



Railroad Bridge Removal

Full Mitigation Best Practice Story

Salinas Municipio, Puerto Rico

Salinas, PR - The community of La Margarita (303 homes) was developed in 1973 in an A-Zone floodplain along the west bank of the Nigua River. Since it was developed, it had been affected by four major floods.



The adverse effects of the floods were aggravated by a 1906 steel railroad bridge located just north of the community that was no longer in use. This abandoned structure accumulated debris washed down stream by rushing water, creating a dam that directed the river current into the community. After the floods caused by Hurricane Hortense (1996), the community organized a group called "Comit, Ro Nigua de Salinas, Inc." to propose mitigation projects to benefit of the town of Salinas and, especially, La Margarita.

The objective of the committee is to serve as a proponent and coordinate interagency action for short-term mitigation projects. The long-term objective is to support and promote a flood control project proposed by the US Army Corps of Engineers that would ultimately result in the reclassification of the township of Salinas as a non-flood zone. Concurrent with these two main objectives, the committee provided and coordinated personal and family mitigation actions by means of weekly orientation and home mitigation workshops.

The first short-term mitigation project consisted of removing the old railroad bridge, known as "Puente Negro" (Black Bridge), for its adverse effect on the community. This action required amendment to PR Law 118 that protected the structure for possible future use. The committee lobbied for amendment of the law with State Senator Enrique Melendez, and Representative Guillermo Valero to present the necessary changes in legislation.

The next challenge was to provide historic documentation of the bridge as required by the State Historic Preservation Office (SHPO). The documentation was coordinated and financed entirely by the committee. The US Army Corps of Engineers supported the proposal, and provided scientific and engineering data on which to base the mitigation project. Other government agencies such as Municipal and State Civil Defense Office, Natural Resources Department, Institute of Puerto Rican Culture, and professional organizations were rallied by the committee to provide support and assistance. Most significant was the community's desire for a solution to the problem. In August 1998, the bridge was removed, just a month before the passage of Hurricane Georges (September 1998).

The timely removal of the bridge, just before Hurricane Georges, minimized damages to homes and personal property, and reduced the risk of losing lives in La Margarita. The community was flooded but not nearly as bad as in the past. Such was the committee's argument during the two years of struggle for the approval of the mitigation project.

The effectiveness of this mitigation project can best be evidenced in the significant reduction of loss claims to state and federal relief agencies by La Margarita residents. Also, the US Army Corps of Engineers benefit because they do not have to expend efforts and resources in the removal of the bridge that was an obstacle to their flood control project. The "Comit, Ro Nigua de Salinas, Inc." efforts and achievements were recognized by United Funds by awarding it the 1999 Golden Rule Award.

Standard Homeowner's insurance policies do not cover flood damage. The National Flood Insurance Program makes Federally backed flood insurance available to homeowners, renters, and business owners in participating communities.

Activity/Project Location

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

FEMA Region: **Region II**

State: **Puerto Rico**

County: **Salinas Municipio**

City/Community: **Salinas**

Key Activity/Project Information

Sector: **Public**

Hazard Type: **Flooding; Hurricane/Tropical Storm**

Activity/Project Type: **Education/Outreach/Public Awareness**

Activity/Project Start Date: **10/1996**

Activity/Project End Date: **08/1998**

Funding Source: **Local Sources; State sources**

Funding Recipient: **Non profit - Environmental**

Funding Recipient Name: **Comit, R?o Nigua de Salinas, Inc.**

Activity/Project Economic Analysis

Cost: **\$31,600.00 (Actual)**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Yes**

Federal Disaster #: **1136 , 09/11/1996**

Federal Disaster Year: **1996**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **No Federal Disaster specified**

Year First Tested: **1998**

Repetitive Loss Property? **Unknown**

Reference URLs

Reference URL 1: <http://www.fema.gov/business/nfip/>

Reference URL 2: <http://www.nhc.noaa.gov/>

Main Points

- The abandoned railroad bridge accumulated debris washed down stream by rushing water, creating a dam that directed the river current into the community.
- The first short-term mitigation project consisted of removing the old railroad bridge.
- The timely removal of the bridge, just before Hurricane Georges, minimized damages to homes and personal property, and reduced the risk of losing lives in La Margarita.