SSPEED Center

- SSPEED = Severe Storm Prediction, Education and Evacuation From Disasters
- Lessons Learned From Hurricane Ike – Funding from Houston Endowment
Hurricane Ike

Category 2
$32 billion in damages
3rd costliest in U.S. History
112 deaths
2.6 million lost power
Hurricane Ike Missed Most of Us
Dr. Susan Rees, Mobile District: “Unlikely to See a Totally Structural Hurricane Abatement Implemented in Today’s Funding and Evaluation Climate”
After Two Years, Recommended Mixed Structural/Non-Structural Flood Control

- Possible Levee for Upper West Side of Galveston Bay
- Non-structural Plan For Upper West Side of Galveston Bay
- Levee/Gate Beneath the Hartman Bridge to Protect the Houston Ship Channel
- Possible Levee for City of Galveston
- National Recreation Area for Low-lying coastal areas
Houston Wilderness
Goal to Protect Wetlands by Innovative Means
Low-Lying Lands of Galveston Bay

(With Flood Protection Levees and Seawalls)
Ike Surge Flowing Back Into Gulf
4 Days After Landfall –
Excellent Flood Storage
Day Recreation Usage

Development of “Backside” of Peninsula

a place, a destination, a state of mind
Bolivar Recreational Area
HOW ACTIVE OUTDOOR RECREATION STACKS UP

Sales comparison to U.S. economic sectors.

PHARMACEUTICAL & MEDICINE MANUFACTURING $144
AUTOMOBILE & LIGHT TRUCK MANUFACTURING $251
ACTIVE OUTDOOR RECREATION RETAIL SALES $289

TELECOMMUNICATIONS $473
SECURITIES, COMMODITY CONTRACTS, INVESTMENTS $277
POWER GENERATION & SUPPLY $269
LEGAL SERVICES $232
MOTION PICTURE & VIDEO INDUSTRIES $80

Source: Outdoor Industry Foundation
ACTIVE OUTDOOR RECREATION PARTICIPANTS BY THE NUMBERS

- BICYCLING 60 MILLION
- CAMPING 45 MILLION
- FISHING 33 MILLION
- HUNTING 13 MILLION
- PADDLING 24 MILLION
- SNOW SPORTS 16 MILLION
- TRAIL 56 MILLION
- WILDLIFE VIEWING 66 MILLION

Source: Outdoor Industry Foundation
Birdwatching
Bird Watching Economics 2006

- 48 Million Birdwatchers in United States
- $36 billion in direct expenditures
- $82 billion in total economic value
- Generated 671,000 jobs
- Generated $11 billion in federal, state and local tax revenues
# Top Bird Counts – 2009/2010

<table>
<thead>
<tr>
<th>U.S. Rank</th>
<th>Name</th>
<th>Species Recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Matagorda</td>
<td>231</td>
</tr>
<tr>
<td>2</td>
<td>Guadalupe Delta</td>
<td>216</td>
</tr>
<tr>
<td>5</td>
<td>Freeport</td>
<td>203</td>
</tr>
<tr>
<td>9</td>
<td>San Bernard</td>
<td>199</td>
</tr>
</tbody>
</table>
Economics of Paddling

• 17.8 million Americans ages 6 and older participated in kayaking, canoeing, and rafting in 2008.
• 9.9 million Americans participated in canoeing in 2008.
• 7.8 million Americans participated in kayaking.
• Paddling participants made 174 million outings in 2008, averaging 10 days per participant.
Low-Lying Lands of Galveston Bay

Could We Develop a Different Economy Here - -

A Resilient Economy Based on Use, Appreciation and Protection of our Natural Values?
Study Area for Potential National Recreation Area
Lynn Scarlett’s Contribution

• Former Assistant Secretary of Interior Under Pres. George W. Bush
• Helped Evaluate and Develop Various Concepts of Coastal Resilience and Federal Designation for SSPEED Center
Conserving Lands, Protecting Coasts: Options for Structures and Funding

• Thinking about Institutional Structures: Two Main Options—Infinite Variations
  – Traditional federal land designations, such as national parks, seashores, refuges and national recreation areas in which lands are under federal ownership and management
  – Network governance models of shared management and multiple ownerships
What Is A National Recreation Area?

• Federally Recognized Recreation Venue Created by Congressional Action
• Can Be Established and Operated Under Innovative Partnership Agreements (Charter) Between Local, State and Federal Governments and Non-Profit Organization and Private Property Owners
• No Additional Regulatory Burden
• No Unwilling Participation
**NRA Designation Would Attract More Visitors to the Galveston Bay Area**

<table>
<thead>
<tr>
<th>Park Name</th>
<th>Annual Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assateague National Seashore</td>
<td>2,110,918</td>
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<tr>
<td>Conoveral National Seashore</td>
<td>1,001,664</td>
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<tr>
<td>Cape Cod National Seashore</td>
<td>4,644,235</td>
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<td>Cape Hatteras National Seashore</td>
<td>2,146,302</td>
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<tr>
<td>Cape Lookout National Seashore</td>
<td>486,889</td>
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<tr>
<td>Cumberland Island National Seashore</td>
<td>82,812</td>
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<tr>
<td>Fire Island National Seashore</td>
<td>604,077</td>
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<tr>
<td>Gulf Islands National Seashore</td>
<td>2,054,201</td>
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<tr>
<td>Padre Island National Seashore</td>
<td>635,925</td>
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<tr>
<td>Point Reyes National Seashore</td>
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<tr>
<td>Acadia National Park</td>
<td>2,075,875</td>
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<tr>
<td>Biscayne National Park</td>
<td>686,062</td>
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<td>Everglades National Park</td>
<td>822,118</td>
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<td>Gateway National Recreation Area</td>
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<td>Golden Gate National Recreation Area</td>
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<tr>
<td>Jean Lafitte National Historical Park and Preserve</td>
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<tr>
<td>Boston Harbor Islands National Recreation Area</td>
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<tr>
<td>Detroit River International Wildlife Refuge</td>
<td>10,000</td>
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<tr>
<td>Ebey's Landing National Historic Preserve</td>
<td>- not available</td>
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<tr>
<td>Timucuan Ecological Preserve</td>
<td>1,038,888</td>
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</tbody>
</table>
Important Destinations
Network Governance

• Partnership between federal, state and local governments, NGOs and private landowners
• Participate only by agreement of parties
• No new land use rules and regulations
• All pursued on willing buyer, willing seller basis
Proposed Galveston Bay National Recreation Area Partnership Roles Set By Partnership Agreement

Advisory Council
Establishing Galveston Bay NRA

• National Park Service evaluates the area of interest for national significance, suitability, feasibility, and management alternatives.

• Eligibility requires that area:
  – display unique natural, cultural, or recreational resources,
  – suitable and feasible for addition to the park system
  – represent a natural or cultural theme not already adequately represented in the park system,
  – Be of sufficient size and configuration to ensure long-term protection and accommodate public use, and
  – have potential for efficient administration at reasonable cost.