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

Dear Trustees:

Find attached the April 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,

A handwritten signature in blue ink that reads "Robin Bullock/LR".

Robin Bullock
Director of Natural Resource Damage Issues
BP Gulf Coast Restoration Organization

Deepwater Horizon Incident

Monthly Report

April 2011

Safety

- **Deepwater Benthic Communities/Fish/Water Column-Plankton:** A NOAA-associated incidental take of a bottlenose dolphin occurred on April 12. NOAA is coordinating with its Protected Resources Division regarding measures that must be taken during any marine studies to protect marine mammals or any other protected resources. A general consultation/agreement is being developed for activities that are highly unlikely to result in "take" of a listed species or injury to a marine mammal. Additional consultations/agreements are in development for net-based activities. All marine study plans are subject to review under these terms.

Key Decisions in April

- **Birds:** Trustees and BP will work to sign Colonial Water Bird addenda. Addendum 1 extends the study from January 1, 2011 through April 1, 2011; addendum 2 extends satellite tracking of brown pelicans and great egrets from April 1, 2011 through April 1, 2012.
- **Birds:** Non-breeding shorebird addendum (Willet telemetry) to be implemented cooperatively by early May.
- **Birds:** Osprey and bald eagle productivity observations being made cooperatively (osprey) and in coordination (eagle).
- **Birds:** Trustees declined participation in the BP proposed 2011 aerial bird survey and the BP proposed 2011 colonial waterbird productivity study.
- **Deepwater Benthic Communities:** The Trustees and BP met on April 20 to review and share bathymetric and photo mosaic data from the Response Abandonment AUV survey and the NRDA Hard-ground AUV survey. It was agreed that data collected as part of the Abandonment AUV survey would complement data collected as part of the Hard-ground AUV survey, allowing the NRDA survey to cover more study locations outside of the Abandonment AUV survey area. Collaboration between the two studies continues.
- **Early Restoration:** The Framework for Early Restoration Addressing Injuries Resulting from the Deepwater Horizon Oil Spill was signed on April 20, 2011.
- **Fish:** Gulf sturgeon river surveys ceased on April 28.
- **Marine Mammals:** BP and Trustees signed the Live Dolphin Health Assessment Plan on April 12.
- **Otter and Mink:** On April 25, BP declined to participate in the Otter and Mink population work plan for reasons as provided in the letter.
- **SAV Emergency Work Plan:** On April 12, BP signed the SAV Emergency Restoration Planning document.
- **Water Column/Plankton:** Trustees and BP signed cooperative Spring 1-meter MOCNESS, 10-meter MOCNESS, and Epipelagic plankton sampling plans.
- **Water Column/Plankton:** BP declined to participate in the Trustees Spring Water Column Processes cruise aboard the Walton Smith due to the lack of opportunity to provide timely review and input to the plan.

Pending Decisions

- **Emergency Restoration:** On March 10, BP received the Trustee revision to the Emergency Restoration Implementation Agreement. BP and Trustees participated in multiple discussions through the month in order to resolve outstanding issues.
- **Birds:** Trustees to review/respond to draft integration agreement for Piping Plover work plan (provided November 23, 2010).

- **Birds:** BP to review/respond to draft carcass persistence study.
- **Deepwater Benthic Communities:** Trustees/BP to determine how best to integrate non-NRDA deep-sea cruise data into NRDA data analysis.
- **Deepwater Benthic Communities:** The ROV Megafauna/Megaplankton study plan was provided to the Trustees on April 5. Dr. Benfield will attend the May 5 Water Column TWG call to discuss the plan and answer Trustee questions to advance this plan to signature.
- **Water Column:** The Natural Seeps study framework was provided to the Trustees on April 15. The Trustees are reviewing the plan and a decision as to whether it would be a Cooperative Study is pending and any associated comments. The AUV work proceeded in April as part of this framework plan. BP is proceeding to prepare water and sediment work plans for implementation in 3Q based on the framework document and the AUV results.
- **Shoreline:** Restoration Work Plan is pending from the Trustees since November 2010. Verbal request made by BP to NOAA in February to conduct the design in two phases, in order to initiate action in 2011. NOAA to discuss phased approach with other Trustees. BP has not received a response from the Trustees as to ability to proceed on this restoration work effort.
- **Toxicity:** BP provided a WAF protocol and an oil weathering report to the Trustees on April 8. As a follow-up to the joint Toxicity meeting with the Trustees on April 29, the Trustees and BP are to determine the preparation methods for the water-accommodated fraction and appropriate test oils, and continue to address toxicity testing methods and test species. These issues are being addressed in preparation for a joint Toxicity meeting in June.

