Evaluating NOAA’s Coastal Storms Program in the Gulf of Mexico Project Area

Program goal: The NOAA Coastal Storms Program (CSP) is a nationwide effort that works to reduce the impact of coastal storms, including loss of life, through increasing the resiliency of affected communities. To date, the program has developed a series of 3- to 5-year regional initiatives in several areas. This project evaluated the success of the program in the Gulf of Mexico project area from 2007 – 2012 focusing on activities in the Mississippi-Alabama area.

Key Program Activities and Outputs

- Funded an Outreach Coordinator (OC) position to coordinate the program’s work in the region and to perform outreach and education related to coastal storm resiliency across the region
- Issued two rounds of small grants to fund development of products and tools to address coastal storm issues in the Gulf region
- Developed web sites to disseminate information and information exchange
- Expanded the scope and use of the Unstructured Grid Catalog to the region to assist in better storm risk modeling
- Performed facilitated sessions with communities using the Community Resilience Index (CRI) and the Critical Facilities Tool to increase community-level resiliency
- Developed a “Homeowner’s Handbook” to assist homeowners in understanding risk and resiliency
- Developed television programs to inform the public about storm risks and resiliency

Some Key Findings

- Interviews with 12 key program staff
- Interviews with nine principal investigators covering a total of 11 grants under the program
- Interviews with local leaders in 13 of the 16 communities in the Mississippi-Alabama area that participated in the Community Resiliency Index (CRI) sessions
- A survey of program stakeholders in the Gulf of Mexico, resulting in a total of 60 survey responses
- A social network analysis (SNA) of regional program stakeholders
- Data from the National Flood Insurance Program (NFIP) Community Rating Scale (CRS) data on communities in the Mississippi-Alabama area as well as comparative information on counties in North Carolina and Florida

The data we collected to perform the evaluation included:

- Interviews with 12 key program staff
- Interviews with nine principal investigators covering a total of 11 grants under the program
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Benefits

18 new communities in Mississippi, Alabama, and Louisiana joined the CRS program and 35 communities improved their CRS classes

These CRS improvements led to reduced annual premiums for flood insurance...

Increased resiliency

Comparing FEMA Community Rating Scale (CRS) classes in AL/MS to NC (control): communities in AL and MS improved their CRS classes at a faster rate than those in NC

Cost Effectiveness

NOAA made a $400,000 investment in CRI and the Critical Facility Viewer (if we assume, conservatively, that the average policy in a Special Flood Hazard Area (SFHA) was $2,000, then the average savings from a one-CRS class improvement for a SFHA policy was $100 (5 percent of $2,000). Thus, there would need to be 4,000 policies in that category to make the $400,000 investment worthwhile. Baldwin County, AL (one of the communities that experienced an improvement in CRS class) alone had more than 5,000 of these types of policies in 2008. Thus, total savings across the 35 counties should significantly exceed $400,000 for just the SFHA policies.

Survey: 59 percent of respondents felt somewhat or significantly more prepared for issues compared to Katrina

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