

Reducing Nutrient Impacts: Activities of the Gulf of Mexico Alliance Nutrients Priority Issue Team (PIT)

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2nd Annual Gulf of Mexico Hypoxia Research Coordination Workshop
Bay St. Louis, MS
March 31, 2011

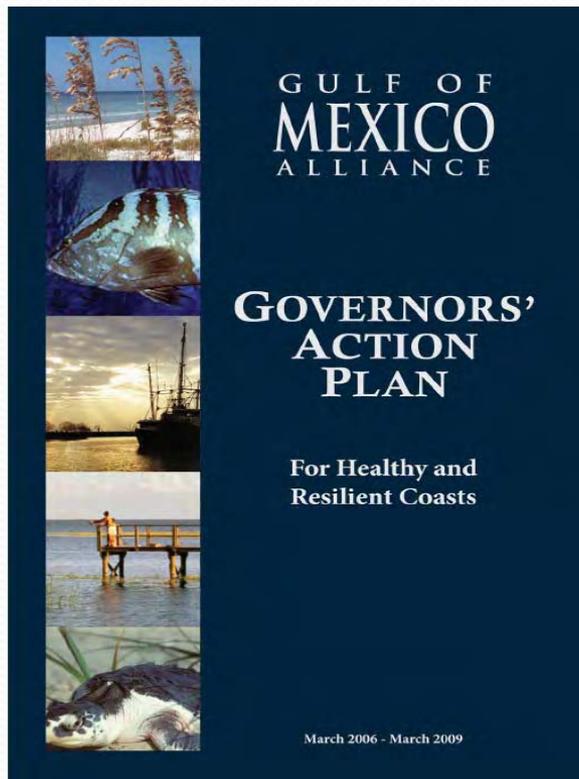


The Gulf of Mexico Alliance



- Gulf States' Governors announced the Alliance in March 2006
- State Led
 - AL, FL, LA, MS, and TX
- Federally Supported
 - Support from numerous federal agencies
 - Federal workgroup chaired by EPA, NOAA, and DOI
 - NOAA, EPA, NASA, and others now providing funding to support Alliance activities

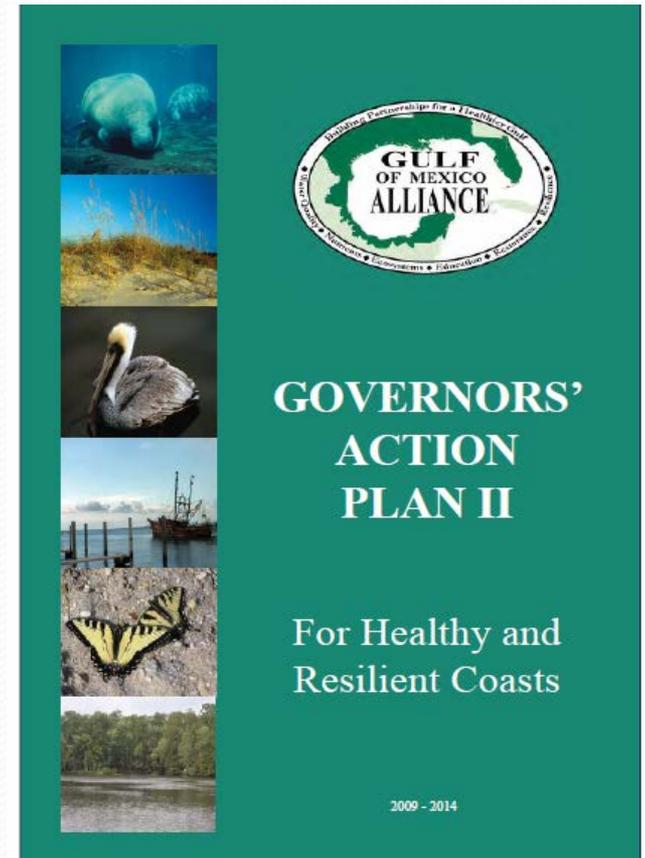
Action Plan 1



- Released March 2006
- Identified regional priority issues and State leads
- Organized into 5 Priority Issue Teams (PITs)
 1. Ecosystem Integration and Assessment
 2. Environmental Education
 3. Habitat Conservation and Restoration
 4. Nutrients
 5. Water Quality
- 36-month outcomes
- Approved/Signed by all 5 Gulf State Governors
- Shoestring budget support
- Wrapped up March 2009

