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Deepwater Horizon Trustees  
RE: May Monthly Report on Joint NRD Activities

Dear Trustees:

Find attached the May Deepwater Horizon monthly NRD cooperative report. This report is provided to identify pending actions, ensure timely agreement on matters of concern to the Trustees and BP, and provide for a month look ahead in field activity planning. Information presented here is accurate to the best of our knowledge, but this document may contain inadvertent errors.

Based on issues raised either in separate correspondence or via these reports, we would anticipate seeking resolution with the Trustees through the TWG structure, the Trustee Council, or coordination with individual Trustees.

Thank you and please let us know if you would like to discuss any of the comments or status of the on-going cooperative NRD program. We also request that this Monthly Activity Report be placed into the Deepwater Horizon Administrative Record.

Regards,

*Robin Bullock (RB)*

Robin Bullock  
Director of Environmental Science and Natural Resource Damage  
BP Gulf Coast Restoration Organization

## Deepwater Horizon Incident Monthly Report May 2011

### Safety

- **Driving Incidents:** Multiple driving incidents occurred in May as part of the field effort. Teams were reminded of the increase in tourist travel and the need to be proactive in training and awareness of third parties.
- **SIMOPS:** May 26, received notification that the sediment coring vessel was in conflict with on-going seismic work. Field team reminded of simultaneous operations (SIMOPS) requirements and adjustments were made to the vessel pattern.

### Key Decisions in May

- **Birds:** Trustees and BP still working to sign Colonial Water Bird addendum 2 which extends satellite tracking of brown pelicans and great egrets from April 1, 2011 through April 1, 2012.
- **Birds:** Agreement in principal to conduct cooperative carcass persistence study and cooperative carcass drift study in June and July respectively.
- **Birds:** On May 4, Trustees informed BP that they decline participation in the bird productivity study.
- **Birds:** May 26, USFWS requested that BP make an unequivocal commitment to fund five work plans (four of them by June 10; one of them by June 1). Three of these were plans that BP had not been appraised of prior to this time.
- **Birds:** May 26 Trustees informed BP they had implemented 3 data collection plans (Glenn Ford Overflights, Piping plover breeding ground surveys, and Gulf of Mexico Breeding shorebirds) without requesting or providing BP with an opportunity to participate. BP was provided plans and asked to respond.
- **Birds:** On May 20 BP provided notice to USFWS of our election to not participate further in the pelagic bird study as BP believes the data would not materially reduce uncertainty and BP would not agree to unconditionally accept the USFWS independently collected data.
- **Deepwater Benthic Communities:** NOAA and BP came to an agreement regarding the use and sharing of fish counts Dr. Ken Sulak (USGS) performed using the footage from the cooperative 2010 Deepwater Coral study and historical data collected in 1997-2005. NOAA agreed to assist BP in obtaining the raw data underlying the 1997-2005 fish counts and to share the video from the 2010 coral study. BP agreed not to assert that Dr. Sulak should be considered a joint expert.
- **Deepwater Benthic Communities:** The Trustees and BP agreed to perform independent toxicity analyses of deepwater sediments, but that the data will be shared with both parties. Sample splits were collected from the recent cooperative Deepwater Sediment Sampling Study for this purpose.
- **Early Restoration:** In May, BP received the AG letters of concurrence.
- **Emergency Restoration:** On May 9, BP signed the Emergency Restoration Implementation Agreement.
- **Fish:** Gulf sturgeon river surveys ceased on April 28. Gulf sturgeon telemetry efforts finished on May 18. BP and Trustees signed the Fish Arm of Sargassum Communities study on May 9.
- **Kemp's Ridley Emergency Work Plan:** On May 12, BP received the final, signed Kemp's Ridley Turtle Emergency Restoration Implementation document.
- **Shoreline:** BP agreed to support the Trustees' proposed LIDAR and elevation transect monitoring plans.
- **Terrestrial and Aquatic Wildlife:** BP declined to participate in the Terrapin Plan as currently

scoped.

- **Water Column/Plankton:** BP agreed to an Addendum to the cooperative Spring Epipelagic plankton sampling plan.

