

GULF OF
MEXICO
ALLIANCE



Coastal Wetlands

Len Bahr, Ph.D

Director, Program for Applied Research in the
Coastal Area
Governor's Office of Coastal Activities



Note:

“Place-holder”

***Len Bahr (LA) will provide
substitute slide(s) for
inclusion.***



Strengths & Progress:

Coastal Wetlands Wetlands

- Each state has a State-level department (i.e., Department of Environmental Protection, Environmental Management, Natural Resources)
- Federal funding and the formation of partnerships with Federal, state, and local entities.
 - GEMS
 - NERRS
 - NEPs
 - NOAA, National Marine Sanctuaries



Barriers / Challenges (1):

Coastal Coastal Wetlands Wetlands

- New technologies for habitat identification and characterization are costly and labor intensive.
- Training of staff and additional resources are necessary and needed to ensure successful implementation.
- Detailed maps of marine habitat types, locations, and uses are lacking.
- Need to inventory the existing habitat data and determine its availability and usefulness.
- Rapid development of the coastal communities is altering habitats in terms of type and extent. The frequency of mapping and delineation efforts is difficult to determine.



Barriers / Challenges (2):

Coastal Coastal Wetlands Wetlands

- Forming partnerships and developing strategies to explore and obtain additional funding sources.
- Maximize the use of funds to prioritize land acquisition in the coastal areas.(CELC)
- Use mitigation efforts to create/restore lost marine habitats
- Standardize mapping techniques, frequencies and methodologies of reporting the information.- A unified approach would reduce cost.
- Develop state programs to research and evaluate conservation and restoration activities in their critical habitat.



Barriers / Challenges (3):

Coastal Wetlands Wetlands

- Identify gaps in habitat mapping information and develop strategies to acquire the necessary information to address those gaps.
- High resolution bathymetry is first step in marine habitat mapping, as well as modeling water movement along the Gulf shelf. Need for Baseline data/maps of the marine environment.
- Gulf coast states need to begin to critically evaluate their development laws and regulations to determine if changes are needed.



Priority Needs:

Coastal Coastal Wetlands Wetlands

- Increase the Gulf Coast state's success and competitiveness in the federal grant process.
- Share data and other information collected by the federal and state programs.
- Obtain useful information derived from data; with assistance from federal agencies.
- Examine what information is available and have easy access to that information.
- Identify data gaps and develop plans to address those gaps.
- Share information and knowledge regarding the best available technologies.

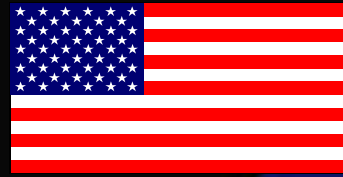
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Coastal Coastal Wetlands Wetlands

Questions / Clarifications?

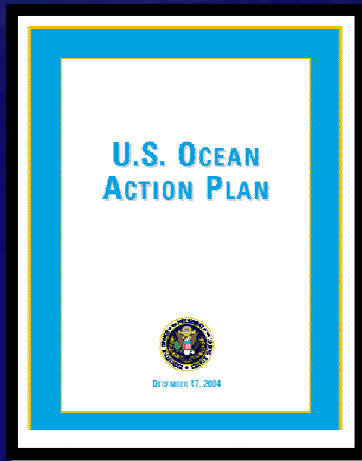
**-FEDERAL PARTNERSHIP RESPONSE –
“Early Concepts/Proposals for Interest”**



Coastal Wetlands Wetlands

-  CEQ
-  EPA
-  NOAA
-  DoI
-  USDA
-  ACOE
-  DHHS
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-  DoE
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-  DoS
-  DoT

Partnership Development Co-Leads:



Bryon Griffith

Director
U.S. EPA Gulf of Mexico Program Office

Jack Hayes, Ph.D.

