# Monitoring and Adaptive Management



#### WHO WE ARE

The Cross-Trustee Implementation Group (Cross-TIG) Monitoring and Adaptive Management work group consists of representatives of all members of the Trustee Council. The work group encourages compatibility of monitoring and data procedures across all TIGs and serves as a forum to address monitoring and adaptive management topics in *Deepwater Horizon* restoration. Activities for 2019-2020 will include:

- Continuing to develop project-level monitoring and adaptive management guidelines for additional restoration approaches.
- Supporting the Trustee Council in programmatic evaluation efforts across TIGs and Restoration Types.
- Continuing to develop guidelines for programmatic data analysis, synthesis, and reporting.
- Continuing to develop a structure for restoration monitoring data in DIVER (the project information database).
- Coordinating with other Gulf restoration programs on monitoring and adaptive management matters.

## WHAT WE DO

Adaptive management involves fine-tuning the restoration program over time, based on monitoring results and improved scientific understanding. We recognize the need for a robust monitoring and adaptive management framework within all the Restoration Areas. The process creates an expanding base of knowledge that supports current and future restoration decision-making and further refines which restoration approaches are most effective for different resources and environmental settings.

We are developing guidance for monitoring to evaluate restoration outcomes and benefits to injured resources. We also identify additional ecological monitoring needs and other scientific activities to address information gaps and improve restoration planning and implementation. This process allows us to proceed with restoration now, without waiting to resolve every scientific question first.

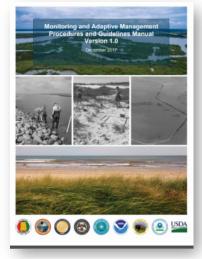
## Deepwater Horizon Natural Resource Damage Assessment and Restoration

## Monitoring and Adaptive Management Manual June 2019

### WHAT IS THE MAM MANUAL?

In the Programmatic Restoration Plan, the Trustees committed to develop a set of guidelines for monitoring and adaptive management practices that support implementation and evaluation of restoration projects.

The Trustee Council has approved the Monitoring and Adaptive Management (MAM) Procedures and Guidelines Manual Version 1.0 (pdf). The MAM Manual serves as guidance for the



Trustee Implementation Groups. It was written by the Cross-TIG Monitoring and Adaptive Management work group, which includes representatives of each of the Trustees.

The MAM Manual includes recommended procedures and guidelines that build upon the monitoring frameworks and conceptual monitoring plans developed for Early Restoration. The Cross-TIG MAM work group and the Trustees will revise the MAM Manual periodically as they develop monitoring guidance for additional restoration approaches, develop approaches to evaluate broader restoration progress, and learn more about the best ways to measure restoration progress for different resources and environmental settings.

The MAM Manual is a good example of how the Trustees are working to ensure that the restoration projects selected for implementation will provide long-term benefits to the natural resources and services injured by the oil spill.

#### The MAM Manual is available at

<u>http://www.gulfspillrestoration.noaa.gov/monitoring-and-adaptive-management</u>.

## WHAT IS IN THE MAM MANUAL?

MAM Manual Version 1.0 includes:

- Guidance for implementing project-level monitoring.
- Monitoring guidance for wetlands, beaches and dunes, barrier islands, water quality, and recreational use restoration approaches.
- Guidance for implementing project adaptive management, when appropriate.
- Data management guidance.

Future versions of the MAM Manual will include:

- Monitoring guidance for additional restoration approaches.
- Guidance for evaluation of progress towards restoration goals.
- Guidance for reviewing existing information to identify emerging "unknown conditions."