### Pending Decisions

- **Birds:** Trustees to review/respond to draft integration agreement for Piping Plover work plan (provided November 23, 2010).
- **Birds:** Trustees to review/respond to BP comments on carcass sinking study.
- **Birds:** BP to respond to request for funding for avian toxicology program, avian physiology plan, and wildlife response search effort data collection.
- **Birds:** BP to determine if they will continue to participate in Willet Study.
- **Birds:** BP to respond to Trustee plans that were initiated without notification.
- **Deepwater Benthic Communities:** Trustees/BP to determine how best to integrate non-NRDA deep-sea cruise data into NRDA data analysis.
- **Shoreline:** Restoration Work Plan is pending from the Trustees since November 2010. BP has not received a response from the Trustees as to ability to proceed on this restoration work effort.
- **Water Column:** The Natural Seeps study framework was provided to the Trustees on April 15, and the Trustees are still reviewing the framework document. BP is proceeding to prepare water and sediment work plans for implementation in 3Q based on the framework document and the AUV results.

### Data Management

- **Data Management:** On April 8, BP sent a Data Needs letter to DOI and NOAA with a listing of cooperative assessment data requests. No formal response has been received.
- **Birds:** BP has requested data from Trustee members of the Avian TWG for Glenn Ford overflights and secretive marsh bird overflights. It is our understanding that progress has been made and the data sets are nearing completion.
- **Birds:** BP and Trustees have discussed a path forward for data requested by BP, related to wildlife recovery efforts during the response. In May the Trustees proposed an initiative that called for Trustee consultant Glenn Ford to assemble data describing wildlife recovery efforts in addition to conducting a series of field based experiments.
- **Birds:** BP has requested missing capture sheets and carcass chains of custody filled out by BRI during the secretive marsh bird and colonial waterbird studies as missing overflight data. The Trustees have committed to transfer the missing data.
- **Deepwater Benthic Communities:** Data from the signed Deepwater Coral study has not been shared with BP. The raw data, and data which have been minimally processed with appropriate software, were requested on February 16, 2011, from the TWG. The Trustees are preparing a synopsis of the results, including dive tallies from 1997-2005, and stated they would provide it to BP by the end of March (information is still pending). Follow-up conversations in May discussed the transfer of the raw data on SD cards, but the data has not yet been provided.
- **Marine Mammals & Turtles:** Significant data sets have been downloaded to NOAA NRDA however large data sets such as echosounder data and photographs are still pending. New data sharing language is being developed for pending plans and addendums that will include tighter reporting and data sharing timelines.

### Trustee Council/BP Communications in May

- **Avian UV Methodology:** On May 13 BP received a letter from DOI acknowledging the UV concerns that BP had and stating that further work on this method would be discussed within the TWG group.

- **Cooperative Assessment Agreement:** On May 26, BP provided a red line of the Cooperative Assessment Agreement to the Trustees.
- **DOI Meeting:** On May 31, BP and DOI met to discuss pre-funding studies and cooperative work program. A follow-up meeting will be scheduled to discuss further.
- **Early Restoration:** On May 9 BP provided initial concepts on the process for early restoration negotiations.
- **NOAA Funding Request:** On May 20, BP provided a response to the NOAA forward funding request letter.
- **Sediment Corer Decontamination:** On May 26, BP received a letter from NOAA in response to
- **Turtle Restoration:** Agreement regarding Emergency Sea Turtle Restoration was executed in May.

