

**NRDA plan for samples of opportunity in support of the Water Column baseline
May 24, 2010**

**Prepared by: Michael Buchman, NOAA Florida Keys National Marine Sanctuary
Proposed and Reviewed by: Ray Jakubczak, Entrix/BP**

Objective: Obtain samples of whole water from the CRMP cruise for NRDA. Samples will be sent to TDI Brooks labs for analysis.

Proposal:

- Since 1999, FWRI's Coral Reef Monitoring Project (CRMP), sponsored largely by NOAA and EPA, established and monitored a set of over 40 coral-monitoring sites throughout Florida Bay (see attached map). The CRMP monitoring sites are visited once each year and coral health is observed using a standard monitoring protocol.
- This year's CRMP sampling cruise is currently already underway. Trips are being made daily from the middle of the Keys (Marathon). The vessel used can accommodate additional staff for water sampling. The stations remaining to be occupied include those in the Dry Tortugas area.
- Samples will be comprised of whole water, sub-surface discrete samples collected by Niskin bottles (or similar sampler). Trustee and RP representatives will be invited to opportunistically obtain these samples for analysis. A split or duplicate from each station may also be collected for analysis by the RP..
- The water samples will be considered joint samples of RP and Trustees to be analyzed at a Trustee lab. Samples will be collected by Entrix staff under observation by CRMP staff using established clean protocols.
- These water samples will augment or complement other baseline samples collected under other work plans. These samples are not intended to replace or substitute for any other baseline samples currently being planned.

Budget

Because this cruise is already underway, there are no costs associated with the sampling platform. Costs are limited to Entrix staff time, sampling consumables, and associated lab analytical costs.

Laboratory and Distribution from Lab:

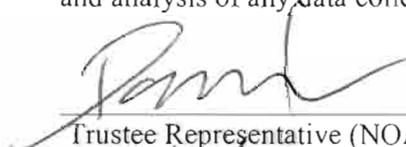
Unless otherwise agreed upon by the Trustees and BP, all samples will be sent to TDI Brooks Lab.

Each laboratory shall simultaneously deliver raw data, including all necessary metadata, generated as part of this work plan as a Laboratory Analytical Data Package (LADP) to the trustee Data Management Team (DMT), the Louisiana Oil Spill Coordinator's Office (LOSCO) on behalf of the State of Louisiana and to ENTRIX (on behalf of BP). The electronic data deliverable (EDD) spreadsheet with pre-validated analytical results, which is a component of the complete LADP, will also be delivered to the secure FTP drop box maintained by the trustees'

Data Management Team (DMT). Any preliminary data distributed to the DMT shall also be distributed to LOSCO and to ENTRIX. Thereafter, the DMT will validate and perform quality assurance/quality control (QA/QC) procedures on the LADP consistent with the authorized Quality Assurance Project Plan, after which time the validated/QA/QC'd data shall be made available to all trustees and ENTRIX. Any questions raised on the validated/QA/QC results shall be handled per the procedures in the Quality Assurance Project Plan and the issue and results shall be distributed to all parties. In the interest of maintaining one consistent data set for use by all parties, only the validated/QA/QC'd data set released by the DMT shall be considered the consensus data set. The LADP shall not be released by the DMT, LOSCO, BP or ENTRIX prior to validation/QA/QC absent a showing of critical operational need. Should any party show a critical operational need for data prior to validation/QA/QC, any released data will be clearly marked "preliminary/unvalidated" and will be made available equally to all trustees and ENTRIX.

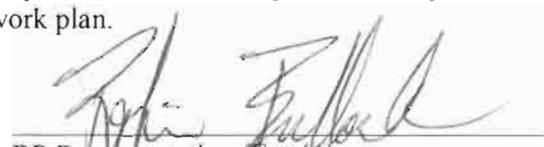
Approvals:

Approval of this work plan is for the purposes of obtaining data for the Natural Resource Damage Assessment. Parties each reserve its right to produce its own independent interpretation and analysis of any data collected pursuant to this work plan.