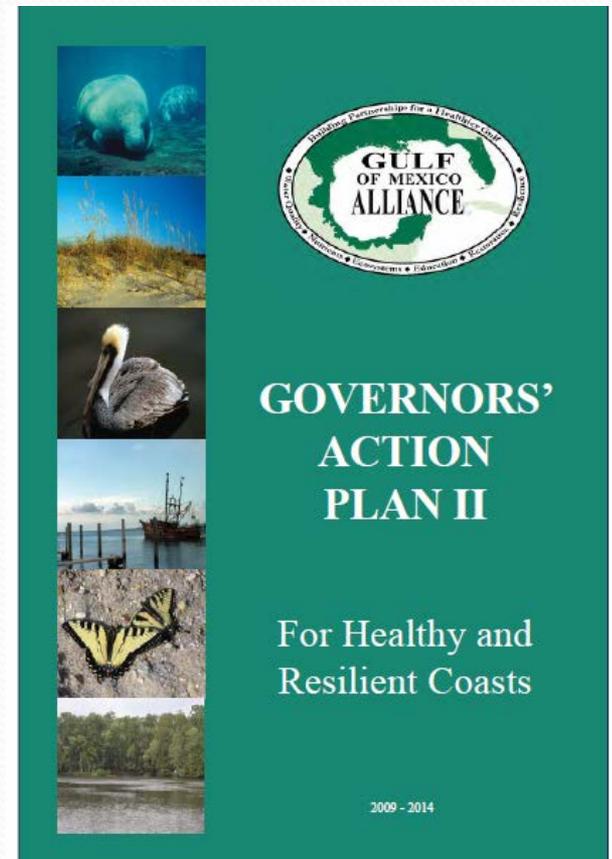
Action Plan 2

- Released in June 2009
- 6 Priority Issue Teams (PITs)
 1. Coastal Community Resilience
 2. Ecosystem Integration and Assessment
 3. Environmental Education
 4. Habitat Conservation and Restoration
 5. Nutrients
 6. Water Quality
- 5 year plan
 - More Ambitious
 - Outcome/Results Oriented
- Alliance receiving positive recognition, leading to funding opportunities



Action Plan 2

- Nutrients PIT Goals 2009-2014
 - Action 1: Nutrient Characterization
 - Action 2: Support State Efforts to Develop Nutrient Criteria
 - Action 3: Hypoxia Re
 - Action 4: Nutrient Reduction Activities
- 4 Actions, 22 Action Steps
- Team developed Tier 2 document to supplement AP2 - more detailed for implementation
- Implementation Teams for each Action



Action 1: Nutrient Characterization

- Nutrient Sources, Fate, Transport, and Effects Studies
 - St. Louis Bay, MS; Weeks Bay, AL; Mission-Aransas Bay, TX; Galveston Bay, TX; Tampa Bay, FL
- Ecosystem and Socioeconomic Impacts
- Strategies for Improved Monitoring and Data Collection
- Environmental and Biological Indicators of Nutrient Impacts
 - Benthic Index for Gulf of Mexico Waters
- Increase Understanding of the Role of Coastal Wetlands
- Increase Understanding of Contribution from Adjacent, Freshwater Systems to Coastal Waters

Action 2: Supporting State Development of Nutrient Criteria

- Aligned, Gulf States Approach
 - Developing a Regional Nutrient Criteria Development Plan
- Annual Gulf Alliance Nutrient Criteria Conference
- Technical Workgroup to Evaluate Appropriate Biological Assessment Tools, Endpoints, and Nutrient Related Thresholds
- Gulf-wide Classification System
- Pilot the Process for Developing and Evaluating Nutrient Criteria