### Planned June Field Activities

- **Birds:** June field efforts include: (a) Cooperative implementation of carcass persistence study; (b) Coordinated implementation of bald eagle plan and osprey productivity addendum (Bird Study #9, Part 2 and Part 3); (c) Independent implementation of BP colonial waterbird productivity study, BP 2011 overflight census plans, Louisiana Brown Pelican productivity study, Trustee Willet telemetry plan.
- **Corals:** N/A
- **Deepwater Benthic Communities:** The Deepwater Softbottom Sediment Sampling survey continues. The ROV Megafauna/Megaplankton Study will be initiated June 8.
- **Fish Oyster Transition Plan Amendment and 2011 oyster surveys** continue. Second survey of the Fish arm of Sargassum Communities study continues on June 7.
- **Human use:** BP and Trustees continue to move forward on potential cooperative data collection for aerial and ground counts as well as the intercept surveys.
- **Marine Mammals & Turtles:** Kemps nesting is actively occurring and indications are 2011 will exceed 2010 for nests laid. Sargassum surveys are scheduled to commence in mid-June including aerial and vessel-based surveys. Live Capture health assessments were conducted in the reference area, Sarasota Bay the week of May 18th. MARUs and HARPs were "hot-swapped" and continue to record marine mammal vocalizations. Loggerhead nesting began in late May, Cardno/ENTRIX is not participating in either the loggerhead or Kemp's ridley nesting studies because the plan addenda are not signed yet. Legal is negotiating data sharing language.
- **SAV:** Tier 3 field efforts are expected to be initiated.
- **Shoreline:** Continue with spring 2011 shoreline coastal vegetation monitoring program in Louisiana, Mississippi, and Alabama.
- **Terrestrial and Aquatic Wildlife:** The endangered beach mouse field assessment is expected to be initiated.
- **Water Column/Plankton:** Continue with cooperative spring plankton sampling with the 1-meter MOCNESS on the Nick Skansi, the 10-meter MOCNESS on the Meg Skansi, and bongo and neuston gear on the Bunny Bordelon. The cooperative summer plankton imaging survey is proposed to begin June 12 on the McArthur II, the cooperative summer epipelagic plankton survey is proposed to begin on June 16, and the cooperative summer mesopelagic fish survey is proposed to begin June 21 on the Pisces.

## Joint Work Plans Signed in May

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Birds	Work Plan for Estimating Oiling and Mortality of Breeding Colonial Waterbirds (Amendment 1)	5/12/2011	5/12/2011	
Corals	Shallow-water Coral Tier 1 Plan Addendum	5/17/2011	5/17/2011	
Deepwater Benthic Communities	Deepwater Sediment Sampling to Access Potential Post-Spill Benthic Impacts	5/20/2011	5/24/2011	
Fish	Assessment Plan for Sargassum Communities and Associated Fauna in the Northern Gulf of Mexico	5/7/2011	5/9/2011	
Marine Mammals & Turtles	Northern Gulf of Mexico MARU Recovery	5/2/2011	5/2/2011	
SAV	Sampling and Analysis Plan for Jean Lafitte National Historic Park (JELA 2010)	5/5/2011 (DOI)	5/7/2011	
SAV	Sampling and Analysis Plan for Jean Lafitte National Historic Park (JELA 2011)	5/19/2011 (DOI)	5/27/2011	
Terrestrial & Aquatic Wildlife	Assessment Plan to Determine Potential Injuries to Beach Mice Due to Habitat Impacts from Response Activities	5/4/2011	5/9/2011	

**Joint Work Plans Under Revision/Awaiting Signature (May)**

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
<b>Aerial Imagery</b>	Aerial Photography Overflights			Contract with AeroMetric for Spring data acquisition was signed late April, waiting on draft work plan from Trustees.
<b>Birds</b>	2011 Aerial Bird Survey			Trustees declined participation in the BP proposed 2011 aerial bird survey on April 6, 2011.
<b>Birds</b>	Detection Probability (Searcher Efficiency) - Bird Study #1B			Trustees finalizing plan as there was an agreed plan in principle (May 26), and Trustees have provided supporting data (May 28).
<b>Birds</b>	Colonial Waterbird (CWB) extension 2 (BRPE and GREG satellite telemetry)			Submitted to Trustees for review and approval on May 23, 2011.
<b>Birds</b>	Raptor – Bald Eagle – Bird Study #9			Waiting on signed plan from Trustees (April 1). Work being implemented in coordination with BP.
<b>Birds</b>	Carcass Sinking			Trustees sent carcass sinking/drift study to BP on May 13, 2011. BP returned comments back to the trustees on May 27, 2011.

### Joint Work Plans Under Revision/Awaiting Signature (May)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Birds	Carcass Persistence			BP sent comments on the carcass persistence study to the trustees on May 3, 2011. Trustees responded on May 9, 2011. BP was given until June 1, 2011 to make this study cooperative and providing pre-funding.
Birds	Avian Toxicity			BP received May 26, 2011.
Birds	Avian Physiology			BP received May 26, 2011.
Birds	Wildlife Recovery Data			BP received May 26, 2011.
Corals	Deepwater Coral SPMD Deployment Plan	Pending	7/9/2010	Awaiting Trustee signature based on BP comments and signature page provided to Trustees on July 9, 2010.
Deepwater Benthic Communities	SPI Survey Addendum #1			BP to send Trustees a no cost addendum that addresses the removal of the water column data collection and adds one-day to the study.
Deepwater Benthic Communities	ROV Megafauna/Megaplankton Survey			Revised draft plan sent to the Trustees for review on May 20, 2011.

