



Mitigation Prevents Community Isolation

Full Mitigation Best Practice Story

Yabucoa Municipio, Puerto Rico

Yabucoa, PR - During any heavy rain event, almost 10,000 residents of Barrio Guayabota and Barrio Quebradilla in Yabucoa faced the possibility of losing the road at Coquí Bridge, which is their connection with downtown Yabucoa and other communities. If this road got damaged or destroyed, it meant a 30-kilometer detour to get assistance or provisions.



Natividad Ruiz was born and raised in Barrio Guayabota and has endured this situation many times. “Just last year, as soon as it started raining heavily, we would worry about how much time we had left before our community would be isolated,” said Ruiz. The floodwaters would scour the creek bank and cause washout of the road.

The FEMA Public Assistance Program normally funds repair of public infrastructure to pre-existing conditions. However, in this case, it was clear that future rains would again damage the road and bridge approach. Thus, after the November 2003 flooding event, a mitigation measure was undertaken, which involved the installation of gabions (rock filled wired baskets) in areas eroded by floodwaters. The gabions were later covered with earth.

“With the completion of this project, even with all the rain brought by Tropical Storm Jeanne (2004), the road never collapsed, and that benefited both communities,” Ruiz explained.

Activity/Project Location

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

FEMA Region: **Region II**

State: **Puerto Rico**

County: **Yabucoa Municipio**

City/Community: **Yabucoa**

Key Activity/Project Information

Sector: **Public**

Hazard Type: **Flooding**

Activity/Project Type: **Flood Control**

Activity/Project Start Date: **11/2003**

Activity/Project End Date: **08/2004**

Funding Source: **Other FEMA funds/ US Department of Homeland Security**

Funding Recipient: **Local Government**

Activity/Project Economic Analysis

Cost: **\$5,772.00 (Actual)**

Activity/Project Disaster Information

Mitigation Resulted From Federal Disaster? **Unknown**

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.fema.gov/government/grant/pa/index.shtm>

Reference URL 2: <http://www.floodsmart.gov/>

Main Points

- If this road got damaged or destroyed, it meant a 30 kilometers detour to get assistance or provisions.
- The FEMA Public Assistance Program normally funds repair of public infrastructure to pre-existing conditions. However, in this case, it was clear that future rains would again damage the road and bridge approach.
- The mitigation measure involved the installation of gabions (rock filled wired baskets) in areas eroded by floodwaters. The gabions were later covered with earth.



Gabions installed to prevent future erosion.