

Community Works Together to Strengthen Resilience in Mississippi

Community Needs

The Mississippi coast is no stranger to coastal hazards. In recent years, communities there have dealt with devastating impacts from major storms and catastrophic oil spills. Local leaders are using the lessons learned from these experiences to help increase the resilience of these coastal communities.

Bringing different groups together to accomplish common goals is a key component of this effort. Money, manpower, and community goodwill can go much further when groups share information and resources.

The Digital Coast Partnership, Northern Gulf Institute, and the Geospatial Education and Outreach Project lead many of these community resilience partnership efforts, bringing new tools and skill-building opportunities to those who need them the most. An example is provided below.

Workshop Brings Disparate Groups Together

A workshop held in the spring of 2012 in Biloxi, Mississippi, brought local, state, and county leaders together to share stories about coping with natural and man-made hazards and to learn about the helpful resources that are now available. Organized

by the National Association of Counties, Northern Gulf Institute, and National Oceanic and Atmospheric Administration (NOAA) Digital Coast Partnership, the workshop recognized existing community partnerships and fostered new ones. The breadth of attendance was particularly important, with participants representing local groups and private companies, state and county organizations, and federal agencies.

Participants talked about information gaps and found they had many common needs. Among them were the needs for consistent and updated imagery, historical data (including bathymetry and shoreline), education and outreach, better access to local data sources, greater use of data standards, and local economic data. At the workshop, participants saw, and welcomed, several tools that easily produce county-level data analysis and visualizations.

The momentum didn't stop at the workshop. Participants continue to work together, sharing information and providing technical assistance. Here are a few examples:

- **Demonstrating the Sea Level Rise and Coastal Flooding Impacts Viewer.** The Mississippi-Alabama Sea Grant Consortium and the NOAA Coastal Storms Program demonstrated this viewer to local floodplain managers and the public at the Edgewater Mall in Biloxi. The demonstration provided a powerful picture for those who wanted



Participants engage in discussion at the Mississippi Coast Workshop: Digital Tools for Community Resiliency.



Workshop participants gather for a group shot.





Storm surge from Katrina pushed boats from Ocean Springs Harbor into a resident's backyard.

to see different flooding scenarios at specific locations (www.csc.noaa.gov/digitalcoast/action/biloxi).

- **Planning for the Future in Jackson County: Sea Level Rise and Changing Coastal Conditions.** This workshop provided participants with the latest scientific information and management tools related to sea level rise and climate change at the local level. Hosted by Grand Bay National Estuarine Research Reserve, the workshop focused on adaptation tools and data available from Sea Grant and the NOAA Coastal Services Center. A popular tool for the audience was CanVis (www.csc.noaa.gov/digitalcoast/tools/canvis), a visualization program that allows users to quickly “see” potential development or flooding scenarios superimposed on local pictures.
- **Climate Change Vulnerability and Assessment Training.** This course taught participants how to conduct a climate change vulnerability assessment and included a “tools café” that introduced participants to a variety of helpful products, such as the Habitat Priority Planner (www.csc.noaa.gov/digitalcoast/tools/hpp). The tool helps coastal communities identify important locations for conservation, restoration, and planning. This workshop was hosted by Grand Bay National Estuarine Research Reserve and the U.S. Fish and Wildlife Service.
- **Climate Adaptation for Coastal Communities Workshop.** Jointly hosted by Grand Bay National Estuarine Research Reserve, Mississippi-Alabama Sea Grant Consortium, and the NOAA Coastal Storms Program, this workshop will take place in early 2013.

These future and ongoing efforts are planned and convened in response to the need for more outreach and education on Digital Coast tools and products:

- **Digital Coast Seminars and Workshops.** The education and outreach component of the Mississippi Digital Earth Model will be conducting seminars along the Gulf coast on the resources available within the Digital Coast. The seminars will target technical personnel who assist decision makers in the analysis of various geospatial data products. The intent is to identify specific elements of the Digital Coast that are of interest to the audience and offer one-day technical workshops on the identified material. The seminars will be conducted in the fall of 2012, with the first technical workshop to be offered in early winter.
- **Weathering the Storm.** This workshop, hosted by the University of Southern Mississippi's Gulf Coast Research Laboratory, will help participants understand some of the processes that affect storm surge, explore architectural ways to promote community resilience, and visualize sea level rise impacts at a neighborhood level.
- **Hands-On Technical Assistance.** The 2012 Bays and Bayous Symposium, hosted by the Mississippi-Alabama Sea Grant Consortium, will provide opportunities for participants to learn more about products and training available to them and will have technical experts on hand. The Nature Conservancy will demonstrate the Gulf of Mexico Coastal Resilience Tool (<http://gulfmex.coastalresilience.org>), a Web-based viewer that incorporates ecological, social, and economic data. The tool has been used to guide resource managers and scientists during oil spill response efforts and continues to help those making restoration decisions.
- **Resilience-Focused Webinar Series.** As a follow-up to the National Association of Counties and Northern Gulf Institute (NGI) workshop in Biloxi, a series of webinars will be held beginning in fall 2012. Topics include insurance rates in flood zones, preparing for events, increasing resilience through green infrastructure, and wise land use decisions (www.naco.org/meetings/webinars/Pages/webinars.aspx).