## Joint Work Plans Under Revision/Awaiting Signature (May)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Deepwater Benthic Communities	Mesophotic Reef Study			BP provided comments on February 23, 2011. Further comments from BP pending review of data from previous Deepwater Coral studies.
Fish	Assessment plan for Marsh Edge and Sandy Shoreline			Trustees revising plan based on April shakedown surveys to refine methods.
Fish	Nearshore Ephemeral Data Collections: Submerged Oil Characterization Across Multiple Habitats			Trustees revising plan based on April shakedown surveys to refine methods.
Marine Mammals & Turtles	Kemp's ridley nesting study addendum			Trustees revising draft plan and developing new data sharing language. Pending since March 2011.
Marine Mammals & Turtles	Loggerhead nesting study addendum			Trustees revising draft plan and developing new data sharing language. Pending since March 2011.
Marine Mammals & Turtles	Genetic Analysis of Stock Structure, Species Identification and Sex Determination for Marine Mammal Biopsies and Strandings			Trustees revising draft plan and developing new data sharing language. Pending since March 2011.
Marine Mammals & Turtles	Addendum to Sargassum Turtle Plan for organizing and linking sea turtle data sets gathered during response and assessment efforts for the MC252 Deep Water Horizon oil spill			BP provided comments in late April. This proposal appears to have been pulled from the cooperative process due to response data sharing issues.



### Joint Work Plans Under Revision/Awaiting Signature (May)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Marine Mammals & Turtles	Post Release Monitoring and Tracking Loggerhead Turtles			Trustees revising draft plan as agreed by email on October 21, 2010. Field work complete. Final work Plan has been pending from Trustees since October 2010.
Marine Mammals & Turtles	Nearshore cetacean & sea turtle prey item sampling plan			Several drafts were exchanged in May 2011. Plan should be signature ready in mid-June 2011
Marine Mammals & Turtles	Investigation of Marine Mammal Morbidity and Mortality through Active Surveillance for Strandings			BP received revised draft on May 27.
SAV	Tier 2 Plan (PEMD Monitoring, Rapid Assessment, Submerged Oil Sentinel Monitoring, Pre-Assessment Low Altitude Aerial Photography of Seagrass Beds)			Trustees provided revised draft May 31. BP reviewing.
SAV	Tier 3 Plan			Trustees provided May 25. BP reviewing.
Shoreline	Plan for the Collection of Data to Measure Shoreline Change Resulting from Heavy Oiling			Trustees reviewing draft plan based on BP comments on January 28. Trustees have indicated they are no longer interested in pursuing this study.
Shoreline	LIDAR Data Acquisition Plan			Trustees are revising based on BP comments provided May 20.

## Joint Work Plans Under Revision/Awaiting Signature (May)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Shoreline	Sampling and Monitoring Plan for Coastal Vegetation			BP provided comments on May 25 and Trustees are currently revising.
Shoreline	MS and AL Addendum to the Monitoring Plan For Coastal Vegetation			Trustees reviewing BP comments to draft plan provided April 19, including a proposed alternative sampling plan.
Shoreline	Emergency Restoration Plan			Trustees (NPS) developing draft plan for initial reconnaissance/assessment. Pending since November 2010.
Water Column	December Cooperative Cruise- (NOAA/BP-CardnoENTRIX NRDA Cooperative Deep Tow Cruise 2/December 2010 Arctic-HOS Davis 5-Sarah Bordelon Cruise)			Awaiting Trustee signature on revised signature page that BP provided on March 28 with an added disclaimer for the record. Field work complete.
Water Column	NRDA Ocean Current Field Plan: Moored ADCPs			Trustees to propose a date for the joint Hydrology meeting. Draft plan on hold pending hydrology meeting. This meeting has been pending since February 2011.
Water Column	Injury Ephemeral Data Collections: ADCP-Measured Currents Monitoring Plan Deepwater Horizon Oil Spill (DWHOS) September 2010 Maintenance Mission			Awaiting Trustee signature of agreed plan provided February 19. Field work (maintenance) complete. Pending since February 2011.

