

TEXAS CITY Y OIL SPILL

NRDA data collection plan 1 (NDCP 1): Wildlife and Shoreline Oiling

NOTE – PLACE HOLDER for signature language



Department of the Interior Trustee Representative

7/17/2014

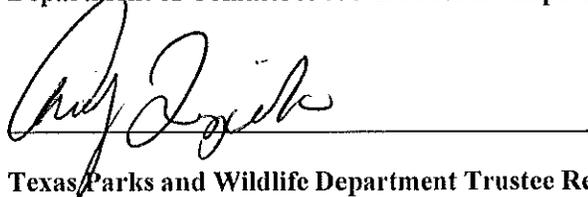
Date



Department of Commerce NOAA Trustee Representative

7/17/2014

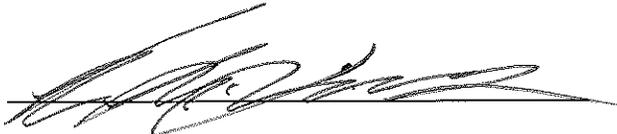
Date



Texas Parks and Wildlife Department Trustee Representative

17 July 2014

Date



Texas General Land Office Trustee Representative

7-17-2014

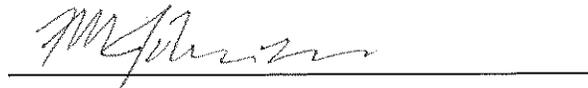
Date



Texas Commission on Environmental Quality Trustee Representative

7-17-14

Date



Kirby Marine Representative

7-17-2014

Date

Draft Texas City Y Spill

NRDA data collection plan 1 (NDCP 1): Wildlife and Shoreline Oiling

April 4, 2014

This study plan has 3 objectives:

1. To gather data which facilitates an estimate of spill-related carcass deposition (all species of birds, turtles, and marine mammals) throughout the spill area. Because carcass deposition continues over time, periodic surveys of the same beaches are used to estimate the rate of carcass over the life of the spill.
2. To collect NRDA-specific shoreline oiling information in areas south of Brazoria county to document any areas of buried or reoccurring oil that may not have been previously or fully searched by SCAT.
3. To gather data which can be used to estimate the proportion of birds that appear oiled.

Study area

The study focuses on two areas:

1. The northern study area is centered on Galveston Island.
2. The southern study area is centered on Cedar Bayou.

The northern and southern boundaries of each study area will be cooperatively established through an adaptive management process. The purpose of the adaptive management process is to ensure that study area boundaries are representative of approximately geographic extent of oiling determined by SCAT.

Design

Sample Units: Sample units are approximately 3 mile long stretches of beach (segment), within each sampling unit a 0.5 mile transect will be randomly placed. Segments correspond to sections of beach already been identified by Response throughout both study areas (Figure 1 and Figure 2). The width of the sample units will be variable, extending from the water line to the high-high tide line which is identified by the wrack line. If this is not apparent, the inland edge is defined as 50 m inland from the water or the vegetation line, whichever comes first.

Sampling Universe: The initial goal is to collect data from all transects within the study area that are not placed off limits by land management agencies. Contingent upon Trustee and RP consensus, specific transects maybe removed from the data collection effort based on field conditions or logistical constraints identified throughout the study period. Live bird oiling data will also be collected from segments following the procedures in Appendix B.

Sampling frequency: Initially this study will target surveying each transect once every 4 days.

Data Collection: Three activities will occur along each transect

1. Crews will search each 0.5 mile transect for carcasses by one team member walking from one end of the transect to the other while the other drives the UTV slowly along the transect. The team will record all observations of bird, mammal, turtle, and or fish carcasses. Bird carcasses will be collected by United States Fish and Wildlife Service (USFWS) or Texas Parks and Wildlife Department (TPWD) personnel following protocols established by USFWS for the Texas City Y oil spill. Oiled wildlife will be transferred to the designated Wildlife Operation collection facility for that sector of operations and reported to Wildlife Operations. Live oiled wildlife that may be recovered by wildlife recovery teams will be reported to Wildlife Operations using procedures established for that sector of operations. NOAA and the Texas Sea Turtle Stranding and Salvage Network and Texas Marine Mammal Stranding Network (stranding networks) will continue to respond to, recover and rehabilitate, or necropsy any animals that are located within the Galveston and Matagorda response areas. Any reports of marine mammal or sea turtle stranding that are collected during beach surveys or by the public will be responded to and data will be collected. If a dead sea turtle or marine mammal is found with external signs of oil, the carcass will be collected if logistically feasible, and specific sampling protocols will be followed.
2. While crews in the southern area are searching for bird carcasses, they will also collect NRDA-specific shoreline oiling information as specified in Attachment 2. This will include oiling observations made in a trench dug at random locations in each transect.
3. At the end of each transect, teams will conduct a live bird oiling survey as specified in Attachment 3.
4. Adaptive management practices based on current conditions and information will be used to determine the duration and scope of the individual components of this work plan. Termination of the work plan will be upon consensus of all parties through a signed work plan termination amendment attached to the approved work plan.

