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

Dear Trustees:

Find attached the March 2012 Deepwater Horizon monthly NRD cooperative report, which now includes a section on Cooperative QA status. 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.

As we begin our data compilation and reporting efforts, we note that many work plans are not fully executed, even though associated field activities are complete. As of the end of March, eighteen work plans for which field work is complete but are under revisions/awaiting signature (one under BP review and seventeen under Trustee review); and seven work plans are waiting for additional Trustee (Louisiana) signatures.

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

Regards,

Robin Bullock  
Director, Natural Resources Damages and Environmental Science  
BP Gulf Coast Restoration Organization

**Deepwater Horizon Incident  
Monthly Report  
March 2012**

**Safety**

- On March 24, a Trustee subcontractor to Stratus had a vehicle incident. Personnel were not injured, however it caused property damage.

**Key Decisions in March**

- **Fish:** TWG decision made to proceed with ovigorous blue crab collection in Florida as the control group for the blue crab study.

**Pending Decisions as of March 31, 2012**

- **Birds:** On February 28, 2012, the Trustees requested funding for analysis of 2011 photographic colonial waterbird census data. BP is reviewing this request for participation and funding.
- **Deepwater Benthic Communities:** Trustees on the DWBC TWG had agreed in principle that Gil Rowe's lab (TAMU-G) would be appropriate for identifying infauna to the species level, particularly polychaetes, pending final Trustee legal approval. Trustees reversed their position and are no longer open to sending non-priority OSAT cores to additional labs (e.g., Rowe or Vittor) for infauna taxonomy. Discussion on ability for Trustees to timely complete the analyses continues to be required and requested.
- **Fish:** The Oyster Transition Amendment 2 status is being assessed. Cooperative QA drafts are anticipated from the Trustees.
- **Fish:** BP provided a second round of comments on the NRDA Sargassum Sample Processing Plan on March 26, 2012, and is awaiting Trustee response.
- **Human Use:** BP proposed that the cooperative human use aerial imagery be extended from its end date of March 31, 2012 to April 30, 2012 in order to reach agreement with the Trustees on sharing ground count data.
- **Marine Mammals and Turtles:** On December 23, 2011, NOAA presented a new proposed joint plan for photo identification of coastal dolphins in Alabama. BP responded that the original scope of work was overly broad and recommended discussing a revised project scope. Trustee response has not been received.
- **Marine Mammals and Turtles:** On March 26, 2012 DOI presented a request for funding the 2012 Kemps ridley nesting plan. The plan is similar to those signed in 2010 and 2011. Data sharing language is being negotiated. Nesting season begins in April so DOI is requesting an expedited decision on funding.
- **Water Column/Plankton:** Trustees provided a revised draft of the NRDA Image Data Processing Plan: Holocam, DAVPR, VPRII plan on March 4, 2012, and BP provided a second set of comments on March 21, 2012. The Trustees will provide a new draft of the plan based on BP comments and follow-up discussions.
- **Water Column/Plankton:** The Trustees provided the initial draft of the Image Data Processing Plan: SIPPER on February 22, 2012. All parties agreed to review this plan in conjunction with the new draft of the NRDA Image Data Processing Plan: Holocam, DAVPR, VPRII plan that the Trustees provide..
- **Water Column/Plankton:** An addendum to the NRDA Plankton Processing Plan – Analysis of Zooplankton was submitted to the Trustees on January 18, 2012. The addendum is for the addition of Dr. Julie Keister's University of Washington laboratory to the plan in order to increase lab capacity and expedite sampling processing. The Trustees have discussed the plan internally but have not provided written comments on the addendum to date.

