

Implementation and Integration Workshop



*Water Quality
Proposal for Action Plan II*

August 2008

Action Plan II

Gulf coast resource managers and human-health managers are often forced to make decisions with insufficient information to best resolve or prevent problems.

- The Water Quality Team is designing and constructing the tools necessary to collect, interpret, and provide this information for an array of Gulf-wide problems. These include harmful algal blooms, disease-causing organisms, nutrient fate and transport, and mercury in seafood.

Headlines

- **Shellfish-harvest areas expanding as coastal water quality improves.**
- **Comprehensive coastal monitoring saves taxpayers millions\$.**
- **New red-tide detection technologies protect swimmers and seafood lovers.**

Headlines

- **Gulf Alliance success eliminates national debt, puts fish in every pot.**

Alliance Leaders admit breakthrough inspired by Brittany Spears pep talk.

Action Plan II

Harmful Algal Bloom Draft Actions

1. Improve technologies for detection of harmful algal blooms and toxins, and identify environmental conditions promoting blooms.

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Harmful Algal Bloom Draft Actions

2. Improve the capabilities of Gulf-wide monitoring networks to provide the bloom information needed for local coastal managers to minimize HAB effects. Recognize that HAB events may be significant at both local and Gulf-wide scales.

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Harmful Algal Bloom Draft Actions

3. Develop methods and technologies that prevent, control, or mitigate harmful algal blooms and their impacts.
4. Better understand harmful algal bloom effects on human health.

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Harmful Algal Bloom Draft Actions

5. Increase communication among those involved in harmful algal bloom-related monitoring and decision-making and provide training opportunities to improve management of resources.

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Human Disease Draft Actions

1. Improve the methods used to identify areas that are impaired by pathogens and to track sources of the pathogens.
2. Improve our understanding of the risks to human health of different sources of pathogens, including survival in ambient conditions.

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Human Disease Draft Actions

3. Provide Coastal Managers with information to make better-informed human-health and resource-management decisions.
4. Better understand *Vibrio*-bacteria ecology and human-health risks.

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Contaminant Reduction Draft Actions

1. Identify the source of the mercury that ends up in Gulf of Mexico seafood.
2. Identify contaminants for which there is a strong potential for accumulation in seafood and screen for their presence in Gulf of Mexico seafood.

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Contaminant-reduction Draft Actions

3. Communicate information to fishermen, seafood distributors, and the public about how to safely deal with mercury and other seafood contaminants having potential human-health effects.

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Water-Quality Monitoring Draft Actions

1. Collect and manage information about water-quality monitoring programs across the Gulf of Mexico.
2. Make water-quality data collected across the Gulf of Mexico comparable in support of Gulf Alliance actions.

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Water-Quality Monitoring Draft Actions

3. Develop a coordinated water-quality monitoring network for the Gulf of Mexico based on existing monitoring and that provides sufficient information to properly manage resources.
4. Improve data-delivery tools to get information to resource managers.

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Water-Quality Monitoring Draft Actions

5. Develop management tools that inform decision makers about existing water-quality conditions and potential changes that could result from coastal land-use decisions.
6. Improve the knowledge base needed to properly manage or reduce nutrients in coastal waters (in collaboration with other Teams)

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Water-Quality Monitoring Draft Actions

7. Improve the understanding of ambient dissolved-oxygen concentrations and their effect on living resources (in collaboration with Nutrients Team)
8. Identify specific wastewater and stormwater disposal alternatives which would benefit coastal ecosystems and human uses.

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Water-Quality Monitoring Draft Actions

9. Encourage the placement of restoration projects to maximize the benefit to water quality.

The background of the slide is a light blue map of the Gulf of Mexico region, showing the outlines of the United States, Mexico, and Central America. The map is centered on the Gulf of Mexico.

Action Plan II

Water-Quality Monitoring Draft Actions

Gulf of Mexico

Annual Monitoring Forum

Spring 2009



Questions/Comments?