

Planner's Digest

Hurricane Floyd Recovery Efforts: An Update

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In September of 1999, eastern North Carolina was hit by several torrential hurricanes, the most disastrous of which was Hurricane Floyd. Fifty-one people were killed by the storms, and over 57,000 dwellings were damaged or destroyed. Sixty-six of the state's 100 counties were designated as federal disaster areas. A year later, the region is slowly recovering from the floods, and officials are working on ways to better prepare for such disasters in the future.

Mapping After Floyd

The extent of the devastation wrought by Hurricane Floyd caught planners by surprise, in part because of the state's inaccurate, out-of-date floodplain maps. More than half of these maps are over ten years old and have not been modified to incorporate landscape changes caused by new development. Worse yet, more than 70 towns in Floyd's path had no floodplain maps at all.

State officials are now beginning to update old maps with the help of NASA. Researchers are using an experimental mapping method in which land elevation is charted through pulses of laser light beamed from planes. This new laser technology will enable the state to speed the mapmaking process; officials predict that maps of eastern North Carolina will be finished in two years and that the entire state will be mapped within five years. Mapping eastern North Carolina alone will cost over \$25 million, with the funding coming from both state and federal

sources.

Officials hope that updating the maps so that they more accurately portray flood risks will prompt more homeowners to buy flood insurance. The new maps will also enable developers to know how close they are building to flood levels. Finally, the new information will help the state to better prepare for flooding in the future.

Housing Flood Victims

In August, workers demolished the first two houses on land acquired through the Hazard Mitigation Grant Program. The program, commonly referred to as "The Buyout," uses 25 percent state funds and 75 percent federal funds to buy properties that lie in the path of potential floods and other natural disasters.

The property on which the houses sat now belongs to the town of Wilson, North Carolina, and will become permanent open greenspace. The former owners will use their payment to buy another house in the town, outside the flood risk area. Wilson has received \$11.5 million in hazard mitigation funds to buy 196 of the town's most damaged homes and is applying for an additional \$6.9 million from the Federal Emergency Management Agency (FEMA) in order to purchase and condemn 206 more houses. The State of North Carolina has submitted \$97 million in housing buyout applications to FEMA and plans to buy more than 4,300 homes at a cost of \$261.4 million, making this one of the largest buyout programs in the nation's history.

Also in August, contractors broke ground on a subdivision in Rocky Mount that will provide 230 homes, priced at \$88,000, for families displaced by Floyd. The project is the first successful collaboration between a private

developer and state and local governments to provide new housing for flood victims.

Relief efforts have been criticized for not placing enough emphasis on the housing needs of renters. In response, the state recently created a \$10 million program to provide new rental housing in flood-damaged areas. The City of Greenville will also receive \$1.8 million in federal funds to repair 216 damaged units of public housing.

Hog Waste Agreement

One of the fouler effects of Hurricane Floyd was the flooding of more than 50 hog waste lagoons. While open-air lagoons are the easiest, cheapest way for farmers to dispose of hog waste, they have long been controversial for their potential to seriously pollute the state's rivers and streams when they break or flood. The flooding and resulting pollution caused by Floyd ultimately prompted action on the matter.

In July, Smithfield Foods, the state's largest hog producer, agreed to phase out hog lagoons and spend \$65 million to develop alternative methods of handling hog waste. The Virginia-based company, which employs 30,800 people, controls about 70 percent of North Carolina's pork production. Smithfield will install new waste treatment systems on its 276 farms within three years of state approval of a conversion plan. The agreement, however, does not apply to farms that produce under contract for Smithfield, and most of the lagoons are located on these contract farms. Nor does it cover companies that produce the remaining 30 percent of pork in the state.

In an effort to craft a more comprehensive solution, the state recently announced a buyout program focused specifically on smaller hog farm operations. Fourteen farmers in flood-prone areas will be paid a total of \$4 million to stop using their land to store hog waste. The state will clean up these waste lagoons, and the landowners will be prohibited from using their property as anything other than irrigation or fishing ponds, fields or pastures. Payments will range from \$75,000 to \$695,000, enabling many of the small-scale farmers who have not been able to compete with larger corporations to leave

the hog raising business.

No Post-Floyd Boom

Often a natural disaster results in an mini-economic boom for the affected areas. After Hurricane Fran hit North Carolina in 1996, sales-tax collections spiked in the hardest-hit areas as homeowners and businesses rushed to rebuild and replace destroyed property. Yet, nearly a year after Floyd, the flooded areas of eastern North Carolina have yet to experience such a boost. Sales-tax collections have actually fallen in counties that were most damaged, the housing starts have remained unchanged or even dropped in some areas.

Analysts predict that there will be little, if any, economic upswing associated with Floyd. The primary reason is that the counties that were the most damaged were struggling even before the storm hit. Eastern North Carolina's farms and factories have been closing for years, leaving behind those who could not afford to move. The poverty rate in many of these counties is approximately 20 percent. Moreover, only 13 percent of the homes destroyed by Floyd were insured. In contrast, the areas hit by Hurricane Fran — mainly beach communities and the Research Triangle area — were relatively wealthy, and most victims were either insured or had the financial resources to quickly begin building anew. **CP**

Sources: The Raleigh News & Observer and the Hurricane Floyd Redevelopment Center

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