Lessons Learned in Grand View Area of Hampton

Full Mitigation Best Practice Story

Hampton City, Virginia

Hampton, VA - Matina Howarth always thought hurricanes needed to be taken seriously, having lived in New England as a child when Hurricane Bob (1991) hit. After she and her husband bought a waterfront home built already in compliance with the city's floodplain regulations to the National Flood Insurance Program (NFIP), they had a large rock bulkhead installed on their waterfront embankment.

"I talked with the neighbors in this area and asked a lot of questions about measures we could take. I especially spoke with residents who didn't have major damage during Hurricane Floyd. Most of the area residents had these huge rocks," she said. They were told not to use the smaller riprap rock because they were told it would move too easily and end up inside their home during strong storms. The Howarth's specified that very large rock should be used as part of the bulkhead protection system in front of their home. They spent $30,000 on the large rock. She goes on to say, "I then negotiated the expense of the rock into the purchase price of the house."

In addition to the large rocks, Howarth had hurricane shutters installed on their home's 33 windows. "My husband didn't want to get the shutters but I made sure we had them. He now swears by them."

Upon Hurricane Isabel's approach as a category five storm, the Howarths followed the evacuation order for the area. Upon return, they found their home, for the most part, unscathed. The only damage outside was to a fence and an aboveground pool. The garage had no water in it, and the first floor living room carpet was wet. The structure of the home was intact.

In the Grand View area overlooking the Chesapeake Bay, many homes built in the 1940s were severely damaged or destroyed by Hurricane Isabel. Yet, some adjacent homes built within the last eight years sustained less damage. The difference? Building code requirements adopted in the early 1980s in compliance with the NFIP.

These newer homes were built above the 100-year flood plain with pilings and breakaway walls," David Langille, chief inspector with the Hampton Codes Compliance Department explains. "The homes built during the 1940s were mostly cottages, and that area received at least $4 million in damages." The typical 1940s cottage style home was one story with the floor and outside grade levels practically the same.

The installation of hurricane shutters and the large rock bulkhead reduced the damage of Hurricane Isabel. "I consider this no damage, when I think of what could have happened. It was great to come home and find the measures we took had paid off and our home was safe," said Howarth.

Activity/Project Location	
Geographical Area:	**Single County in a State**
FEMA Region:	**Region III**
State:	**Virginia**
County:	**Hampton City**
City/Community:	**Hampton**

Key Activity/Project Information

Sector:	**Private**
Hazard Type:	**Hurricane/Tropical Storm**
Activity/Project Type:	**Building Codes; Retrofitting, Non-structural**
Structure Type:	**Wood Frame**
Activity/Project Start Date:	**03/2001**
Activity/Project End Date:	**07/2001**
Funding Source:	**Homeowner**
Funding Recipient:	**Property Owner - Residential**
Funding Recipient Name:	**Homeowners**

Activity/Project Economic Analysis

Cost:	**$50,000.00 (Estimated)**

Activity/Project Disaster Information

Mitigation Resulted From Federal Disaster?	**No**
Value Tested By Disaster?	**Yes**
Tested By Federal Disaster #:	**No Federal Disaster specified**
Year First Tested:	**2003**
Repetitive Loss Property?	**Unknown**

Reference URLs

Reference URL 1:	**http://www.floodsmart.gov/floodsmart/pages/benefits.jsp**
Reference URL 2:	**http://www.virginia.gov/**

Main Points

- Code compliance and enforcement
- Saved money and protected property
- Pro-active rather than re-active
- Followed evacuation order

Rock embankment and the Howarth's home in the background.

Hurricane shutters installed on sliding doors and windows.

1940's home that received substantial damage.