## Data Management as of March 31, 2011

- **Birds:** BP believes the exchange of cooperatively collected data is materially complete with the exception of some information held by the Trustees related to chain of custody for blood and carcasses. Cooperative QA of one data set is underway but not finalized.
- **Birds:** BP has requested but not received pre-spill Osprey nesting data collected by NPS.
- **Deepwater Benthic Communities:** Historical fish count data from 1997-2005 have been committed, but have not yet been received by BP.
- **Deepwater Benthic Communities:** BP and the Trustees submitted a joint request for video data from the West Florida Shelf mesophotic reefs from NOAA.
- **Deepwater Benthic Communities:** Trustees provided available (to date) meiofauna and macrofauna data from the Sarah Bordelon 9 Cooperative Deepwater Sediment Study. Data are provided as provisional (i.e., non-validated) data.
- **Marine Mammals & Turtles:** Data sharing and laboratory analysis language continue to be developed for incorporation into several work plans. Inquiries are still being made into redactions seen in turtle nesting observation sheets for Padre Island nesting data. Sargassum data subject to the NOAA organization plan has been deemed non-cooperative and not available to BP at this time. Data from the dolphin live capture health assessments is being received by BP periodically via noaa.nrda.
- **Water Column:** BP provided to the Trustees 180 pieces of high definition video of the well head from April to July 2010.

## Cooperative QA Status as of March 31, 2012

- **Birds:** Cooperative QA discussions have been ongoing. The Beached Bird Survey Searcher Efficiency Data set has undergone cooperative QA. Trustees are preparing a summary report of that QA. BP has requested cooperative QA of all other avian databases. Trustees verbally requested that BP fund a joint contractor to handle the QA for the Trustees. BP agreed to fund a joint contractor and offered to assist the Trustees in identifying the approach and potential contractor. Trustees are developing a QA study plan. BP awaits Trustee plan to initiate further work on cooperative QA. Approximately 75% of the non-QA'd data is available across all programs.
- **Deepwater Benthic Communities:** Cooperative photo/video data QA and validation continues. Cooperative QA of the field logs, cruise reports, and data sheets has not yet been initiated. Discussions on cooperative QA have begun regarding the CTD files. None of the QA'd chemistry data is yet available on Query Manager.
- **Fish:** Discussion of cooperative QA has been initiated. NOAA has informed Cardno ENTRIX that a validation SOP specific to the Fish TWG is being drafted. BP expects to receive a copy of this draft for review once complete. All of the unstructured data is available. However, none of the fish-related QA'd chemistry data is available on Query Manager.
- **Oyster:** Discussion regarding cooperative QA has been initiated, though no cooperative QA procedure has yet been established. A call was held in early March to discuss the procedures/protocols Trustee representatives have been following – further documentation is anticipated. Almost all of the unstructured data (75-100%) across all oyster efforts is available. None of the QA'd chemistry data is available on Query Manager.
- **SAV:** Cooperative QA discussion has been initiated with the Trustees. Most of the QA'd chemistry related data is not yet on Query Manager.
- **Shallow-Water Coral:** Cooperative discussions have not yet been initiated and none of the data is currently available from the Trustees.
- **Shoreline:** Discussion regarding cooperative QA has been initiated. BP proposed progression towards cooperative datasets. It has been mentioned on shoreline TWG calls since then, but no

progress has been made. Approximately 50% of the QA'd chemistry data is available on Query Manager.

- **Water Column:** Discussion regarding cooperative QA has been initiated, and the Trustees and BP are developing a cooperative post-processing plan ("NRDA CTD Processing Plan") for CTD/fluorometry data to establish a common post-processing SOP and consensus QA'd dataset for all cooperative and independent offshore water column studies. Approximately 25% to 75% of the QA'd water chemistry data is available on Query Manager.
- **Water Column/Plankton:** A cooperative QA process has been established. Sample processing and QA is ongoing under the cooperative NRDA Plankton Processing Plan – Analysis of Zooplankton and first quarter progress reports have been received. None of the data is yet available from the Trustees.
- **Water Column/Plankton Imaging:** Discussion regarding cooperative QA of plankton imagery data has been initiated, and the Trustees and BP are developing a series of cooperative processing plans for the various imaging systems utilized for the NRDA. None of these data are yet available from the Trustees.
- **Marine Mammals and Turtles:** No discussion regarding cooperative QA has been initiated. While a fair portion (50% – 100% depending on the program) of the telemetry data is available, almost none of the other dolphin, turtle, or manatee data is available from the Trustees.