Final Disposition of Original Data and Datasheets

All data shall be transferred following Chain-of-Custody procedures (including electronically archived data), and original data sheets or electronic files, Camera memory cards, GPS track logs and original data sheets will be transferred under Chain-of-Custody (USFWS Form 3-2063 Chain of Custody) after a card is full or after the study is completed pursuant to a protocol for transferring and uploading digital photos and track logs. Oiled wildlife will be transferred to the designated Wildlife Operation collection facility following protocols established by USFWS for the Texas City Y oil spill for oiled wildlife. All data, shall be transferred to the USFWS Texas Coastal Ecological Services Field Office in Clear Lake, TX for the Galveston sector or the USFWS Texas Coastal Ecological Services Field Office in Corpus Christi, TX for the Port O'Connor sector. Copies of all data collected under this protocol shall be provided at the same time to the designated Kirby Marine representative.

Attachment 1: Carcass Transects

Crews of two will search transects, one on foot the other driving slowly on the UTV, zigzagging to ensure complete coverage of the transect. One crew member should focus on the seaward side of the transect while the other focuses on the landward side. Crew members should zigzag throughout their area of focus to ensure complete coverage. All carcasses observed (bird, mammal, turtle, fish) will be recorded on the carcass collection form (Figure AI-1).

Trustee team members will collect all fresh dead bird carcasses using protocols established for the Texas City Y spill.

1. Personnel will wear appropriate personal protective equipment when handling wildlife: at a minimum, disposable gloves (latex or nitrile are preferred) and dedicated clothing will be worn on oiled beaches.
2. If fresh dead bird carcasses are found above the wrack line they can be collected. You must note in comments section that they were out of the plot.
3. If no carcasses are observed, clearly write "NO CARCASSES OBSERVED" across the form.
4. If live oiled birds in need of capture and washing are observed, call the wildlife Hotline at [REDACTED]

Guidelines

- **Your safety and the safety of your team are the number one priority. Never proceed into an area you are not trained for or comfortable in.**
- Start track mode on GPS.
- Record names of all observers.
- Each surveyor searches different portions of the shoreline/intertidal zone.
- Collect and photograph fresh dead birds both oiled and un-oiled. All photographs shall be collected and transferred following the Guidance for Taking and Transferring Digital Photographs from Wildlife Operations and NRDA Field Teams to the USFWS Data Management Group. Mark collection locations as waypoints in GPS.
- If no carcasses are observed, write NO CARCASSES OBSERVED.
- Record end time and end track mode on GPS.
- All GPS data will be transferred as both GPX and shape files. Files should be transferred using the DNRGPS Application (<http://www.dnr.state.mn.us/mis/gis/DNRGPS/DNRGPS.html>)
- Save all files as [IncidentName] \ Photos \ Archive \ [Year_MonthDay]\LastName_FirstName
Example: Oil_Spill \ Photos \ Archive \ 2009_0910\Smith_Joe
- **All forms and GPS files must be turned in to your point of contact each evening and transferred following the Chain of Custody directions provided in this work plan .**

CARCASS COLLECTION FORM (back page)