Action 3: Increasing Regional Coordination to Reduce Hypoxia

Coordinate strategies and provide guidance to better characterize hypoxia and the resulting socioeconomic impacts

- Includes Both Localized Hypoxic Events and the Gulf Hypoxic Zone
- Coordinate and Leverage with the Efforts of the Hypoxia Task Force (AP2 and GHAP 2008 Coordination Matrix)
- Monitoring and Modeling Components Included
- Coordination of Resources and Research
- Promote Information and Technology Exchange between the Upper and Lower MS River Basin States

Action 4: Reducing Nutrient Inputs

Develop management tools and implement nutrient reduction activities in cooperation with local communities to reduce excess nutrient inputs to Estuaries and coastal waters

- Outreach and Education Efforts
- Decision Support Toolbox
- Increasing Partnerships
- Identify Sources, Identify Opportunities for Load Reductions
- Implement BMPs
- Pilot New Innovative Technologies
- Implement and Evaluate Nutrient Reduction Strategies

Today's Topic of Interest...Hypoxia

More Detail on Action 3

- Action 3 Implementation Team Leads: Dave Kidwell and Stacy Ray
- Focus on implementing and accomplishing the goals laid out within Action 3 of the Governors' Action Plan (APII)
- Anyone is welcome to join the team and participate!

More Detail on Action 3

- Action Step 3.1 - Develop a framework for the minimum monitoring necessary to characterize dissolved oxygen stress and hypoxic events including monitoring strategies for estuaries and coastal waters with a high frequency of hypoxic events

Relevant Projects:

1. Monitoring and Assessment of Coastal and Marine Ecosystems in the Northern Gulf: Stephan Howden, USM
2. NGOMEX Monitoring by TAMU and LUMCON

More Detail on Action 3

- Action Step 3.2 - Identify and coordinate resources and research to provide guidance in the development of low dissolved oxygen stress and hypoxia reduction goals, thresholds, and reference sites or conditions.

Relevant Projects:

1. Super-regional Model Testbed (Sub-project: Shelf Hypoxia in the Gulf of Mexico)
2. NGOMEX Monitoring by TAMU and LUMCON

More Detail on Action 3

- Action Step 3.3 - Support the goals and actions of the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force as identified in the Gulf Hypoxia Action Plan.

Relevant Projects:

1. Meetings that bring together GOMA and Hypoxia Task Force
2. Integration of Communication and Outreach Plan
3. Numerous items within the GOMA Action Plan and the Gulf Hypoxia Action Plan overlap....many opportunities to collaborate

More Detail on Action 3

- Action Step 3.4 - Participate in and promote information and technology exchange between upper and lower Mississippi River Basin states and organizations.

Relevant Projects:

1. Prepare and Facilitate a Nutrient Removal Treatment Technology, Tools, and Efficiency Workshop for Small/Medium-Sized Wastewater Treatment Facilities in Mississippi
2. Primer of Gulf of Mexico Hypoxia
3. Proposed MS River Basin Newsletter on Nutrient Reduction Efforts

Key Next Steps (funding dependent)

- Coordinate the development of a hypoxia/nutrient criteria data portal and online data conversion tool
 - Facilitate access to data
 - Help assessment of monitoring gaps
- Develop a Research and Action Plan for hypoxia in the Gulf of Mexico (Gulf-wide)
- Expedite actions in the Gulf of Mexico Hypoxia Communications Plan
- Initiate efforts to determine/quantify the socio-economic impacts of Gulf Hypoxia

Funding limitations strengthen the need to identify and take advantage of opportunities to leverage efforts!

How to Get Involved?

- Always looking for Team Members
 - Contact Nutrients PIT Leadership for more information
 - Action Implementation Efforts
- Nutrients PIT Monthly Conference Calls
 - 2nd Tuesday of each Month
- Upcoming Events
 - Gulf Alliance “All Hands” Meeting
 - August 2-4, 2011
 - New Orleans, LA





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