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. The attached table listed the data sets which have not yet been received by BP which are believed to be in the Trustees' possession or Trustee suppliers. 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. 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. No path forward has currently been finalized, although the Trustees generally do not believe that they are the appropriate entity to respond to the request.
- **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. BP did receive the software and video related to the secretive marsh bird overflights. BP has not been able to view/review the data and has asked the Trustees for assistance in decoding the drives that contain the data. The Trustees have committed to transfer the flight transcriptions.
- **Birds:** All waterfowl data has been transferred between the Trustees and BP.
- **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 1997-2003, and stated they would provide it to BP by the end of March (information is still pending).
- **Marine Mammals & Turtles:** Trustees provided access to NOAA NRDA database and BP is currently reviewing the contents per each plan to identify all present and missing data.
- **Water Column:** BP has had numerous requests from NOAA data managers for metadata/data associated with the NRDA independent studies (i.e., BGOM cruises). A joint data sharing discussion is scheduled for early May.

Trustee Council/BP Communications in April

- **Turtle Restoration:** On March 22 and subsequently through the month, BP received and responded to a draft Emergency Restoration Turtle project.
- **Avian UV Studies:** On April 11, BP provided a letter to the Trustee Council outlining BP's initial concerns with the use of UV light as an exposure assessment tool. A response had not been received by end of April.
- **DOI Funding Request:** On April 25, BP provided an initial response to the DOI request for pre-funding. A meeting has been scheduled to discuss further.
- **NOAA Funding Request:** On April 11, BP received a NOAA forward funding request letter. The request is under evaluation by BP.

Planned May Field Activities

- **Birds:** May field efforts include: (a) Cooperative implementation of non-breeding shorebird plan (Bird Study #5); (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 and BP 2011 overflight census plans; and (d) Potential initiation of carcass persistence study.
- **Corals:** N/A
- **Deepwater Benthic Communities:** Leg 2 of the Hard-ground AUV survey cruise is planned for May 7-May 22. The independent Response/BP Abandonment AUV survey is currently underway, and Leg 2 of the cruise scheduled to continue surveying through mid-May. The Deepwater Softbottom Sediment Sampling survey is proposed for May 25-June 16 (study plan is in final review by the Trustees).
- **Fish:** Oyster Transition Plan Amendment and 2011 oyster surveys continue. Gulf Sturgeon telemetry receiver deployments continuing. Fish arm of Sargassum Communities study anticipated to begin May 9.
- **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:** Continue with the 2011 Kemp's ridley nesting surveys in Texas. Sargassum-Turtle surveys are scheduled to commence mid-May including aerial and vessel-based surveys. Live capture dolphin health assessments are also scheduled for mid- to late-May 2011. MARU's used in the marine mammal acoustics study will be collected and re-deployed beginning May 6, 2011.
- **SAV:** Fieldwork for the emergency restoration planning was initiated in early April, and it is anticipated to be completed in early May.
- **Shoreline:** Continue with spring 2011 shoreline coastal vegetation monitoring program in Louisiana, Mississippi, and Alabama.
- **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.

