



OVERVIEW OF NOAA AND OTHER PROGRAMS

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Sheltering Communities from Coastal Storms

NOAA Coastal Storms Program





AL/MS/SE LA Coast

- **Opportunity to contribute to improve hurricane preparedness and planning efforts**
- **Katrina recovery will be ongoing for years– this effort can be designed to assist with rebuilding in the optimal way**
- **Expressed local needs**
- **Strong collaborative & partnership potential with many ongoing groups, projects and funding sources**
- **Potential to have a broader regional impact**





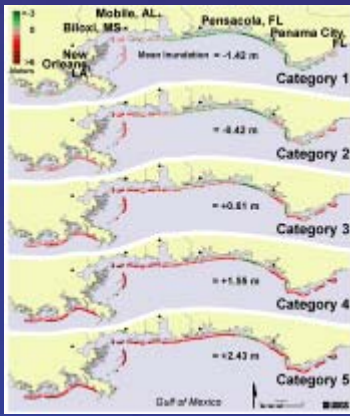
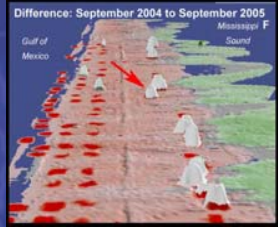
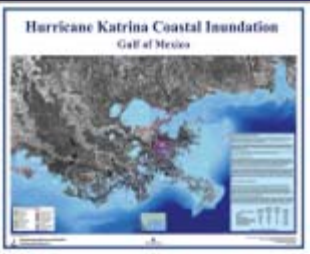
Next Steps

- Evaluate March 14th and March 15th feedback
- Identify which highlighted needs are best met by CSP expertise
- Identify potential partners/collaborators
- Begin to develop a cooperative agreement with Sea Grant for outreach and extension
- In FY08 -
 - Continuing dialogue between CSP team leaders and local users & partners
 - Begin development of selected products and services, depending upon budget



Forecasting the Response of Coastal Ecosystems to Persistent Forcing and Extreme Events

John Haines (USGS) and Margaret Davidson (NOAA)
Michael Ellis (NSF), Toni Johnson (USGS), Keelin Kuipers (NOAA), Bill Birkemeier (ACOE), Kevin Summers (EPA), Barbara Wallace (MMS)





Forecasting the Response of Coastal Ecosystems

Science Objectives

Objectives: Promote and support efforts to enhance and integrate observations, monitoring and modeling to create routinely available tools for Federal, state, and local public safety, health, and resource managers so they can make better decisions in planning, resource management, hazard mitigation, and public health and safety.

Rationale: Promote opportunities to integrate existing observational, monitoring and modeling capabilities resulting in enhanced and effective decision support that responds to regional needs and the mission objectives of multiple federal and non-federal partners.



Forecasting the Response of Coastal Ecosystems

FY08 Spend Plan

Agency	Great Lakes	GOMEX	NTP-wide
USGS FY08 Pres Bud: \$1.5M	Test methods; predictive models; monitoring; source tracking; standards, methods, and training \$750k	NOPP BAA: \$200K	<ul style="list-style-type: none">Support for program management and interagency coordinationSupport for joint interagency activities
NOAA FY08 Pres Bud: \$5M	<ul style="list-style-type: none">Approx \$250K to be coordinated with GLERL and CEGLHH	<ul style="list-style-type: none">NOPP BAA: \$550KAgency-led modeling and data integration activities: \$3,000K	<ul style="list-style-type: none">Support for program managementSupport for joint interagency (USGS, USACE) activities- sea floor and coastal mapping, data integration



\$12M Geospatial Grants

- Regional Geospatial Modeling Grants.-The Committee provides \$12,000,000 and directs the Coastal Service Center, working with the National Coastal Data Development Center and coastal state programs, to establish a competitive program for researchers and resource managers to create useful and comprehensive models or geographic information systems using existing geodetic, coastal remote sensing data, terrestrial gravity measurements or other physical datasets. Ideally, these products will assist with regional storm surge and flood modeling, disaster response preparedness, drought assessment or digital, web based Elevation Project for the Northern Gulf States to use as a model for other regional activities