INV: Incident-specific assigned number or spill incident name.	Evidence Seizure Tag: Number imprinted on white Evidence Seizure Tag
Beach types: sandy, gravel, jetty, rip-rap Type of habitat backing the beach: bluff/cliff, sand dunes, marsh, mud flat, forest, urban.	
Beach Orientation: Lower: in the tidal wash zone; Middle: above the tidal wash zone, but below high tide line; Upper: above high tide line.	
General Notes: For example, you could note how many eagles you see in the vicinity of your search location; note observations of actual predation; note tracks or other evidence of mammalian predators on beaches (fox, mink, bears, etc.); note number of live birds seen on nearshore waters; how many of those appear to be lethargic, sickly, or obviously oiled; note evidence of other unusual mortality (e.g., fish, urchins or bivalves) or ocean conditions (plankton bloom, water temperatures, recent storms, etc.).	
Condition codes: 'A'= fresh specimen (possibly still damp, eyes still intact, dead less than a day). 'B'= dead less than a week (somewhat desiccated, eyeballs present but sunken, perhaps partially buried by sand/debris, but body still limp and flexible). 'C'=week to a month old (desiccated, body rigid, eyeballs gone or sunken and completely hardened, parts missing). 'D'=very old (more than a month, completely desiccated, brittle, may be just parts like wings and breastbone only).	
Degree of oiling codes: 0=no obvious oil on body. 1=light spots of oil. 2=moderate patches over body. 3=heavily oiled all over.	Degree of scavenging codes: 0=no evidence of scavenging. 1=light scavenging (skin broken, some guts removed). 2=heavy scavenging (guts completely eviscerated, breast meat consumed).
Emaciation codes (for birds in 'Condition A or B' only): To assess whether birds were starving or not, feel the breast muscles. L=Lifeboat (normal): the breast is rounded like a lifeboat and you can barely feel the keel of the breastbone. R=Roof (slightly emaciated): the breast slopes evenly away from an obvious keel like the roof of a house. S=Sailboat (very emaciated): the breast is concave inwards from a sharply defined keel like the hull of a sailboat.	
ID#: Item No. on blue Evidence Identification Tag	Photo#: Digital photo #
Latitude and Longitude: Provide GPS coordinates in decimal degree format to 5 decimal places (e.g. 29.65231, -94.36985).	

Crews working in the northern study area will not collect NRDA-specific shoreline oiling information.

Crews working in the southern study area will collect NRDA-specific shoreline oiling information.

At two random locations in the segment, crews will dig a trench perpendicular to shoreline of sufficient depth and consistent with SCAT protocols to expose buried oil. This trench will extend from the high tide line to the water. Crews will document buried oil using standard SCAT methods. All SCAT forms shall be labeled as the Texas City Y Oil Spill – NDCP1.

While traversing transects looking for animal carcasses crews will also document shoreline oiling using standard SCAT methods described in the shoreline assessment manual (http://response.restoration.noaa.gov/sites/default/files/manual_shore_assess_aug2013.pdf). However, crews will NOT fill out the clean-up recommendation.

SHORELINE ASSESSMENT FORM EXPLANATIONS

August 2000

Calibration IS VERY IMPORTANT! Do a calibration exercise to make sure that all teams are consistently using the same terminology and estimations.

Units: Use either metric (m, cm) or English (yd, ft, in). Circle the units used.

Tide Height: Circle the two letters indicating the progression of the tidal stage during the survey.

Segment/Survey Length: Always record both lengths on the first survey, especially where the SCAT team creates the segments in the field. On repeat surveys, always enter in the Survey Length, especially if only part of the segment is surveyed.

Start/End GPS: Use of decimal degrees is preferred, but be consistent among teams.

SURFACE OILING CONDITIONS

Zone ID: Use a different ID for each different oil occurrence, e.g., two distinct bands of oil at mid-tide and high-tide levels, or alongshore where the oil distribution changes from 10% to 50%. Describe each different occurrence on a separate line.

Tidal Zone: Use the codes to indicate the location of the oil being described, as in the lower (L), mid (M), or upper (U) intertidal zone, or in the supra (SU) tidal zone (above the normal high tide level).

Distribution: Enter the estimated percent of oil on the surface, or codes for the following intervals:

C	Continuous	91-100% cover
B	Broken	51-90%
P	Patchy	11-50%
S	Sporadic	<1-10%
T	Trace	<1%

Surface Oiling Descriptors - Thickness: Use the following codes:

PO	Pooled Oil (fresh oil or mousse > 1 cm thick)
CV	Cover (oil or mousse from >0.1 cm to <1 cm on any surface)
CT	Coat (visible oil <0.1 cm, which can be scraped off with fingernail)
ST	Stain (visible oil, which cannot be scraped off with fingernail)
FL	Film (transparent or iridescent sheen or oily film)

Surface Oiling Descriptors - Type

FR	Fresh Oil (unweathered, liquid oil)
MS	Mousse (emulsified oil occurring over broad areas)
TB	Tarballs (discrete accumulations of oil <10 cm in diameter)
TC	Tar (highly weathered oil, of tarry, nearly solid consistency)
SR	Surface Oil Residue (non-cohesive, oiled surface sediments)
AP	Asphalt Pavements (cohesive, heavily oiled surface sediments)
No	No oil (no evidence of any type of oil)

SUBSURFACE OILING CONDITIONS

Oiled Interval: Measure the depths (from the sediment surface) to top/bottom of subsurface oiled layer. Enter multiple oil layers on separate lines.