### Trustee Council/BP Communications in March 2012

- **Communications:** The Trustees responded by letter on March 20, 2012, to BP's draft second year report on NRD.
- **Administrative Record:** On March 1, 2012, DOI provided a letter to BP concerning their position on the administrative record. BP is developing a response to DOI's letter.
- **Fish (Oysters):** Working group joint call March 8, 2012.
- **Funding:** BP responded on March 2, 2012, to DOI's February 13, 2012 request for funds for Pelagic Oiled Bird Photographic Evaluation and Turtle Analytical Plan.
- **Human Use:** As described above, BP proposed that the cooperative human use aerial imagery be extended from its end date of March 31, 2012 to April 30, 2012, in order to reach agreement with the Trustees on sharing ground count data. BP and the Trustees are discussing the proposal.
- **SAV Funding Request:** On March 28, 2012, BP received a request for funding from DOI for SAV monitoring. BP is reviewing this plan and request for funding.
- **Early Restoration:** Several communications and exchange of information were conducted between BP and the Trustees in March to further progress the initial early restoration projects.

### Planned April 2012 Field Activities

- **Birds:** None planned.
- **Deepwater Benthic Communities:** None planned.
- **Fish (Oysters):** No cooperative activities planned.
- **Fish:** Blue Crab collections to take place in Mississippi beginning April 10, 2012.
- **Human Use:** Cooperative Aerial Imagery continued in March pursuant to the executed plan addendum, valid through March 31, 2012. Cooperative work is continuing in April 2012 pending agreement to a plan addendum and sharing ground count data.
- **Marine Mammals & Turtles:** Turtle and dolphin prey sampling began October 7, 2011, and continues intermittently due to weather conditions. Aerial surveys for distribution and abundance of oceanic marine mammals and turtles ended in March 2012. Photo ID and remote biopsy collection for dolphins resumed in January 2012 and will continue until April 2012. Discussions about appropriate data sharing provisions and development of several plans for

laboratory analyses are ongoing.

- **Shoreline:** Erosion stakes in LA will be measured, and new stakes will be set in the Delta. Aerial targets will also be set in the Delta.
- **Water Column:** None planned.

## Joint Work Plans Signed in March 2012

TWG	Plan	Signature Date		Comments
		NOAA/USFWS	BP	
<b>Marine Mammals &amp; Turtles</b>	Assessing Potential Sublethal and Chronic Health Impacts from the Mississippi Canyon 252 Oil Spill on Coastal and Estuarine Bottlenose Dolphins: Addendum	3/9/2012	3/19/2012	
<b>Marine Mammals &amp; Turtles</b>	Satellite Tracking of Sperm Whales in the Gulf of Mexico in 2011, a Follow-up to the Deepwater Horizon Oil Spill: Analysis Plan for Years – Addendum	3/14/2012	3/22/2012	
<b>Marine Mammals &amp; Turtles</b>	Nearshore Cetacean & Sea Turtle Prey Item Sampling Plan: Addendum to Update Target Species List	3/22/2012	3/30/2012	
<b>Shoreline</b>	Work Plan for Impacts to Marsh Fiddler Crabs and Periwinkles along the Gulf of Mexico	3/16/2012	3/16/2012	
<b>Shoreline</b>	North Barataria Bay Addendum to the Monitoring Plan for Coastal Vegetation	3/16/2012	3/16/2012	
<b>Shoreline</b>	Coastal Wetland Vegetation Elevation Survey - Addendum to the Monitoring Plan	3/19/2012	3/19/2012	
<b>Water Column</b>	ADCP December 2011 Maintenance and ADCP Removal plan	3/29/2012	3/30/2012	