Deputy Assistant Administrator
Ocean and Coastal Zone Management
NOAA National Ocean Service

-FEDERAL PARTNERSHIP RESPONSE – (Team Support Framework)



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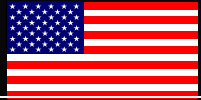
Coastal Coastal Wetlands Wetlands

Co-Leads:

Technical / Resource
Support:



-FEDERAL PARTNERSHIP RESPONSE – (Priority Area Coordination)



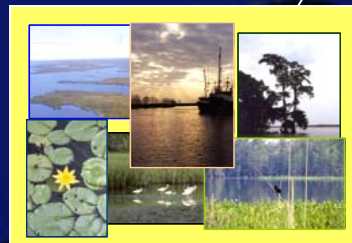
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WR-1:
Corporate Wetlands
Restoration Partnership



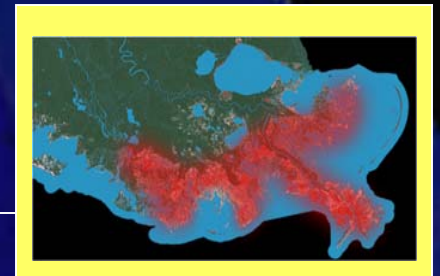
Near-Term
Project
Concepts
(Proposed)

WR-3:
Accurate Coastal
Elevations



Coastal Wetlands Wetlands

WR-2:
Coastal Infrastructure
Risk Assessment



Preliminary Federal Response

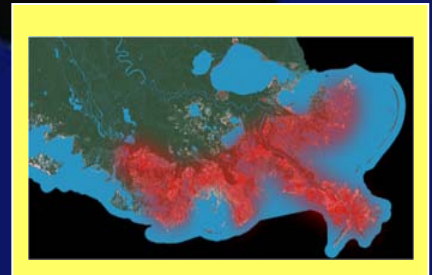
Proposals: **Wetlands Restoration**

WR-1:
Corporate Wetlands
Restoration Partnership



- **WR-1: Corporate Wetlands Restoration Partnership – EPA/ACOE**
 - Why? “Developing more streamlined/seamless funding regarding wetland restoration efforts that require multiple funding sources.”
 - facilitate the establishment of a comprehensive five-state, regional network of Corporate Wetlands Restoration Partnership (CWRP) chapters in the Gulf region

WR-2:
Coastal Infrastructure
Risk Assessment



Preliminary Federal Response

Proposals: **Wetlands Restoration**

- **WR-2: Assessing Risks to Energy and Chemical Transportation & Manufacturing Infrastructure**
 - Why? “Develop[ment] of a collaborative Gulf-coast wide effort in identifying watershed/ ecosystem based restoration and conservation priorities [is needed].”
 - identifying potential spill risks from coastal infrastructure as a result of land loss, natural hazards, and human activities.

