

**Gulf of Mexico Alliance
Ecosystem Integration and Assessment (EIA)
Priority Issue Team (PIT) Meeting
April 15-17, 2009, Corpus Christi, TX**

Meeting Notes & Action Items

Overall Notes of Interest

All 5 Gulf States were in attendance. State agency reps from: Mississippi Department of Environmental Quality, Mississippi Department of Marine Resources, Louisiana Department of Wildlife and Fisheries, Alabama Department of Conservation and Natural Resources Marine Resources Division, Texas Parks and Wildlife, and Florida Fish and Wildlife Conservation Commission. Also in attendance were representatives from the other Alliance Teams - Nutrients, Education and Outreach, Restoration, Resiliency, Water Quality (on April 17th). Total attendance for Thursday's meeting – 32 Total attendance for Friday's meeting – 27

Announcements

- 1) Capitol Hill Ocean Week in D.C., June 9-11th, will feature a display booth for Gulf of Mexico Alliance. They have requested that each PIT provide them with digital copies of logos and pictures for booth content.

Action: Please send digital photographs to seneca.holland@tamucc.edu

- 2) All Hands Gulf of Mexico Alliance Meeting in Mobile, Alabama, August 4-6

Tentative Agenda:

August 4 – Individual Team Meetings

August 5 – All Hands Opening Plenary in AM, Individual Team Meeting in PM

August 6 - All Hands Closing Plenary in AM

Field Trip to Mustang Island

On Wednesday April 15th, Jim Gibeaut (HRI) led a half-day field trip which explored Mustang Island and the North Padre Island barrier island system. During this trip we inspected typical barrier island environments and discussed their dynamics. We discussed management issues, and the data used for representing this real world environment and tracking change. 16 people participated in this event.

Welcome and Introductions

Thursday April 16th Larry McKinney, State lead for the PIT, hosted the meeting and kicked it off by welcoming the attendees.

Purpose and Goals of Workshop

Team coordinator Seneca Holland (HRI) reviewed the goals for the meeting.

Update on EIA workgroup actions and discussion of APII Outcomes

Becky Allee (NOAA Gulf Coast Services Center) provided an update on EIA workgroup actions and led a discussion of APII outcomes. It was decided that reference to PHINS would be removed from the AP II Document. Allee also suggested that the team address public comments on the EIA chapter. Public comments will be taken into consideration for the APII tier two document; specifically, comments that the PIT will need to take into further consideration include:

- 1) Invasive species.
- 2) Sea level rise and climate change.

Action Items:

Remove PHINS acronym from EIA document

Address invasive species at our next team mtg. in August

Better address sea level rise and climate change in our APII Chapter.

The team then moved to revising outcomes which do not appear to be relevant to the APII tier one document. The new document released the day before the PIT meeting had a different format and had exchanged "Outcomes" for "Expected Results". However, outcomes may be included in the APII tier two document; therefore outcomes were revised along with their milestone(s) and are as follows:

Outcomes #1 - Regional Ecosystem Data Management (REDM) System that supports federal, state and public data needs and requirements for sound management of Gulf of Mexico resources.

Milestones:

- 1) Number of web-based tools and applications developed.
- 2) Number of new data and metadata records written, cataloged and made discoverable.
- 3) Percentage of gaps filled through new data acquisition. Quarterly report of web statistic depicting user access and download of "REDM" data sets, products & services.

Outcome #2 – Use of tools and data accessibility contribute to management decisions in the Gulf of Mexico.

Milestones:

- 1) # of Acres of marsh identified and mapped

- 2) # of discovered datasets being displayed and made accessible to resource managers
- 3) # of citations utilizing REDM
- 4) # of management decisions influenced by use of the system.

Outcome #3 - Collaborative partnerships with the Gulf of Mexico Fishery Management Council and the Gulf States Marine Fisheries Commission are established to develop an agreed upon approach to ecosystem based management and enhance conservation of living marine resources in the Gulf of Mexico.

Milestones:

- 1) # of MOUs established with the living marine resource management agencies and ecosystem- based organizations. Ex. Marine Spatial planning.
- 2) # of joint meetings planned
- 3) # of collaborative partnerships identified

Expected Results were also modified and Becky Allee emailed the revised APII document to the PIT members, requesting that additional changes or comments be sent to her, Diane Altsman and Seneca Holland by April 24th.