\$12M Geospatial Grants

www.senate_earmarks.omb.gov/resources/tracking_pdfs/senate_committee_account_CJ.006.48.1450.pdf



Resilient Coastal Communities

08 Senate Appropriations

- ☞ **Coastal Services Center (CSC).**-The Committee encourages NOAA to invest in a Resilient Coastal Communities effort by tying smart land use and building practices to the actuarial rating systems, so that owners and small businesses are
- ☞ incentivized to build smarter and stronger with assurances that if they do they will realize lower insurance rates. The Committee also encourages CSC to work closely with the National Institute of Standards and Technology on its "Disaster Resilient Communities" initiative that the Committee has recommended funding.



A Roadmap to a Seamless Topobathy Surface

Topography and Bathymetry Data Inventory: Gulf of Mexico - *Fall 2007*



Topography and Bathymetry Data Considerations: Datums, Datum Conversion Techniques, and Data Integration - *Fall 2007*



Topobathy Elevation Model Applications - *Summer 2008*





08 Prez. Bud.

\$5 million will used to build and augment state capacity for implementation of GoMEX Governor's Action plan and its priority issues, The FY 08 Administration Budget includes \$5 Million for GOMA.

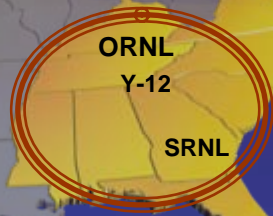


Southeast Region Research Initiative SERRI

*Community-Based, Regionally-Deployed Solutions to
Homeland Security Challenges*

Regional Operations
Support Initiatives

Regional Research
Initiative



ORNL

Y-12

SRNL



SERRI Program Goal

Assist local, state, and regional leaders within the Southeast Region in developing tools and methods required to anticipate and deter terrorist events and to enhance disaster response.





SERRI Program Objective

1. Combine science and technology with validated operational approaches
2. Address regionally relevant requirements
3. Suggest regional solutions with national implications



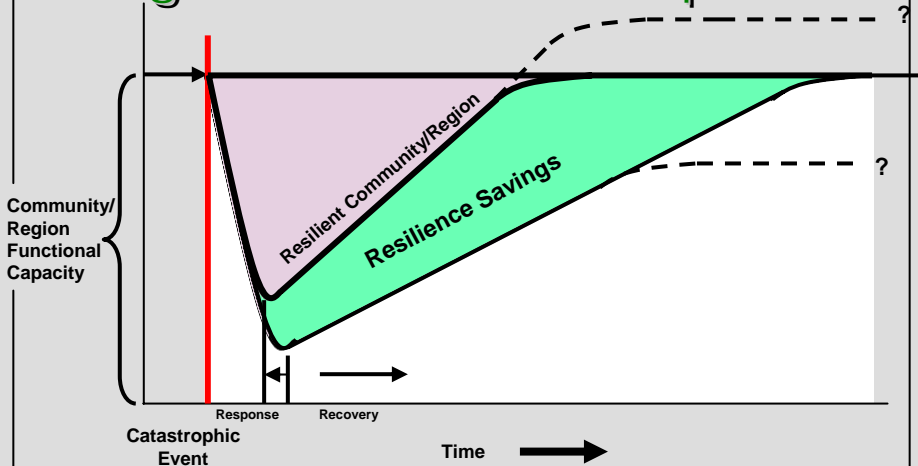


Resilience

Resilience: a community or region's capability to prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to public safety and health, the economy, and national security.

- **Prevents and mitigates cascading failures, often characteristic of critical infrastructure impacts**
- **Minimizes disruption to life and economies.**

Regional Resilience Impact...