WR-3:
Accurate Coastal
Elevations



Preliminary Federal Response

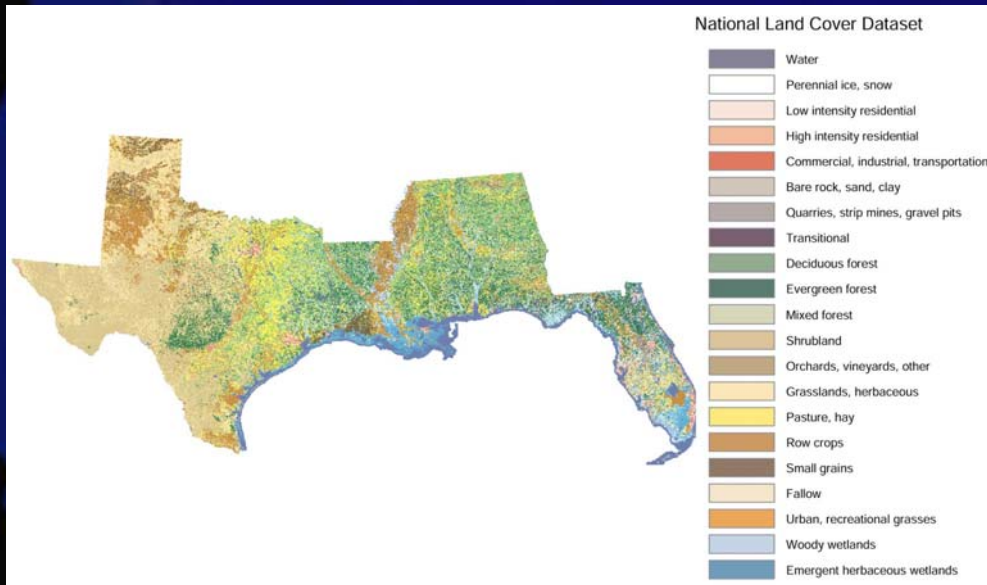
Proposals: **Wetlands Restoration**

- **WR-3: Accurate Coastal Elevations to Support Wetlands Restoration**
 - Why? “Acceleration in sea-level rise, land subsidence, and increased storm vulnerability due to erosion and loss of barrier islands creates confounding dilemmas in managing and maintaining existing and restored wetlands and are serious challenges to restoration efforts.”
 - providing technical guidance and assistance as the Gulf States work to establish, coordinate, and disseminate geospatial data needed to understand and relate coastal elevation data.

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Habitat Identification



Bruce Moulton

Policy Advisor
Texas Commission on Environmental Quality



Problem Statement / Goal:

Habitat
Habitat
Identification
Identification

- To Better Manage Coastal Habitats, it is necessary that the states begin laying the groundwork for improved ecosystem-based management.
- In order to do so, each state must identify and characterize the types and extent of habitats that exist in their coastal waters.



Strengths & Progress:

Habitat Habitat Identification Identification

- Each state has a State-level department (i.e., Department of Environmental Protection, Environmental Management, Natural Resources)
- Federal funding and the formation of partnerships with Federal, state, and local entities.
 - **GEMS**
 - **NERRS**
 - **NEPs**
 - **NOAA, National Marine Sanctuaries**



Strengths & Progress (2):

Habitat Habitat Identification Identification

- New technologies for habitat identification and characterization are costly and labor intensive.
- Training of staff and additional resources are necessary and needed to ensure successful implementation.
- Detailed maps of marine habitat types, locations, and uses are lacking.
- Need to inventory the existing habitat data and determine its availability and usefulness.
- Rapid development of the coastal communities is altering habitats in terms of type and extent. The frequency of mapping and delineation efforts is difficult to determine.



Opportunities / Solutions:

Habitat Habitat Identification

- Forming partnerships and developing strategies to explore and obtain additional funding sources.
- Maximize the use of funds to prioritize land acquisition in the coastal areas.(CELC)
- Use mitigation efforts to create/restore lost marine habitats
- Standardize mapping techniques, frequencies and methodologies of reporting the information.- A unified approach would reduce cost.
- Develop state programs to research and evaluate conservation and restoration activities in their critical habitat.



Opportunities / Solutions (2):

Habitat Habitat Identification Identification

- Identify gaps in habitat mapping information and develop strategies to acquire the necessary information to address those gaps.
- High resolution bathymetry is first step in marine habitat mapping, as well as modeling water movement along the Gulf shelf. Need for Baseline data/maps of the marine environment.
- Gulf coast states need to begin to critically evaluate their development laws and regulations to determine if changes are needed.



Priority Needs:

Habitat Habitat Identification Identification

- Increase the Gulf Coast state's success and competitiveness in the federal grant process.
- Share data and other information collected by the federal and state programs.
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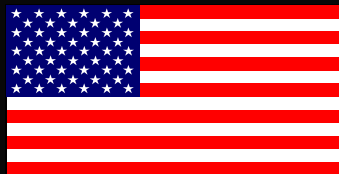
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Habitat
Habitat
Identification
Identification

Questions / Clarifications?

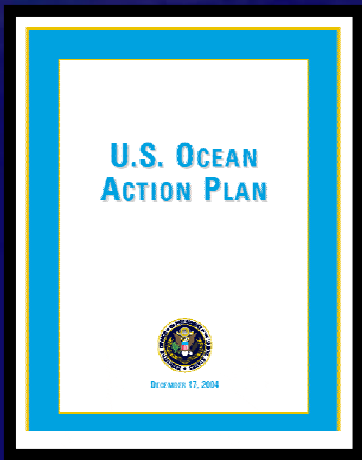
**-FEDERAL PARTNERSHIP RESPONSE –
“Early Concepts/Proposals for Interest”**



Habitat Habitat Identification Identification

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Partnership Development Co-Leads:



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**-FEDERAL PARTNERSHIP RESPONSE –
(Team Support Framework)**



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Habitat Habitat Identification Identification

Co-Leads:

Technical / Resource
Support:



-FEDERAL PARTNERSHIP RESPONSE – (Priority Area Coordination)



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HI-1:
Regional Coordination
of Habitat ID Efforts



 **NASA**

**Near-Term
Project
Concepts
(Proposed)**

HI-2:
Biogeographic
Assessments



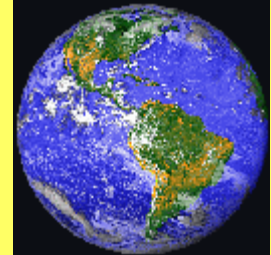
 **NOAA**

Habitat Habitat Identification Identification

Preliminary Federal Response

Proposals: **Habitat Identification**

HI-1:
Regional Coordination
of Habitat ID Efforts

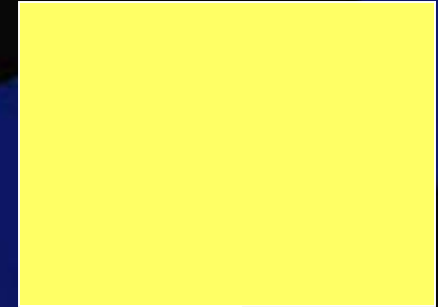


- **HI-1: Regional Coordination of Habitat Coordination Efforts – NASA**
 - Why? “Many of the Gulf coast states feel as if they are managing their submerged aquatic resources using very sparse data and information.”
 - increasing collaboration between Federal and state agencies to leverage existing resources and expertise for addressing habitat identification available at the NASA Stennis Space Center in Mississippi.

Preliminary Federal Response

Proposals: **Habitat Identification**

HI-2:
Biogeographic
Assessments



- **HI-2: Biogeographic Assessment in the Gulf of Mexico Region – NOAA**
 - *Why? “... detailed maps of marine habitat types, locations, and uses are still lacking, making management difficult ...”*
 - Florida Mapping Project: NOAA will map shallow-water coral ecosystems of southern Florida using a suite of technologies and map development procedures
 - LIDAR Topographic / Bathymetric Data Acquisition and Processing: Airborne topo and bathy LIDAR data will be collected in the Pensacola, Florida area in spring 2005. Airborne gravimetric data will be collected for the entire GoMex region to support vertical data transformations.
 - CCAP Program: Further incorporation of Gulf States into Coastal Change Analysis Program

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Environmental Education Education

Amy King

Public Education and Outreach Coordinator
Alabama Department of Conservation and
Natural Resources



Environmental Environmental Education Education

Problem Statement / Goal:

- The Coastal Environment is seriously and negatively impacted by stressors and effective environmental education is more important than ever
- Environmental Education is hindered by three factors:
 - Disparity between the Coastal States' capabilities and subsequent funding,
 - Gradual decline in science literacy.



Environmental Education Education

Strengths & Progress:

- Every county along the Gulf Coast has an extension office providing adult education programs.
- Qualified and interested natural resource professionals serving in positions to provide educational needs.
- Partnerships with a variety of agencies to coordinate efforts.
- Interactive programs that emphasize a 'human element' in environmental activities to generate a personal connection.



Environmental Environmental Education Education

Strengths & Progress (2):

- **Media Services are increasing public awareness.**
- **Professional development opportunities are available for technical topics.**
- **Web based programs and information offer a new conduit of educational opportunities.**
- **The Southern Association of Marine Educators and the Southern Association of Marine Laboratories are among the oldest and most active of the national affiliates.**
- **Amount of volunteerism is strong.**



Barriers / Challenges (1):

- **Coastal States' Capabilities**
 - **Budget reductions**
 - **'Environmental Education' is an umbrella for numerous environmental issues**
 - **Redundancy**
 - **Inability to assign credible economic value to environmental assets**



Barriers / Challenges (2):

▪ Environmental Literacy

- Pressures on formal classroom educators leave little time to enable them to incorporate existing resources into daily lesson plans.
- Diverse environmental education involves a variety of Earth sciences.
- Constant testing has forced teachers to reduce the amount of time they spend on experiential learning and more on “teaching for the test” for improved scores.
- Growing price of fuel will soon force schools to reduce or eliminate experiential learning by discontinuing field trips.



