



## Home Buy-Outs Create Green Space on Dauphin Island

### Full Mitigation Best Practice Story

#### *Mobile County, Alabama*



**Dauphin Island, AL** – Dauphin Island has created a more hurricane-resistant community. Property acquisitions have taken place as mitigation measures to protect renters, owners, and businesses from frequent flooding caused by hurricanes and storms. Recreational areas, green spaces, and bird habitats occupy land where repetitive loss properties once stood.

Standing guard between Mobile Bay and the vast Gulf of Mexico is Dauphin Island, a true barrier island with dunes, maritime forests, salt marshes, tidal flats, and two freshwater lakes. The island is 14 miles long and 1 ¼ miles wide at the widest point. Less than half of the island is inhabited; 8 miles on the western side are undeveloped. Dauphin Island is vital for providing protection to the mainland from severe weather events. Island officials are very experienced in planning and preparing for hurricanes and floods.

Since Hurricane Katrina (2005), Dauphin Island has begun requiring an additional two feet of freeboard above the Base Flood Elevation (BFE) for all new construction to help reduce the risk of future flood damages to properties. The BFE is the average floodwater depth for a flood event that has an estimated one percent chance of occurring during any given year. Buildings constructed to this standard are expected to sit above the floodwater and avoid damage during all but the most severe inundations. Freeboard is a factor of safety usually expressed in feet above a flood level for purposes of floodplain management. Freeboard compensates for the many unknown factors that could contribute to a flood height greater than the calculated height, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed. Freeboard is not required under the National Flood Insurance Program (NFIP), but communities are encouraged to adopt at least a one-foot freeboard to account for the one-foot rise built into the concept of designating a floodway and the encroachment requirements where floodways have not been designated. Freeboard results in significantly lower flood insurance rates due to lower flood risk.

Plagued by frequent flooding from heavy rains and hurricanes, Dauphin Island officials were motivated to acquire repetitive loss properties from property owners. The acquisition was funded by FEMA's Hazard Mitigation Grant Program (HMGP) and administered by the Alabama Emergency Management Agency. Following a major disaster declaration, the HMGP funds up to 75 percent of the eligible costs of a project that will reduce or eliminate damages from future natural hazard events.

The concept of FEMA's acquisition program is simple. When homes and businesses experience heavy flooding (especially multiple flood events), FEMA's buyout program is a cost-effective and long-term solution for community floodplain managers and owners of flood-damaged property. This mitigation activity restores the natural function of the floodplain, eliminates the risk of future damages to those structures removed from the floodplain, and reduces the potential for future property losses by limiting the kinds of future improvements permissible on the land acquired. The resulting open space can be used for flood resistant projects such as parks, picnic areas, walking paths, basketball courts, and wildlife refuges.

A total of three homes were included in an acquisition project that was completed after Hurricane Ivan (2004). "There is no question about what would have happened to these homes during Katrina if they had not been [removed from the floodplain]. They would have flooded," said Mayor Jeff Collier.

Mayor Collier was born on the island and has been its mayor since 1998. He is very familiar with the hurricane season in the Gulf Coast region. He and other island officials are committed to helping protect the island and believe strongly in acquisitions as a mitigation strategy. He stated the City has approximately 40 grant applications pending to acquire more property.

One acquired property on Dauphin Island is now known as Salt Creek Park, which borders Salt Creek. The cost of the HMGP acquisition totaled \$218,140, and the property is now a popular park located near an elementary school. Visitors enjoy modern playground equipment, picnic tables, benches, and shade trees. Pryor Park, a property acquired through the HMGP for a total of \$204,262, is located in a quiet residential neighborhood. It is enclosed by a picket fence and has benches for relaxing. The third property was acquired for \$101,355, and is now green space for birds to enjoy.

“Dauphin Island is unique because of its location, tourists, secondary homeowners, and specialty shops. Because of its makeup, the effects are far reaching when severe damage occurs from hurricanes and frequent flooding,” said Mayor Collier.

Standard homeowner’s insurance policies do not cover flood losses. The NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in participating communities. Dauphin Island joined the NFIP in 1970.

#### Activity/Project Location

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

FEMA Region: **Region IV**

State: **Alabama**

County: **Mobile County**

City/Community: **Mobile**

#### Key Activity/Project Information

Sector: **Public**

Hazard Type: **Flooding**

Activity/Project Type: **Acquisition/Buyouts**

Activity/Project Start Date: **08/2000**

Activity/Project End Date: **02/2005**

Funding Source: **Hazard Mitigation Grant Program (HMGP)**

Funding Recipient: **Property Owner - Residential**

Application/Project Number: **9999**

#### Activity/Project Economic Analysis

Cost: **\$523,757.00 (Actual)**

Non FEMA Cost:

#### Activity/Project Disaster Information

Mitigation Resulted From Federal  
Disaster? **Unknown**

Value Tested By Disaster? **Unknown**

Repetitive Loss Property? **Unknown**

## Reference URLs

Reference URL 1: <http://www.fema.gov/government/grant/hmgp/index.shtm>

Reference URL 2: <http://ema.alabama.gov/>

## Main Points

- Dauphin Island has created a more hurricane-resistant community.
- Property acquisitions have taken place as mitigation measures to protect renters, owners, and businesses from frequent flooding caused by hurricanes and storms.
- Since Hurricane Katrina (2005), Dauphin Island has begun requiring an additional two feet of freeboard above the Base Flood Elevation (BFE) for all new construction to help reduce the risk of future flood damages to properties.
- Recreational areas, green spaces, and bird habitats occupy land where repetitive loss properties once stood.



Mayor Jeff Collier.



Acquired property is now a park.