Subsurface Oiling Descriptors: Use the following codes:

OP	Oil-Filled Pores (pore spaces are completely filled with oil)
PP	Partially Filled Pores (the oil does not flow out of the sediments when disturbed)
OR	Oil Residue (sediments are visibly oiled with black/brown coat or cover on the clasts, but little or no accumulation of oil within the pore spaces)
OF	Oil Film (sediments are lightly oiled with an oil film, or stain on the clasts)
TR	Trace (discontinuous film or spots of oil, or an odor or tackiness)

Sheen Color: Describe sheen on the water table as brown (B), rainbow (R), silver (S), or none (N).

Attachment 3: Live bird oiling surveys

When teams finish searching a transect for carcasses and oil, they will stop and make live bird oiling observations for ½ hour.

During live-bird oiling observations, observers count and identify live birds that they can unambiguously classify as either oiled, or un-oiled. NOTE: DO NOT GUESS OR ASSUME OILING. Birds too far away or moving too quickly to reliably identify as either oiled or un-oiled should not be labeled as oiled or un-oiled.

Importantly, it may be easier to identify a heavily oiled bird than it is to identify a lightly oiled bird or to make a confident determination that a bird is not oiled. To assure that an unbiased sample is taken, surveyors should establish a maximum distance up to which they can differentiate between oiled and un-oiled birds. Even if a bird beyond this distance can be unambiguously identified as oiled or un-oiled, it should not be counted in the survey.

Birds will be identified as having no visible oil or as having light, moderate, or heavy oiling (Figure A3-1).

Guidelines

- **Your safety and the safety of your team are the number one priority. Never proceed into an area you are not trained for or comfortable in.**
- Each time you arrive at a new live bird oiling observation location, fill out a new live bird survey form.
- For each survey sheet, include the names of **all** persons looking for oiled wildlife.
 - Fill data sheets out completely. Include start and end time as well as GPS coordinates.
 - Following the guidelines above, record observations of **both** oiled and un-oiled birds. If positive species ID is not possible ID to the extent possible; waterfowl, shorebird, gull, diving bird.
 - Where feasible, survey teams will attempt to photograph banded shorebirds such that the band is clearly visible for further documentation and identification.
- All forms and GPS units must be turned in to your point of contact each evening.

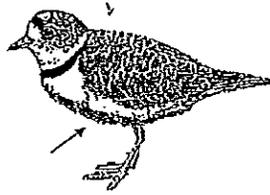
Figure A3-1

LIGHT



Note light oiling around the top of leg(s).

MODERATE

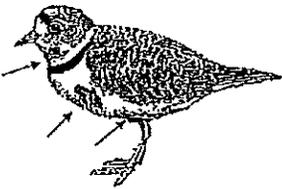


Note that the whole belly is covered with moderately darker oil

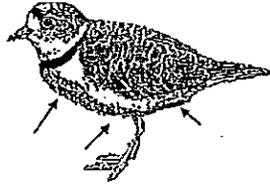
HEAVY



Note that the breast and belly are covered with a very dark layer of oil.



Other example of light oiling may also appear as light colored spots on the face or breast or belly, or parts of the body. Oiling on 2 or more body parts is recorded as Moderate.



Another example of moderate oiling showing most of the breast, belly and vent covered with oil.



Here, a heavy dark layer of oil is seen on the face, breast, and belly.

Attachment 4: Guidance for Taking and Transferring Digital Photographs from Wildlife Operations and NRDA Field Teams to the USFWS Data Management Group

Background

This guidance describes procedures for the collection and handling of digital photographs by Wildlife Operations and NRDA field teams. It is intended to protect the legal integrity of digital photographs stored on digital memory cards (SD cards), as well as the legal integrity of the SD card itself. SD cards will be issued to field members in order to record photographic images of bird carcasses collected in the field and transfer those images to the NRDA Bird Data Quality Officer.

There are two concepts that apply to creating a legally defensible photo record. First, maintain a complete photo record. Do not delete photos from the camera or from your computer before the official archive is created. Second, keep one set of photos that are never opened. In practice this means transferring one copy of the photos from the camera memory card to a computer, to other storage media such as a non-editable DVD-R or CD-R, and to the secure server without ever opening them. The resulting continuous set of photo files that have not been opened will demonstrate that you have a full, un-edited, photo record for the court.