A Resilient Community:





Potential Starting Points

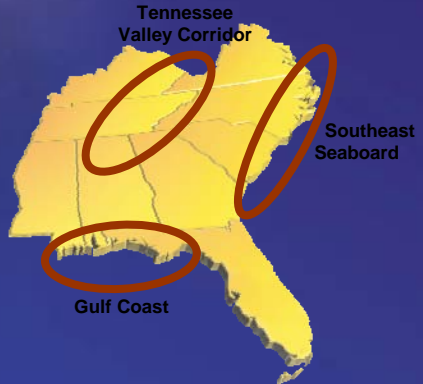
☞ **Manageable mini-regions**

☞ **Economically connected**

☞ **Critical to the region**

☞ **Vital to the Nation**

- Assisting regional coordination
- Building Public/Private Partners
- Rationalizing Plans and Policies
- Facilitating Communications
- Establishing Trust





Center of Excellence for the Study of Natural Disasters, Coastal Infrastructure and Emergency Management

 [http://www.grants.gov/search/se
arch.do/mode=VIEW&oppld=124](http://www.grants.gov/search/search.do/mode=VIEW&oppld=124)

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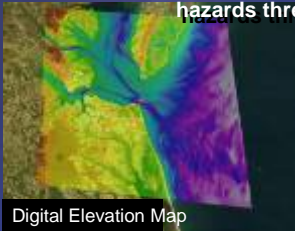
DHS Science and Technology Directorate is soliciting applications for the establishment of a Center of Excellence (COE) to conduct research on DHS mission-related aspects of Natural Disasters, Coastal Infrastructure and Emergency Management. This COE's research will enhance the Nation's technical capabilities to prepare for, prevent, mitigate, respond to, and recover from catastrophic natural events challenging people, coastal infrastructure and critical supply chains. The COE will also develop relevant educational curricula for both matriculated students and career professionals in these topical areas.



Coastal Community Resilience

NOAA helps coastal communities become resilient

- Provide communities with data, models, tools, and training to understand vulnerability to coastal hazards and how to reduce it.
- Provide communities with data to minimize development in high hazard risk areas—floodplains/tsunami inundation zones.
- Help communities translate information to the public and decision makers about coastal hazards and how to avoid impacts.
- NOAA Weather Radio warns communities when natural hazards threaten.



Digital Elevation Map

StormReady



SLOSH Model



SHAPING THE FUTURE

of the

MOBILE BAY REGION

in the

21st CENTURY

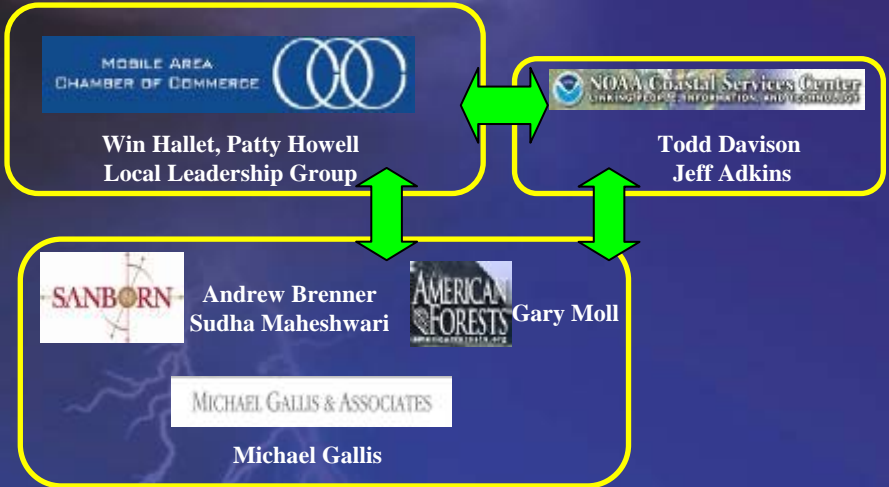
Presented to

THE MOBILE BAY REGIONAL LEADERSHIP COMMITTEE

APRIL 17, 2007



Project Organization





CARP PILOTS

 **LOUISIANA**

 **TEXAS**

 **TAMU**

 **UNO**

 **SUNY**

 **OTHERS**



RISK--WISE

