Working with Nature on the Northern Gulf of Mexico

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1 June 2014
“Working with Nature”

Definition:
- Alignment of natural and engineering processes to efficiently and sustainably deliver economic, environmental, and social benefits through collaborative processes

Key Goals:
- Beneficial use
- Produce operational efficiencies that support sustainable delivery of project benefits
- Use natural processes to maximize benefits
- Broaden base of benefits
- Collaborate
Working with Nature Opportunities

- Beneficial use of dredge material in strategic locations
- Utilize natural processes to create habitat and reduce cost
- Optimize use of natural systems to reduce effects of storm processes
- Science-based communication processes to improve stakeholder collaboration
- Increased buy-in of stakeholders (ownership)
Example #1: Restoration of Deer Island
Deer Island Project Features
Deer Island Restoration Benefits

- Created beneficial use areas for dredge material disposal
- Provided habitat for nesting shorebirds and sea turtles
- Reduced wave energy on mainland
- Created recreational area for locals
- Promoted collaboration with the State of Mississippi and local residents
Working with Nature Benefits
Example #2: Sand Island Oil Mitigation Berm
Sand Island Oil Mitigation Berm

- **Intent:**
  - Construct a mitigation berm to minimize submerged oil from entering Mobile Bay estuary system

- **Benefits:**
  - Beneficial use of approximately 1.5 million cubic yards of sand to construct berm
  - Created capacity in the disposal area that the Mobile District uses to dispose of sandy material
  - Sand used for berm will eventually transport westward and feed Dauphin Island
  - Promoted collaboration with the State of Alabama and local residents
Evolution of Sand Island Project Features
Lessons Learned & Recommendations

- Active communication with the stakeholders and general public is critical

- Approach holistically to ensure that environmental, economic, and social factors are included in the decision making process

- Pursue projects that serve multiple purposes and provide benefits to an extended base
Continuing Efforts - Round Island
Continuing Projects - Greenwood island
Questions????

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