Mobile Bay Decision Support System Conceptual Framework: Part 2: Major Elements, Benefits, and Implementation

### Decision Support System Components and Features Aligned with Regional Gulf Coast Ecosystem Restoration Task Force and Recommended Actions

**Regional and Coastal Resources**
- Prioritize depleted populations of living coastal and marine resources.
- Enhance and protect estuarine environments.
- Coordinate and expand existing Gulf monitoring efforts to track sentinel species and sites.
- Minimize and eliminate where possible, invasive species that impact the Gulf.

**Encroachment Community Indicators**
- Develop and implement comprehensive, scientifically based, and stakeholder-informed coastal improvement programs.
- Establish risk and support tools to enhance community planning, risk assessment, and sound implementation.
- Enhance environmental education and outreach.

**Selected Decision Support System Benefits**
- Increased stakeholder alignment, transparency, and cost-effectiveness for the restoration of the Gulf.
- Provide technical basis for allocating the restoration of the state basins, which have identified specific actions.
- Increase the impact of ongoing and proposed conservation actions by providing clear guidance on the efficacy and efficiency of different strategies.
- Provide a holistic framework for assessing the effectiveness of restoration efforts.
- Enhance the capacity for decision-making by providing a platform for collaboration among stakeholders.
- Support adaptive management by allowing for ongoing refinement of strategies based on new information and changing conditions.

### Implementation Approach
- **Prior Study on Mobile Bay watershed**
- **Framework expandable to other Gulf Coast basins**
- **Collaborative programming approach**
- **Integrated into the planning of the Gulf Restoration Council**
- **Based on integration of critical components of existing tools whenever possible**

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**Post Deepwater Horizon Approach**

In the aftermath of the Deepwater Horizon spill, and in response to the oil spill report call for a balanced approach to restoration, the United States Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (USACE) established the Ecosystem Restoration Task Force to develop a comprehensive strategy for restoring the Gulf Coast ecosystem. This strategy was developed through a collaborative process involving representatives from various federal, state, and local agencies, as well as stakeholders from the Gulf Coast region. The process involved the following key steps:

1. **Framework Conceptualization**
   - **System Boundary & Assumption Confirmation**
   - **Issues & Threats Identification/Analysis**
   - **Stakeholder Engagement & Feedback**
   - **Framework Conceptualization**

2. **Implementation Approach**
   - **Technology Transfer & Application**
   - **Operational Feasibility, Risk, & Interaction Evaluation/Adaptive Management**
   - **Adaptation & Interaction**

3. **Decision Support System**
   - **Decision Support System Components**
   - **Benefits**

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**Mobile Bay Decision Support System Conceptual Framework**

- **Regional and Coastal Resources**
- **Encroachment Community Indicators**

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