Trustee Representative (NOAA)
6/5/10

Date

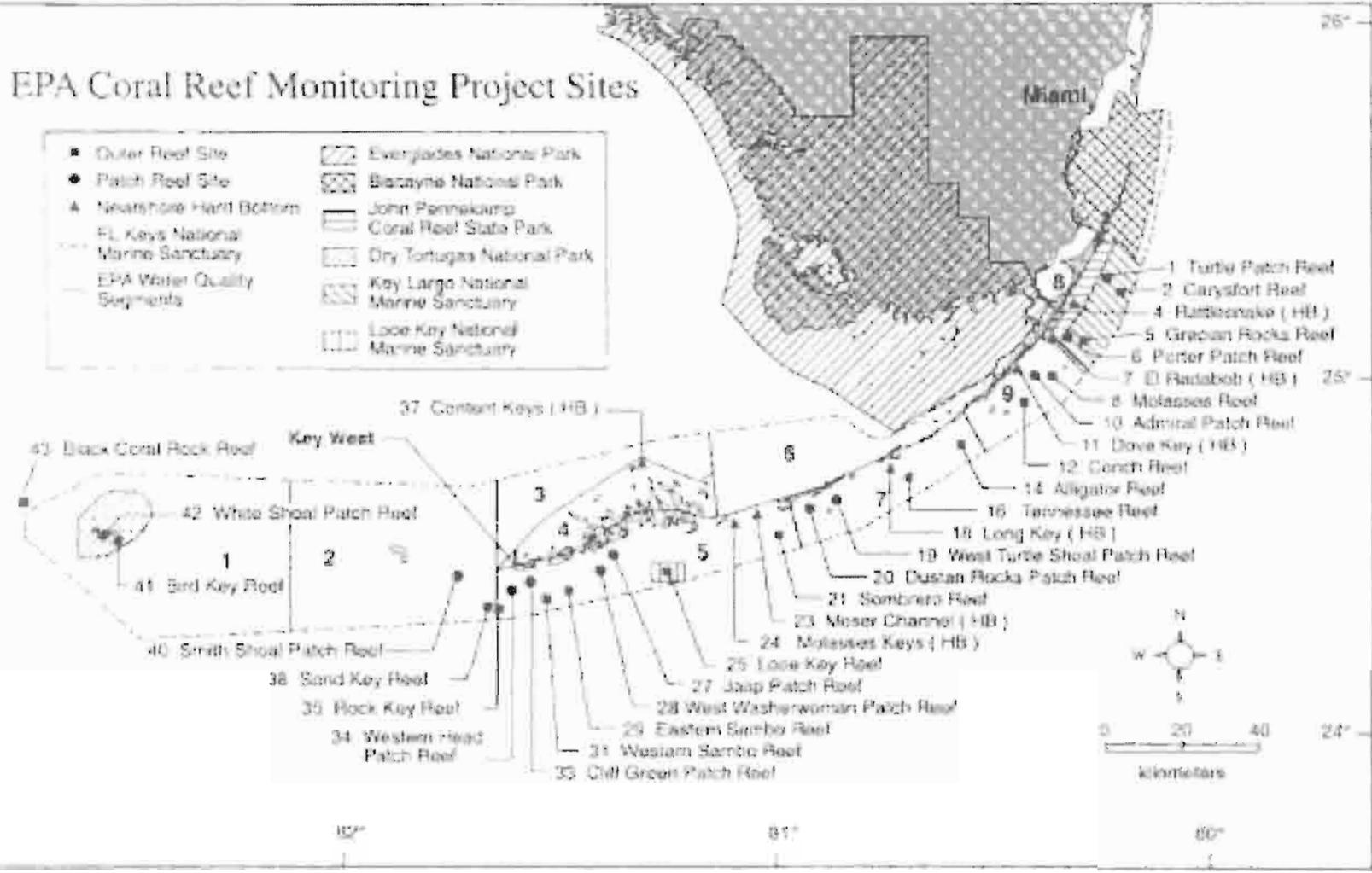


BP Representative (~~Entrix~~)
June 5, 2010

Date

EPA Coral Reef Monitoring Project Sites

- | | |
|-------------------------------------|--|
| ● Outer Reef Site | ▨ Everglades National Park |
| ● Patch Reef Site | ▨ Biscayne National Park |
| ▲ Nearshore Hard Bottom | ▨ John Pennakump Coral Reef State Park |
| ▨ FL Keys National Marine Sanctuary | ▨ Dry Tortugas National Park |
| ▨ EPA Water Quality Segments | ▨ Key Largo National Marine Sanctuary |
| | ▨ Looe Key National Marine Sanctuary |



- 1 Turtle Patch Reef
- 2 Carysfort Reef
- 4 Rattlesnake (HB)
- 5 Grecian Rocks Reef
- 6 Porter Patch Reef
- 7 El Rastabob (HB)
- 8 Molasses Reef
- 10 Admiral Patch Reef
- 11 Dove Key (HB)
- 12 Conch Reef
- 14 Alligator Reef
- 16 Tennessee Reef
- 18 Long Key (HB)
- 19 West Turtle Shoal Patch Reef
- 20 Dusan Rocks Patch Reef
- 21 Sombrero Reef
- 23 Moser Channel (HB)
- 24 Molasses Keys (HB)
- 25 Looe Key Reef
- 27 Jaup Patch Reef
- 28 West Washerwoman Patch Reef
- 29 Eastern Sombo Reef
- 31 Western Sombo Reef
- 33 Owl Green Patch Reef
- 34 Western Head Patch Reef
- 35 Rock Key Reef
- 38 Sand Key Reef
- 40 Smith Shoal Patch Reef
- 41 Bird Key Reef
- 42 White Shoal Patch Reef
- 43 Black Coral Rock Reef
- 37 Contant Keys (HB)