Joint Work Plans Signed in April

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Birds	American Oyster Catcher Amendment 1 - Contract Extension	1/8/2011	4/7/2011	Extends capture and tagging. Signed by Louisiana 4/11/2011.
Birds	American Oyster Catcher Amendment 2 - Contract Extension	4/6/2011	4/6/2011	Extends field and telemetry tracking. Signed by Louisiana 4/11/2011.
Birds	Louisiana Non-Breeding Shorebird Addendum	4/6/2011	4/6/2011	Adds Willets to the Non-Breeding Shorebird Plan. Signed by Louisiana 4/11/2011.
Birds	Raptor – Osprey Rapid Assessment Addendum – Bird Study #9	4/25/2011	4/27/2011	
Deepwater Benthic Communities	Sediment Profile Imaging (SPI) Study Plan	4/6/2011	4/6/2011	
Deepwater Benthic Communities	Hard-ground AUV Survey	4/24/2011	4/25/2011	
Fish	Pisces Spring Imaging Addendum	4/22/2011	4/25/2011	
Marine Mammals & Turtles	Dolphin Health Assessment	4/8/2011	4/8/2011	
SAV	SAV Emergency Restoration	4/12/2011	4/12/2011	
Water Column - Plankton	Plankton Sampling Plan – Nick Skansi MOC-1 Spring sampling	4/22/2011	4/25/2011	
Water Column - Plankton	Plankton Sampling Plan – Meg Skansi MOC-10 Spring sampling	4/22/2011	4/25/2011	
Water Column - Plankton	Plankton Sampling Plan – Bunny Bordelon Spring Epipelagic sampling	4/22/2011	4/25/2011	

Joint Work Plans Under Revision/Awaiting Signature (April)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Aerial Imagery	Aerial Photography Overflights			Contract with AeroMetric for Spring data acquisition was signed late April, waiting on draft work plan from Trustees.
Birds	2011 Aerial Bird Survey			Trustees declined participation in the BP proposed 2011 aerial bird survey.
Birds	Detection Probability (Searcher Efficiency) - Bird Study #1B			Trustees finalizing plan as there is an agreed plan in principle, and Trustees have provided supporting data.
Birds	Colonial Waterbird (CWB) – BRI SOW cost extension – Bird Study #4			Awaiting Trustee signature based on BP comments provided on February 2.
Birds	Colonial Waterbird (CWB) extension 2 (BRPE and GREG satellite telemetry)			To be submitted after cost extension 1 is completed.
Birds	Raptor – Bald Eagle – Bird Study #9			Waiting on signed plan from Trustees. Work being implemented in coordination with BP.
Corals	Shallow-water Coral Tier 1 Plan Addendum			Trustees revising plan based on final BP comments provided January 31. Awaiting Trustees signature.

Joint Work Plans Under Revision/Awaiting Signature (April)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Corals	Deep-water 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			Trustees reviewing brief addendum to address the removal of the water column data collection and one-day study extension.
Deepwater Benthic Communities	ROV Megafauna/Megaplankton Survey			Trustees reviewing draft plan provided on April 5.
Deepwater Benthic Communities	Deepwater Sediment Sampling			Trustees revising plan based on comments from BP on April 18.
Deepwater Benthic Communities	Mesophotic Reef Study			Trustees revising plan based on initial BP comments provided on February 23, and pending data from previous Deepwater Coral studies.
Fish	Sargassum Communities Pre-Assessment Plan Version 5			Trustees revising plan based on comments provided by BP on April 26.
Fish	Assessment plan for Marsh Edge and Sandy Shoreline			Trustees provided a draft plan on April 16. Shakedown surveys in late April-early May to refine methods.

Joint Work Plans Under Revision/Awaiting Signature (April)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Fish	Nearshore Ephemeral Data Collections: Submerged Oil Characterization Across Multiple Habitats			Trustees provided a revised draft plan on April 18. Shakedown surveys in late April-early May to refine methods.
Marine Mammals & Turtles	Kemp's ridley nesting study addendum			Trustees revising draft plan. Pending since March 2011.
Marine Mammals & Turtles	Loggerhead nesting study addendum			Trustees revising draft plan. 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. 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 reviewing revised draft provided April 24.
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			Trustees revising draft plan. Pending since April 19.