## Joint Work Plans Under Revision/Awaiting Signature (May)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Water Column	MC252 Deepwater Horizon Oil Spill ADCP-Measured Currents Monitoring Plan December 2010 Quarterly Maintenance Mission Amendment #2			Awaiting Trustee signature of agreed plan provided February 19. Field work (maintenance) complete. Pending since February 2011.
Water Column	MC252 Deepwater Horizon Oil Spill ADCP-Measured Currents Monitoring Plan June 2011 Quarterly Maintenance Mission			Awaiting Trustee comments and approval. Cruise scheduled for June 20, 2011.
Water Column - Plankton	Plankton Sampling Plan – Fall 2010 Shakedown Cruise 1 – Nick Skansi			Trustees reviewing revised plan provided on February 8. Field work complete.
Water Column - Plankton	Plankton Sampling Plan – Fall 2010 Shakedown Cruise 2 – Nick Skansi			Trustees reviewing revised plan provided on February 8. Field work complete.
Water Column - Plankton	Plankton Sampling Plan – Fall 2010 Cruise 3 – Nick Skansi			Trustees reviewing revised plan provided January 11. Field work complete.
Water Column – Plankton	Plankton Sampling Plan – Fall 2010 Cruise 4 – Nick Skansi			Trustees reviewing revised plan provided January 11. Field work complete.
Water Column - Plankton	SEAMAP Plankton Sampling Plan & Winter 2011 Cruise Plan - Oregon II			BP agreed plan was ready for signature April 4, 2011. Waiting for a signature from NOAA to proceed with signing process.
Water Column - Plankton	Winter 2011 Oceanus VPRII Cruise Plan - Addendum			BP agreed plan was ready for signature April 4, 2011.

**Joint Work Plans Under Revision/Awaiting Signature (May)**

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Water Column – Seeps	Natural Seep Assessment Program			Trustees reviewing draft program summary provided April 15. Study plans to be developed based on framework.

**Joint Work Plans Awaiting Louisiana Signature (May)**

TWG	Plan	Date NOAA/USFWS Submitted to Louisiana	Comments
Birds	Work Plan for Estimating Oiling and Mortality of Breeding Colonial Waterbirds (Amendment 1)	5/12/2011	
Birds	Osprey Rapid Assessment	11/1/2010	Minus DOI and LA signatures.
Birds	Raptor – Osprey Rapid Assessment Addendum – Bird Study #9	4/27/2011	
Birds	Wintering Waterfowl Study	2/4/2011	
Corals	Shallow-water Coral Tier 1 Plan Addendum	5/17/2011	
Deepwater Benthic Communities	Sediment Profile Imaging (SPI) Study Plan	4/6/2011	
Deepwater Benthic Communities	Hard-ground AUV Survey	5/2/2011	
Deepwater Benthic Communities	HOS Sweetwater ROV Sediment Sampling Study	3/23/2011	
Fish	Assessment Plan for Sargassum Communities and Associated Fauna in the Northern Gulf of Mexico	5/7/2011	
Fish	Mid-Water Trawl (Pisces) Spring	3/20/2011	
Fish	Mid-Water Trawl (Pisces) Spring Imaging Addendum	4/27/2011	

## Joint Work Plans Under Revision/Awaiting Signature (May)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Marine Mammals & Turtles	Addendum February 2011 ADCP Maintenance and HARP Recovery Plan	3/18/2011		
Marine Mammals & Turtles	Northern Gulf of Mexico MARU Recovery	5/2/2011		
Marine Mammals & Turtles	Spatial Distribution (Aerial) Marine Mammal and Turtles 2011	1/30/2011		
SAV	Sampling and Analysis Plan for Jean Lafitte National Historic Park (JELA 2010)	5/7/2011		
SAV	Sampling and Analysis Plan for Jean Lafitte National Historic Park (JELA 2011)	5/27/2011		
Water Column	HOS Davis Cruise 3 Addendum	12/4/2011		
Water Column - Plankton	Fall Gordon Gunter Cruise - plankton distribution	11/19/2010		
Water Column - Plankton	Spring MOC-1 plankton plan Nick Skansi	4/27/2011		
Water Column - Plankton	Spring MOC-10 plankton plan Meg Skansi	4/27/2011		
Water Column - Plankton	Spring Epipelagic plankton plan Bunny Bordelon	4/27/2011		
Water Column - Plankton	Spring Plankton Imaging VPRII - Oceanus	3/9/2011		