

Gulf of Mexico Research Planning Workshop Summary

Prepared for the:

Gulf of Mexico Alliance's Identification and Characterization of Gulf Habitats Priority Issue Team

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Overview of the Gulf of Mexico Research Planning Effort

The purpose of the Gulf of Mexico Research Plan (GMRP) is to 1) identify regional research and information needs and 2) address these needs through collaboration with agencies and organizations that conduct and use Gulf of Mexico-related research. The GMRP is rooted in stakeholder input, and workshops were one of the primary methods used to collect this input. One workshop was held in each of the five Gulf of Mexico states and approximately 300 participants and facilitators representing over 100 organizations, universities and departments of local, state, and federal agencies participated in the workshops. The top ten research priorities from each workshop were linked to one of the GOMA priority issue team areas. This summary describes the top priorities identified at the workshops that most closely align with the Identification and Characterization of Gulf Habitats Priority Issue.

Summary

Understanding the connectivity between habitats and between habitats and species was ranked as the top or one of the top priorities at several workshops (table 1). Specific research is needed to identify connections from the watersheds to the shelf edge. One priority is to develop a system wide model that links Gulf of Mexico habitats and also includes data on forcing functions. More data is needed to validate or refute connectivity claims. One of the top priorities is to develop GIS layers that characterize the marine and coastal environment, and workshop participants indicated that these layers should incorporate onshore data layers. The development of automated mechanisms to add existing and real time data and establishing a clearinghouse for data and layers would assist in this effort. In addition to developing the GIS layers, workshop participants identified the need for real time observation systems to create new and validate existing numerical circulation models. Work is needed to identify the placement of sensors in order to develop an optimal observation system.

You can find out more about the GMRP at the project's web site at: masgc.org/gmrp or by contacting Steve Sempier, Gulf of Mexico Research Planning Coordinator, at stephen.sempier@usm.edu.

Table 1. Research topics identified at the GMRP workshop that relate to the Identification and Characterization of Gulf Habitats Priority Issue Team.

| Topic | Rank at Workshop | State Workshop |
|--|------------------|----------------|
| Connectivity across the Gulf of Mexico -Connections between offshore banks and estuaries -System-wide model for the GOMEX - not just conceptual - include data on forcing functions -Need data to back up connectivity claims | 1 | TX |
| Understand connectivity among populations and habitats: -Watershed to shelf edge -Fisheries management -Shelf edge deep water hard bottom habitat | 1 | FL |
| Develop GIS databases (layers) that characterize the marine and coastal environment -Develop additional layers or create extensions of onshore data layers -Develop automated mechanism to incorporate existing and new data (real time) -Identify a clearing house for data and layers | 4 | FL |
| Enhance coastal and ocean real time observation systems -Develop and validate numerical circulation models and develop techniques for data assimilation into those models -use OSSEs (Observing System Simulation Experiments) to determine optimal placement of offshore observations | 6 | TX |
| Where are the best locations for sensors? (Data collection) -Wind -Climatological hot spots -Gulf of Mexico -Atmospheric / ocean circulation -GAP analysis -Redundancy -\$ | 8 | FL |

“Topic” was the raw comment that was presented as a priority at the workshop and voted for by workshop participants.

“Rank at Workshop” is based on the number of votes the topic received at the workshop. A rank of “1” indicated that the topic received the most votes.

“State Workshop” is the workshop where the topic was presented and received votes.