Other general comments from team members:

Rafael Calderon made an announcement about a Legislative Process that is going on throughout U.S. - Marine Spatial Planning, which the group needs to be aware of and determine how we can collaborate with this effort.

Russ Beard - NOAA is setting up a climate services office. Climate impact needs to be addressed through the Alliance and we need to come to agreement on how we can access these resources and how we can include this in our plan.

State Roles and EIA GOMA Grant Subawards

Jim Gibeaut then moved on to discussing the cooperative agreement between NOAA and the Harte Research Institute for Gulf of Mexico Studies. Jim stated that the overall goal of this agreement is to improve management of Gulf habitats through the creation of a publicly accessible Internet portal for searching, viewing, analyzing, and downloading ecosystem-related geospatial data. Jim also discussed goals and objectives by year (1-3) and project resources (including HRI personnel and state subawards). HRI has a subaward currently in place with the State of Florida (Dave Reed & Cristina Carollo, Florida Institute of Oceanography) and hopes to have subawards in place soon with Louisiana Department of Wildlife and Fisheries (Jeff Marx & Heather Finley) and Mississippi Department of Marine Resources (Grant Larson & Jan Boyd). at the Alabama Department of Conservation and Natural Resources, Marine Resources Division (Chris Denson) will not be entering a into a subaward agreement with HRI this year; however is

expected to do so in year two. Jim then presented a generalized state statement of work list of tasks for year one. Tasks include:

1. Participation in two EIA PIT Meetings;
2. The development of a data search and compilation plan;
3. Data discovery (Ongoing);
4. Maintenance of online GAME survey * (Ongoing & specific to Florida);
5. Assisting other State partners in their data compilation efforts * (Ongoing & specific to Florida);
6. Begin/update Florida gap analysis (Specific to Florida);
7. Presentation of data search findings and search methods at EIA meetings.

Concurrent Sessions

Two concurrent sessions were held in the second half of the morning: one for metadata training and the other to further address APII outcomes.

Metadata training

Kathy Martinolich from NOAA's National Coastal Data Development Center (NCDDC) provided a hybrid metadata training session for 15 of the meeting participants. The training presentation is available at <ftp://ftp.sam.usace.army.mil/OUTGOING/JALBTCX/EIAPIT/>

Outcomes

This session was intended to further refine outcomes and milestones for APII but it was learned that outcomes were no longer included in the tier one document. Therefore, participants agreed that a better use of the time would be to discuss how the team could move forward on the 'Assessment' responsibilities of the team, which to date have not been addressed. The following notes reflect those discussions.

Dave Palandro, FWRI identified the issue for the team to discuss: the team is currently data centric but there is a need to include the assessment side more. Dave then proposed the team have a data subgroup.

The group discussed the pros and cons of having a data subgroup. It was decided that the EIA team would have two subteams; one for data 'integration' and the other for 'assessment'. Taking this approach ensured that data integration was noted as being equally important as the assessment side and utilizes the name of the team better. Team members would participate in whichever subteam would best utilize their specific expertise. Following this discussion, participants started to brainstorm on ideas of activities the assessment subteam could undertake in the short term.

Russ Beard raised the point that there were no coastal resource managers in attendance. This lack of representation minimizes the team's effectiveness in providing useful assessments because we do not know what coastal managers actually need/want.

It was noted that the team needs to provide better data gap analyses and other management analyses and that there is a need to identify the target before acquiring the data.

Further discussion emphasized that habitat and ecosystems management needs should drive what this team does and data should support it; but the team is currently driven by data. It was noted that the initial focus on data was important and that the team made good strides, but now it is time to let science take over rather than data and data stewardship.

Participants were made aware of an IEA white paper, developed by NOAA for the Gulf of Mexico. It was suggested that the new assessment team may be able to help NOAA implement the IEA. The paper should be circulated for members to review and react, provide comments and help further define how an IEA should work for the Gulf of Mexico. An IEA will likely consist of multiple, smaller pieces that will eventually roll up to the larger Gulf. Initial assessments but be scaled to a manageable level so near term success can be demonstrated.