<b>Data Summary Reports Transmitted to Date (as of March 2012)</b>				
<b>DSR Number</b>	<b>DSR Short Title</b>	<b>Transmittal Date</b>	<b>Comments</b>	<b>Outstanding Data Issues</b>
<b>DSR 002</b>	Estimating Mortality of Birds Using Beach Bird Surveys	1/13/2012		
<b>DSR 005</b>	Detection Probability (Searcher Efficiency) (Bird Study 1B)	2/6/2012		
<b>DSR 006</b>	Carcass Persistence Pilot Study (Bird Study 1C)	2/6/2012		
<b>DSR 007</b>	Using Radio Telemetry to Determine the Fates of Bird Carcasses Drifting in the Northern GoM (Bird Study 1D)	2/6/2012		
<b>DSR 049</b>	Aerial Surveys for Assessing Marine Mammals and Sea Turtles in the Region of DWH	2/29/2012		
<b>DSR 068</b>	Oyster Sampling Plan - Phase I	1/23/2012		
<b>DSR 071</b>	SAV Tier 1 Pre-Assessment Plan Pre-Impact Baseline Characterization	2/29/2012		
<b>DSR 078</b>	Tier 2 Rapid Assessment and Tier 2 Submerged Oil Sentinel Monitoring Plan	2/29/2012		
<b>DSR 080</b>	Shoreline/Vegetation NRDA Pre-Assessment	1/13/2012		
<b>DSR 134</b>	Water Column Profiling to Measure Dissolved Phase – Jack Fitz 1	10/16/2011		
<b>DSR 139</b>	Water Column Injury Ephemeral Data Collections: Deepwater Horizon Oil Spill (DWHOS) Plan for Adaptive Water Column NOAA-NRDA Sampling (PAWNNS) Cruise Plan – American Diver 2	2/6/2012		
<b>DSR 149</b>	Water Column Ephemeral Data – HOS Davis 3	1/13/2012		
<b>DSR 157</b>	Deep Benthic Sediment Sampling – Soft Sediment Plan	1/13/2012		

Joint Work Plans Under Revision/Awaiting Signature (March 2012)					
TWG	Plan	Signature Date		Comments	Status
		NOAA/USFWS	BP		
<b>Aerial Imagery</b>	Aerial Image Acquisition in Support of the MC252 NRDA Process: Fall 2010 Through Spring 2012			Geographic scope of Spring 2012 aerial imagery acquisition is under review. Joint Trustee/BP consensus not yet reached. BP/Trustees agreed on baseline scope during the March 28, 2012 TWG meeting, with an action item to engage the technical TWGs on needs/justification for any work beyond the agreed-upon baseline scope.	BP Review
<b>Aerial Imagery</b>	Assessment Plan Concerning Aerial Imagery in the Northern Gulf of Mexico. (Original draft intended to describe the scope of airborne and spaceborne imagery acquisition, mapping interpretation, and analysis)			Revised draft developed that provides only for mapping of feature primitives (e.g., land-water interface; habitat maps for marsh, SAV, flats, beaches), inventory, use matrix, and quick-look evaluation. Interpretation and analysis components of original draft have been tabled. BP agreed during the March 28, 2012 TWG meeting that comments would be provided by April 13, 2013.	BP Review
<b>Aerial Imagery</b>	AVIRIS Hyperspectral (Two plans - 1. Assessment of Marshes, 2. Offshore Surface Oil Volume Est.)			BP agreed during the March 28, 2012 TWG meeting that comments would be provided by April 27, 2013.	BP Review



Joint Work Plans Under Revision/Awaiting Signature (March 2012)					
TWG	Plan	Signature Date		Comments	Status
		NOAA/USFWS	BP		
<b>Aerial Imagery</b>	Aerial Photo Target Placement and Survey in Support of: Sampling and Monitoring Plan for the Assessment of Marsh Loss Due to Impacts from MC252 Oil in the Gulf of Mexico			BP/Trustees agreed to support plan at the March 28, 2012 TWG meeting. Plan to be submitted to Trustees for review. Trustees are facilitating land access agreements for state-owned properties.	Trustee Review
<b>Birds</b>	Quality Assurance/Quality Control			BP responded on February 9, 2012, with request for a more developed work plan.	Trustee Review
<b>Deepwater Benthic Communities</b>	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. Field work is complete.	Trustee Review
<b>Deepwater Benthic Communities</b>	Deepwater Corals ROV Hardground Survey			BP returned comments for final revisions to the Trustees on Mar 22, 2012. Field work is complete.	Trustee Review
<b>Deepwater Benthic Communities</b>	HOS Sweetwater 4 and 6 – ROV Sediment and Water Sampling Plan - Addendum			BP provided comments on the addendum for revised sampling dates and sheen on December 15, 2011. Field work is complete.	Trustee Review
<b>Deepwater Benthic Communities</b>	Mesophotic Reef Follow-Up Cruise Plan			BP provided comments to the Trustees on October 14, 2011. Field work is complete.	Trustee Review
<b>Deepwater Benthic Communities</b>	Red Crab Study			BP received a draft study plan from Trustees on July 26, 2011, and is preparing detailed comments. Field work is complete.	BP Review
<b>Deepwater Benthic Communities – Analysis Plan</b>	ROV Megafauna/ Megaplankton Consolidated Analysis Plan			Revised plan sent to Trustees February 27, 2012.	Trustee Review