Barriers / Challenges (3):

- **Additional Barriers**
 - **General lack of interest from leaders and administrators**
 - **Existing education gap with areas adjacent to coastal region**
 - **Social, economic and cultural factors**
 - **Advertising is too expensive for grassroots organizations**



Priority Needs:

Environmental Environmental Education

- Utilize the successes of existing programs
- Long-term sustainable funding needs to be established
- Establish and strengthen partnerships with private industry
- Encourage “integrated education” inside and outside the classroom and through the media
- Encourage environmental awareness as an integral part of community development



Priority Needs (2):

Environmental Education Education

- Invite politicians to see the ‘good things’ flowing from existing programs and activities and encourage support from the legislature.
- Develop and strengthen existing coastal public outreach task forces.
- Continue and enhance workshops and trainings that provide relevant environmental resources to the participants.
- Implement economic valuation studies in targeted representative areas along the Gulf Coast.

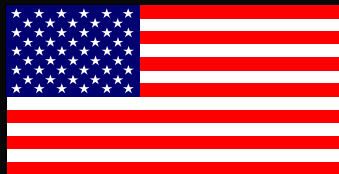
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Environmental
Environmental
Education
Education

Questions / Clarifications?

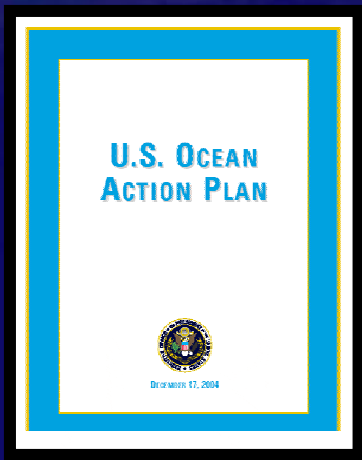
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“Early Concepts/Proposals for Interest”**



Environmental Environmental Education Education

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**-FEDERAL PARTNERSHIP RESPONSE –
(Team Support Framework)**



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Environmental Environmental Education Education

Co-Leads:

Technical / Resource
Support:



**-FEDERAL PARTNERSHIP RESPONSE –
(Priority Area Coordination)**



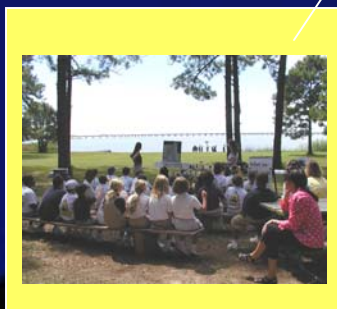
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GE-1:
Campaign for the
Gulf



**Near-Term
Project
Concepts
(Proposed)**

GE-3:
Gulf Educational
Summit



Environmental Education

GE-2:
Coastal Ecosystem
Learning Center
Framework



Preliminary Federal Response

Proposals: **Habitat Identification**

GE-1:
Campaign for the
Gulf



- **GE-1: Campaign for the Gulf of Mexico – NOAA**
 - *Why? “... advertising (print ads, PSAs, billboards), which can serve multiple years of service, is often too expensive for grassroots organizations to get their concept across to the mass public ...”*
 - Develop a suite of outreach products that will create a regional GoMex message
 - Hire a full-time GoMex environmental education and outreach material clearinghouse coordinator

Preliminary Federal Response

Proposals: **Habitat Identification**

GE-2: Coastal Ecosystem Learning Center Framework



- **GE-2: Gulf Coastal Ecosystem Learning Center Network – EPA**
 - Why? “Take advantage of existing, well-funded environmental programs to educate and involve citizens about these priority problems identified by the Gulf Alliance”
 - expanding the network of Coastal Ecosystem Learning Centers (CELCs) to all five Gulf States and Mexico and developing a formal Gulf States education and outreach planning and management team.



Preliminary Federal Response

Proposals: **Habitat Identification**

- **GE-3: GoMex Educators Summit – NOAA**
 - *Why? “... continue and enhance workshops, teacher-in-services, and trainings that provide relevant environmental resources ...”*
 - **Comprehensively expose Gulf teachers to the wealth of educational materials and opportunities related to science and the environment that are currently available for the GoMex region, including fully developed lesson plans and teacher training programs**

“Draft” Timeline for Building the *Plan of Action*