Another example of work that the assessment subteam could undertake was trend analysis; this is a needed product and of interest to NOAA.

The question was raised on how to proceed from here to there on all this?

Wetlands, seagrass, oyster reefs, and hardbottom habitat types were identified as those important to the states. It was recommended that the team start with these and then further detail specific focal areas to work on.

One suggestion was that the subteam consider developing models for/mapping that could be developed into tools.

Ongoing sea level rise work was used as an example of a useful tool that could be developed. It was noted that there are currently visualization models and other studies addressing SLR throughout the Gulf of Mexico. A useful product would be to have all these related studies and resulting product in one central location so that a picture of how SLR might impact the Gulf of Mexico as a whole may begin to emerge. From this a tool could be developed to give people information and a process to reach better decisions.

It was then stated that the model is not the tool that users will need but rather the final product, e.g. maps.

There was a suggestion that an overarching goal for the Alliance should be to address climate change.

One example of how the assessment team could provide useful products was the idea of evaluating habitat stability in regards to sea level rise. The subteam could create a map/visualization tool to help contribute to this.

Some short term goals were identified for the subteam including performing an initial assessment of what habitats are found in the Gulf of Mexico, inventorying what tools currently exist, performing gap analyses of what is not known, and evaluate the potential effect(s) of SLR.

REDM

Eric Roby at NOAA's NCDDC presented via phone on the architecture of REDM. This presentation can be found at <ftp://ftp.sam.usace.army.mil/OUTGOING/JALBTCX/EIAPIT/>.

Action Item:

We need to develop a REDM GOMA GUI (graphic user interface) prototype for the Alliance so all PITs will begin to recognize this structure and look to incorporate their data into REDM. Russ suggested that we demo the REDM GOMA GUI at the August 4-5th All Hands Meeting in Mobile, Alabama.

Gulf GAME

Dave Reed of the Florida Oceanographic Institute presented on Gulf GAME. This presentation along with the paper that Cristina mentioned which is currently in press can be found at <ftp://ftp.sam.usace.army.mil/OUTGOING/JALBTCX/EIAPIT/>

Master Mapping Plan

Jennifer Wozencraft, Director of the Army Corp of Engineers Joint Airborne Lidar Bathymetry Technical Center of Expertise, presented on the Master Mapping Plan. This presentation initiated quite a bit EIA and cross PIT discussion. Her presentation can be found at <ftp://ftp.sam.usace.army.mil/OUTGOING/JALBTCX/EIAPIT/>

Action: Send any shape files that reflect historic, current or planned habitat mapping efforts to Jennifer so they can be added to the 'master' map. Having this information will enable us to evaluate the gaps and determine priority areas for future efforts.

Discussion of management Scenario and data needs

Jim Gibeaut of HRI gave a presentation on Projecting Impacts of Relative Sea-level Rise and Erosion on Texas Barrier-island Environments. This presentation can be accessed at <ftp://ftp.sam.usace.army.mil/OUTGOING/JALBTCX/EIAPIT/>

Discussion on Database infrastructure and EIA Tool Development

Seneca Holland of HRI presented several slides depicting the tool development process. These slides can be found at <ftp://ftp.sam.usace.army.mil/OUTGOING/JALBTCX/EIAPIT/>

Gulf of Mexico Alliance Priority Issue Team IT Session

On Friday April 17th individual GOMA PITs presented on their IT related needs and current projects.

EIA Team –

gave a brief synopsis of their IT needs as this had been one of the primary focuses of the EIA meeting overall. No PowerPoint was provided.

Nutrient Team –

Working on:

- Modeling Inventory
- Battelle Data Platform

Needs:

- Need database to house data collected from Nutrient Sources Fate and Transport
- Routine data collection coupled with intensive surveys for model development, calibration and verification
- Need WQ, hydrodynamic, circulation and loading models
- Need Funding for data collection with intensive surveys
- Need to follow common framework
- Preference to use existing database: Battelle data platform
- Currently the nutrient database is an orphan (no host)
- Data must be accessible have QA documentation and GIS viewing capabilities.