Joint Work Plans Under Revision/Awaiting Signature (March 2012)					
TWG	Plan	Signature Date		Comments	Status
		NOAA/USFWS	BP		
Deepwater Benthic Communities	SPI Survey Addendum #1			BP sent the Trustees on October 25, 2011, a no-cost addendum that addresses the removal of the water column data collection and adds one day to the study. Field work is complete.	Trustee Review
Deepwater Benthic Communities	SPI Survey Addendum #2			BP returned to the Trustees as approved for signature on November 30, 2011. Field work is complete.	Trustee Review
Deepwater Benthic Communities/ Water Column – Seeps	Natural Hydrocarbon Seep Study Plan – Leg 1			BP provided revised study plan to Trustees December 2, 2011, awaiting comments back to finalize the plan. Field work is complete.	Trustee Review
Deepwater Benthic Communities/ Water Column – Seeps	Natural Hydrocarbon Seep Study Plan – Leg 2			BP provided revised study plan to Trustees December 6, 2011, awaiting comments back to finalize the plan. Field work is complete.	Trustee Review
Deepwater Benthic Communities	Seeps Plan Microbial Water and Sediment Core Processing SOP Addendum			Trustees provided comments on the addendum on December 20, 2011. BP met with Trustee reviewers to discuss the remaining issues. BP is revising the comments based on this discussion.	BP Review
Fish	Bluefin Tuna Tagging Work Plan			BP returned to the Trustees as approved for signature on March 28, 2012.	Trustee Review
Fish	Gulf Sturgeon - Year 2 NRDA Assessment - Fall 2011 & Spring 2012			BP provided second round of comments on September 20, 2011.	Trustee Review
Fish	Transition Oyster Sampling Plan Amendment 2			BP received the draft plan for review and comment on October 28, 2011. Field work is complete.	Trustee Review

Joint Work Plans Under Revision/Awaiting Signature (March 2012)					
TWG	Plan	Signature Date		Comments	Status
		NOAA/USFWS	BP		
<b>Fish</b>	NRDA Sargassum Sample Processing Plan			BP returned to the Trustees as approved for signature on March 26, 2012.	Trustee Review
<b>Marine Mammals &amp; Turtles</b>	Dry Tortuga MARU and HARP Recovery & Servicing Mission July 11-13, 2011			Field work is complete.	Trustee Review
<b>Marine Mammals &amp; Turtles</b>	MC252 Deepwater Horizon Oil Spill MARU & HARPS Recovery February 20 – March 9 Mission Plan February 10, 2012				Trustee Review
<b>Marine Mammals &amp; Turtles</b>	Genetic Analysis of Stock Structure, Species Identification and Sex Determination for Marine Mammal Biopsies and Strandings: ADDENDUM	7/2/2011		BP received revised draft on January 17, 2012. Final revisions in progress.	BP Review
<b>Marine Mammals &amp; Turtles</b>	Analysis of Marine Mammal Tissue Samples Collected Pursuant to the Deepwater Horizon Mississippi Canyon 252 Oil Spill			BP received revised draft on January 7, 2012. Final revisions in progress. Significant issues pertaining to sample selection and analyses still exist.	BP Review
<b>Nearshore Benthic</b>	Submerged Oil Plan 2011 – Addendum 1 - Sediment Sampling with Vibracorer			BP received this plan on October 27, 2011, and requested the Trustees provide data results to support the justification or need for this plan.	Trustee Review
<b>SAV</b>	Tier 3 Plan			Trustees revising plan to address prior BP comments and to include Fall 2011 Signature Verification Addendum. Field work is complete.	Trustee Review