Joint Work Plans Under Revision/Awaiting Signature (April)				
TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Marine Mammals & Turtles	Investigation of Marine Mammal Morbidity and Mortality through Active Surveillance for Strandings			Trustees reviewing BP comments on draft plan. Status unknown. Pending since March 2011.
SAV	Sampling and Analysis Plan for Jean Lafitte National Historic Park and Preserve (JELA) - <i>Baseline Characterization/Response Injury</i>			Trustees provided revised plan on February 16, 2011. The final plan language is in discussion.
SAV	Sampling and Analysis Plan for Jean Lafitte National Historic Park and Preserve (JELA) – Spring and Fall 2011 Surveys			Trustees provided new JELA workplan on April 5, 2011. Discussions with the Trustees on plan comments to finalize for signature.
SAV	Tier 2 Plan (PEMD Monitoring, Rapid Assessment, Submerged Oil Sentinel Monitoring, Pre-Assessment Low Altitude Aerial Photography of Seagrass Beds)			Trustees preparing a revised draft plan. BP provided last comments to Trustees on the first draft of the plan.
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.
Shoreline	LIDAR Data Acquisition Plan			Trustees provided revised approach on March 21. BP is reviewing.
Shoreline	Sampling and Monitoring Plan for Coastal Vegetation			Trustees provided revised plan on April 27.
Shoreline	Addendum to the Monitoring Plan For Coastal Vegetation			Trustees reviewing BP comments to draft plan provided April 19, including a proposed alternative sampling plan.

Joint Work Plans Under Revision/Awaiting Signature (April)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Shoreline	Emergency Restoration Plan			Trustees (NPS) developing draft plan for initial reconnaissance/assessment. Pending since November 2010.
Terrestrial & Aquatic Wildlife	Endangered Beach Mice (EBM)			Awaiting Trustee signature as final plan has been agreed by Trustees and BP. Pending since April 20.
Terrestrial & Aquatic Wildlife	Plan to Determine potential Exposure and Injury to Diamondback Terrapins (<i>Malaclemys terrapin</i>) from Deepwater Horizon / Mississippi Canyon 252 Oil Spill			Trustees revising draft plan based on BP comments on April 15.
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.

Joint Work Plans Under Revision/Awaiting Signature (April)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
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.
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 - Plankton	Plankton Sampling Plan – Fall 2010 Shakedown Cruise 1 – Nick Skansi			Trustees reviewing revised plan provided on February 8. Field work complete. Pending since February 2011.
Water Column - Plankton	Plankton Sampling Plan – Fall 2010 Shakedown Cruise 2 – Nick Skansi			Trustees reviewing revised plan provided on February 8. Field work complete. Pending since February 2011.
Water Column - Plankton	Plankton Sampling Plan – Fall 2010 Cruise 3 – Nick Skansi	Pending		Trustees reviewing revised plan provided January 11. Field work complete. Pending since January 2011.
Water Column – Plankton	Plankton Sampling Plan – Fall 2010 Cruise 4 – Nick Skansi	Pending		Trustees reviewing revised plan provided January 11. Field work complete. Pending since January 2011.

Joint Work Plans Under Revision/Awaiting Signature (April)

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
Water Column - Plankton	SEAMAP Plankton Sampling Plan & Winter 2011 Cruise Plan - Oregon II			Awaiting signature from Trustees as Trustees and BP agreed plan was ready for signature in early April.
Water Column - Plankton	Winter 2011 Oceanus VPRII Cruise Plan - Addendum			Awaiting signature from Trustees based on agreed plan on April 4.
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 (April)

TWG	Plan	Date NOAA/USFWS Submitted to Louisiana	Comments
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	
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	Fish Kill Plan	10/29/2010	
Fish	Mid-Water Trawl (Pisces) Spring	3/20/2011	
Fish	Mid-Water Trawl (Pisces) Spring Imaging Addendum	4/27/2011	
Marine Mammals & Turtles	Marine Mammals and Prey DeSoto Canyon	1/6/2011	Minus BP and LA signatures.
Marine Mammals & Turtles	Addendum February 2011 ADCP Maintenance and HARP Recovery Plan	3/18/2011	Adds 5 additional HARPS to the February Maintenance Cruise.
Marine Mammals & Turtles	Spatial Distribution (Aerial) Marine Mammal and Turtles 2011	1/30/2011	
SAV	SAV Emergency Restoration	4/12/2011	
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	

Joint Work Plans Awaiting Louisiana Signature (April)			
TWG	Plan	Date NOAA/USFWS Submitted to Louisiana	Comments
Water Column - Plankton	Spring Epipelagic plankton plan Bunny Bordelon	4/27/2011	
Water Column - Plankton	Spring Plankton Imaging VPRII - Oceanus	3/9/2011	
Water Column - Plankton	Spring 2011 Plankton Imaging Sampling Cruise Plan	3/9/2011	