Action: EIA Team needs to plan for:

- **Dynamic data**
- **New and legacy data**
- **Download and analysis**
- **Model input**
- **Accessibility and Viewing**
- **Reporting requirements**
- **How to address different schema and data portal/flow requirements**

The Nutrient team is searching for historical data for their estuarine study areas. The first area of study is in the Bay St. Louis, MS estuary. Two other study areas will be identified.

Action: The EIA Team will appoint a representative to work with the Nutrients team.

Action: Estuarine study contacts should work with the HRI (Jim's) sub award contacts. Perhaps move this data into REDM.

Action: REDM can host the Nutrients database. Mercury data perhaps can be stored at REDM as well.

Habitat Team –

Working on:

- Catalog existing restoration plans and programs
- Information using a searchable mapping feature in which program and plans could be retrieved by clicking on a particular location.
- The plans identify priority sites for restoration
- Establish an inventory of state habitat issues on a state by state basis that conservation and restoration activities should focus upon
- Team would like to make info publicly available on the internet for stakeholders.

Action: HCRT established 8 priority issues in the area of environmental compliance and policy. These issues need to be made publicly available.

Needs:

- Where habitats are located what are the issues.
- Where can they be housed?

Resiliency –

Working On:

- Habitats and communities at risk.
- Need Information associated with hazards, hurricanes, subsidence, etc. etc.
- Habitats serving as a first line of defense.

Action: Need Population growth statistics that reflect changes in land-use patterns around the Gulf. Population statistics need to be made publicly available and searchable by location.

- Regional Sediment Management Data base.
- Community Resiliency Component
- Include all habitats of the Gulf of Mexico.
- How population affect habitat. - Identify different geographic regions such as Western /Central/ Eastern

- Used the Sea Level Affecting Marshes Model based upon the NWI data. – Oyster Reefs- Selecting 5-10 areas. Now working on Sabine River and Grand Bay National Estuarine Research Reserve (NERR) in MS. Results coming out in May/June timeframe.
- SLAMM model now generates maps, tables, graphs.

Needs:

- Sea Level rise is a cross team issue.
- Need updated elevation data.
- Perhaps create a model application of Sea Level rise.
- Need to cooperate with EIA to determine if this is adequate
- Need to be open and transparent to the Public, about sea level rise and its implications.

Action: EIA team will coordinate with the Restoration and Resiliency Teams on the SLAMM sea level rise model and uploading the Sediment Management Plan on to NOAA NCDDC's REDM

Water Quality Team -

Working On:

- Addresses and has established workgroups for Pathogens, HABs , Mercury and Monitoring
- The monitoring workgroup is focusing on the collection and management of information about monitoring programs and improving data dissemination tools to deliver information to resource managers. Established metadata elements to describe monitoring program across the Gulf
- Sensor type, acoustics, is an example of one of the elements.
- Identify and broadly characterize monitoring programs within the Gulf.
- Catalog of Water quality monitoring programs – EPA grant
- Assisting the Nutrient team in developing nutrient criteria.
- Monitoring catalog envisioned to assist in this process.
- Already using NASA's COAST Application
- Team has Water Quality Sampling Sites Map and would like to include in REDM.

Environmental Education -

Working On:

- Website and Online Digital Library
- CELC Exhibits.
- IT resources from the Education committee
- GOMA Public Site
- GOMA Working Web Site

- GOM EEN Site

Next Steps for the EIA PIT

Action Item: It was decided that the next EIA PIT meeting would take place at the GOMA All Hands meeting in Mobile, AL. The meeting following that will be hosted by FWRI in St. Petersburg FL.

Action Item: Proposal to form 2 subteams, Ecosystem Assessment and Data Integration. Becky Allee expressed a need for the two subteams to be lead by state participants and nominated Dave Palandro to lead the Assessment subteam. There were no objections. The group agreed that the two subteams would not hold separate meeting and agreed to:

- Have joint meetings, with concurrent sessions for specific subteam related issues.
- Do not lose the reality check aspects.
- Do not allow sub-teams to get too far apart from each other.

Action Item: Resurrect the two white papers that were written proposing the formation of an ad hoc data team for the entire Alliance. Team members (ideally two from each PIT) would be responsible for coordinating all data-related activities for their respective PITs. This proposal should be vetted by the AMT.