Joint Work Plans Under Revision/Awaiting Signature (March 2012)					
TWG	Plan	Signature Date		Comments	Status
		NOAA/USF WS	BP		
<b>Water Column</b>	December Cooperative Cruise- (NOAA/BP-Cardno ENTRIX NRDA Cooperative Deep Tow Cruise 2/December 2010 Arctic-HOS Davis 5-Sarah Bordelon Cruise)	Original Signature Page December 17, 2010	Amended Signature Page March 26, 2011	Signature Page was revised after Trustee signed. BP requested Trustees re-sign in March 2011 so all signatures are on one sheet. Awaiting new Trustee signature.	Trustee Review
<b>Water Column</b>	CTD Data Processing Work Plan			Original Trustee-drafted CTD Data Processing plan was received by BP on January 20, 2012. This was reviewed and returned by BP on February 29, 2012.	Trustee Review
<b>Water Column - Plankton</b>	Plankton Sampling Plan – Fall 2010 Shakedown Cruise 1 – Nick Skansi			Trustees reviewing revised plan provided February 8, 2011. Field work is complete.	Trustee Review
<b>Water Column - Plankton</b>	Plankton Sampling Plan – Fall 2010 Shakedown Cruise 2 – Nick Skansi			Trustees reviewing revised plan provided on February 8, 2011. Field work is complete.	Trustee Review
<b>Water Column - Plankton</b>	Plankton Sampling Plan – Fall 2010 Cruise 3 – Nick Skansi			Trustees reviewing revised plan provided January 11, 2011. Field work is complete.	Trustee Review
<b>Water Column – Plankton</b>	Plankton Sampling Plan – Fall 2010 Cruise 4 – Nick Skansi			Trustees reviewing revised plan provided January 11, 2011. Field work is complete.	Trustee Review
<b>Water Column - Plankton</b>	Image Data Processing Plan: Holocam, DAVPR, VPRII			BP provided comments to the Trustees on March 21, 2012.	Trustee Review
<b>Water Column - Plankton</b>	Image Data Processing Plan: SIPPER			Trustees provided draft for review on February 22, 2012; BP is currently reviewing the draft plan.	BP Review
<b>Water Column - Plankton</b>	Walton Smith Marine Snow Cruise 4 Work Plan			Work plan reopened when Trustees received notice in January 2012 that BP will pay for the study in exchange for the data. Field work is complete.	Trustee Review

<b>Joint Work Plans Awaiting Louisiana Signature (March 2012)</b>			
<b>TWG</b>	<b>Plan</b>	<b>Date NOAA/USFWS Submitted to Louisiana</b>	<b>Comments</b>
<b>Birds</b>	Carcass Persistence Study	6/12/2011	Field work is complete.
<b>Birds</b>	Colonial Waterbird (CWB) Extension 2 (BRPE and GREG satellite telemetry)	7/29/2011	Satellite data collection in progress.
<b>Birds</b>	Using Radio Telemetry to Determine the Fates of Bird Carcasses Drifting in NGOM	7/15/2011	Field work is complete.
<b>Corals</b>	Shallow-water Coral Tier 1 Plan Addendum	5/17/2011	Field work is complete.
<b>Deepwater Benthic Communities</b>	NRDA Tier 1 for Deepwater Communities – Addendum Plan for Coral Aging	2/6/2012	Laboratory work in progress.
<b>Marine Mammals &amp; Turtles</b>	Addendum February 2011 ADCP Maintenance and HARP Recovery Plan	3/18/2011	Field work is complete.
<b>Water Column</b>	ADCP December 2011 Maintenance and ADCP Removal plan	3/30/2012	Field work is complete.