Carcass Photograph Overview

To photo-document a bird carcass at the time of collection, field teams will:

- Complete the appropriate Evidence Seizure Tags and a *Bird Search Effort and Birds Collected Data Form*.
- Photograph the carcass with the blue Evidence Identification Tag (and white board for NRDA personnel) clearly visible in the frame.
- Record the Photo ID Number (from the camera) on the *Bird Search Effort and Birds Collected Data Form*.
- Record the SD Card ID Number (eg. "WO-x") in the Field Comments section of this form.

Notes:

- *At no time will information stored on a digital memory card or camera internal memory be erased or over-written.*
- *Digital photo files must be stored sequentially on the SD card and not renamed. returning from the field, create separate "Working" and "Archive" directories and copy photos into each before reviewing on the PC (review= open) if you need to look at any photos.*
- *Digital photos taken by NRDAR and Wildlife Operations personnel should be uploaded to a secure database at the end of each day. Please refer to "Uploading Digital Photographs" for this specific information.*

Chain of Custody

At the time of issue, details of each SD card will be recorded on the appropriate *SD Digital Memory Card Tracking Log*. Wildlife Operations and NRDA tracking logs should be kept separately, at each sector IC or headquarters.

Note: SD Card ID Numbers are assigned sequentially and each respective card will have a unique number which will not be repeated.

The unique SD Card ID Number (“WO-x” for Wildlife Operations, “NB-x” for NRDA Birds) is assigned at this time and legibly printed on the SD card itself with a permanent marker (eg. Sharpie). The individual SD card will then be issued to a field team member using a *Chain-of-Custody* form (see example below).

U.S. Department of the Interior U.S. Fish and Wildlife Service Bureau of Land Management				CHAIN OF CUSTODY RECORD		FILE NO.
DATE AND TIME OF SEIZURE: N/A		REGION: 4	EVIDENCE/PROPERTY SEIZED BY: N/A			
SOURCE OF EVIDENCE/PROPERTY (person and/or location) <input type="checkbox"/> TAKEN FROM <input checked="" type="checkbox"/> RECEIVED FROM: John Doe, USFWS <input type="checkbox"/> FOUND AT: Wildlife Ops, Supply Mobile, AL			CASE TITLE AND REMARKS: Texas City Y Oil Spill USFWS NRDA / Wildlife Operations Bird Carcass Photographs			
ITEM NO.	DESCRIPTION OF EVIDENCE/PROPERTY (include Seizure Tag Numbers and any serial numbers)					
1	<p>SD Digital Memory Card</p> <p>Brand or Manufacturer: <u>Kingston</u></p> <p>Card Serial # or ID: <u>WO-1</u></p> <p>Capacity (In GB): <u>2 GB</u></p> <p>Field Team ID: <u>Team 18</u></p> <p>State/Operational Area: <u>FL/Pensacola to Panama City</u> (ACP Grid or geographic location)</p> <p>Date Range Memory Card was in Use: Installed: _____ Removed: _____</p>					
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE:	RELEASE DATE:	DELIVERED VIA:		
1	John Doe, USFWS	<i>John Doe</i>	06Jul10	<input type="checkbox"/> U.S. MAIL		
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE:	RECEIPT DATE:	<input checked="" type="checkbox"/> IN PERSON		
	Bill Smith, APHIS	<i>Bill Smith</i>	06Jul10	<input type="checkbox"/> OTHER:		

Example of Chain-of-Custody form for the first SD card issued (WO-1) at time of issue

In practice, two SD cards can be issued for each field team (using separate *Chain-of-Custody* forms) so that one SD card is always on hand when cards are swapped out of the camera.

So that the labeled SD card and *Chain-of-Custody* form do not become separated, place them together in a 1-gallon ziplock-type bag. A blank *Chain-of-Custody* form is attached to this protocol (and is fillable using Excel, if viewing this protocol electronically).

Note: Ensure only one SD card and one Chain-of-Custody form per bag.

At the time the SD card is installed in the camera, the field team member will record the date on the *Chain-of-Custody* form in the space labeled “Installed”. The *Chain-of-Custody* form should then be placed back in the ziplock-type bag and safeguarded for later use.

