



History Not Repeated at Gulf State Park

Full Mitigation Best Practice Story

Baldwin County, Alabama

Gulf Shores, AL - Park Superintendent Hugh Branyon remembers the horrible aftermath Hurricane Frederic had on the Gulf State Park lakeside cabins in 1979. All the cabins were destroyed leaving only their chimneys behind. During Hurricane Ivan on September 16, 2004, however, the rebuilt cabins did not repeat history. Only one of the seventeen cabins was destroyed. The drastic difference was the result of the cabins being elevated above tidal surge and flood levels.



After Hurricane Frederic, the cabins were rebuilt to the same size along Lake Shelby with Federal assistance. However, this time they were elevated over 12 feet instead of the previous three feet.

Hurricane Ivan struck the Gulf State Park on September 15, 2004, with winds over 120 miles per hour and a tidal surge over nine feet. Beyond minor roof damage and one damaged AC unit, 16 of the 17 cabins escaped significant damages. High water marks at Cabin 6 indicated the water had reached 10.5 feet. If the cabins had not been elevated over 12 feet, they would have been catastrophically damaged by the floodwaters. The estimated replacement cost for each cabin is over \$150,000.

The survival of the cabins is significant beyond the reduced damage costs to the park and State of Alabama. The cabins are a popular park attraction, which generates year round revenue from the cabin rentals to support the park and provides employment for eight staff members. Because the cabins had only limited damage, the cabins resumed rental operation approximately eight weeks after Hurricane Ivan. A remarkable reduction compared to the three years the cabins were not available for rental while being rebuilt after Hurricane Frederic.

Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region IV**

State: **Alabama**

County: **Baldwin County**

City/Community: **Gulf Shores**

Key Activity/Project Information

Sector: **Public**
Hazard Type: **Flooding; Hurricane/Tropical Storm**
Activity/Project Type: **Elevation, Structural**
Activity/Project Start Date: **10/1980**
Activity/Project End Date: **10/1981**
Funding Source: **Other FEMA funds/ US Department of Homeland Security**
Funding Recipient: **Local Government**
Funding Recipient Name: **Gulf State Park**

Activity/Project Economic Analysis

Cost: **Amount Not Available**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Yes**
Federal Disaster #: **598 , 09/13/1979**
Value Tested By Disaster? **Yes**
Tested By Federal Disaster #: **No Federal Disaster specified**
Year First Tested: **2004**
Repetitive Loss Property? **Unknown**

Reference URLs

Reference URL 1: <http://www.floodsmart.gov>
Reference URL 2: <http://www.csc.noaa.gov/clearinghouse>

Main Points

- All State Park cabins were destroyed after Hurricane Frederic in 1979. But during Hurricane Ivan in 2004, only one of the seventeen cabins was destroyed.
- The re-built cabins survived because they were elevated above tidal surge and flood levels.
- Hurricane Ivan struck the Gulf State Park on September 15, 2004, with a tidal surge of up to 10.5 feet. The cabins were elevated to 12 feet.
- Hurricane Ivan struck with winds over 120 miles per hour. Beyond minor roof damage and one damaged AC unit, 16 of the 17 cabins escaped significant damages. The estimated replacement cost for each cabin is over \$150,000.
- The cabins were able to resume rental operation approximately eight weeks after Hurricane Ivan, compared to three years the cabins were not available for rental after Hurricane Frederic.