The SD card should remain in the camera for approximately two weeks or until it approaches its storage capacity. As personnel rotate in and out of the field teams, the out-going and incoming team members must transfer custody of the SD card by completing the appropriate section of the *Chain-of-Custody* form. When it is time to replace the SD card, the field team member in custody of the card will remove it from the camera and move the locking tab to the "Locked" position. On the *Chain-of-Custody* form, the date will be recorded in the space labeled "Removed". The SD card and *Chain-of-Custody* form should then be placed back in the ziplock-type bag for return to the appropriate USFWS Office for the sector of operation.

If a "runner" is used to return the SD card and Chain-of-Custody form, the appropriate "From" and "To" boxes on the *Chain-of-Custody* form must be completed each time custody changes. If the SD card is sent via FedEx, ensure that the appropriate "From" box on the *Chain-of-Custody* form is completed; the USFWS representative will complete the "To" box upon receipt. SD cards should be shipped to:

Galveston Sector

Texas Coastal Ecological Services, Clear Lake
U.S. Fish & Wildlife Service
17629 El Camino Real, Ste 211
Houston, TX 77058
Office: (281) 286-8282

Port O'Connor Sector

Texas Coastal Ecological Services Field Office,
Corpus Christi
U.S. Fish & Wildlife Service
6300 Ocean Drive, Unit 5837 Corpus Christi, TX
78412
Office: (361) 994-9005

Procedure for Retrieving Original SD Cards Already in Use

Some cameras issued to field crews have SD cards that were not assigned a unique SD Card ID Number at the beginning of field operations. For field crews that possess an un-numbered SD card, a new replacement SD card will be issued to one of the members of the field team, as described in the procedure above. Included with the new SD card and *Chain-of-Custody* form (both in a ziplock-type bag) will be a blank *Chain-of-Custody* form in a separate bag.

Upon receipt, the field team will remove the un-numbered SD card from the camera and record the details of the SD card on the blank *Chain-of-Custody* form (leaving the "SD Card ID Number" space blank). The SD card and *Chain-of-Custody* form will then be sealed in the ziplock-type bag and returned to the USFWS representative (see procedures above). Remember, the appropriate "From" and "To" boxes on the *Chain-of-Custody* form must be completed each time custody changes. Upon receipt, the USFWS representative will complete the *Chain-of-Custody* form, assign a unique SD Card ID Number, and label the SD card with a permanent marker.

Appendix A: Chain-of-Custody Form

CHAIN OF CUSTODY RECORD (continued)

FILE NO.
INV.

ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE:	RELEASE DATE:	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE:	RECEIPT DATE:	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE:	RELEASE DATE:	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE:	RECEIPT DATE:	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE:	RELEASE DATE:	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE:	RECEIPT DATE:	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE:	RELEASE DATE:	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE:	RECEIPT DATE:	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE:	RELEASE DATE:	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE:	RECEIPT DATE:	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE:	RELEASE DATE:	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE:	RECEIPT DATE:	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE:	RELEASE DATE:	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE:	RECEIPT DATE:	

Appendix B: Matagorda Island bird survey procedures

Matagorda Island bird survey procedures

- Three teams of two, one representing the Trustees and one representing the RP, will cooperatively survey designated segments.
- The team will start at the northern most point of the designated segment.
- At the starting point the team will record the latitude and longitude, start the track log on the handheld gps unit and record the time the survey was started.
- The teams will proceed southerly along the segment searching for dead wildlife, recording all carcasses, including latitude and longitude on the Carcass Collection Form. Bird carcass will be collected under USFWS guidelines. Sea turtle and marine mammal carcasses will be reported to the Texas Sea Turtle Stranding and Salvage Network and Texas Marine Mammal Stranding Network. Oiled wildlife will be turned over to Wildlife Operations or as directed by USFWS.
- If no carcasses were found "NO CARCASSES OBSERVED" will be recorded on the datasheet.
- Oiled wildlife capable of being captured will be reported to the Wildlife Hotline, [REDACTED]
- Teams will record all observations of birds that have been assessed for oiling on the Live Bird Assessment Transect form. Include oiled and unoiled birds.
- Teams will make a reasonable effort to identify banded birds.
- Upon reaching the northern point of the designated ½ mile transect one observer will get out the UTV and walk southerly searching for dead wildlife and assessing birds.
- Upon reaching the southern point of the designated the team will stop and assess birds for ½ hour, recording the observations on the Live Bird Assessment Point Count form.
- After completing the ½ hour point count the team will continue south on the segment to the end, searching for dead wildlife and assessing birds.
- At two locations, chosen by the team, trenches will be dug following the SCAT methods to determine subsurface oil.
- Upon reaching the end of the segment teams will record the latitude, longitude and time.
- Continue the track until reaching the final point of the day.