



Enhanced Restoration Project Should Protect Town Road

Full Mitigation Best Practice Story

Ulster County, New York

Hurley, NY – Repairs to a section of highway in the Town of Hurley in Ulster County, which was damaged by severe storms and flooding last fall, were performed to higher standards that should help protect the road against future destruction.



Heavy and continuous rainfall during the storms led to a surge from uphill streams that overwhelmed a culvert carrying water under Eagles Nest Road. With the culvert blocked by debris, a torrent of water undermined the road bed and washed out a section of the highway and its underlying material.

At the request of Governor George E. Pataki, President George W. Bush signed a major disaster declaration for New York State as a result of the storms.

Among the recovery programs activated by the declaration was the Public Assistance Program. This program reimburses eligible government jurisdictions and certain non-profits for costs for debris removal, emergency protective measures and the repair or restoration of damaged public infrastructure.

The Federal Emergency Management Agency (FEMA) provides 75 percent of the grant funding. The 25 percent non-federal share is made up from state and local funding. The New York State Emergency Management Office (SEMO) administers the program.

In most cases, Public Assistance repair and restoration funding brings the damaged infrastructure back to pre-disaster conditions.

However, a major FEMA and SEMO policy goal is to mitigate, where it is cost effective, when restoring damaged infrastructure so the repaired facility is better able to withstand future disaster damages. A little extra money spent now may save untold funds later.

In addition to cleaning out the 18-inch diameter culvert, repairing the highway and resetting guide rails, the Eagles Nest Road project included the addition of a new 36-inch-diameter culvert adjacent to the existing pipe to channel flows during high water periods.

That extra measure cost about \$1,700 and brought the total project cost to about \$68,000, of which the federal share was approximately \$51,000.

“That was a classic example of accumulated natural debris from upstream plugging the culvert and causing the washout,” explained Hurley Highway Superintendent Linda Cook. Keeping ahead of such problems is a perennial issue for small towns with limited resources, she said. “Money is the key thing, and time plays a factor.”

Cook is a supporter of FEMA’s policy to identify mitigation efforts that prevent future damage. “It’s much better than it used to be,” she said.

“Mitigation activities such as these are a smart way of doing business by expending monies now to lessen the threat on communities before an event occurs in the future,” said James W. Tuffey, Director of the State Emergency Management Office.

“This is an excellent example of a modest investment in infrastructure improvements that will pay dividends for years to come,” said FEMA Federal Coordinating Officer Marianne C. Jackson.

FEMA prepares the nation for all hazards and manages federal response and recovery efforts following any national incident. FEMA also initiates mitigation activities, trains first responders, works with state and local emergency managers and manages the National Flood Insurance Program and the U.S. Fire Administration.

Activity/Project Location

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

FEMA Region: **Region II**

State: **New York**

County: **Ulster County**

City/Community: **Hurley**

Key Activity/Project Information

Sector: **Public**

Hazard Type: **Flooding**

Activity/Project Type: **Flood Control**

Activity/Project Start Date: **11/2004**

Activity/Project End Date: **06/2005**

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

Funding Recipient: **Local Government**

Funding Recipient Name: **Town of Hurley, NY**

Activity/Project Economic Analysis

Cost: **\$51,000.00 (Actual)**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Yes**

Federal Disaster #: **1564 , 10/01/2004**

Value Tested By Disaster? **Yes**

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

Year First Tested: **2005**

Repetitive Loss Property? **Unknown**

Reference URLs

Reference URL 1: **<http://www.fema.gov/government/grant/pa/index.shtml>**

Reference URL 2: **<http://www.semo.state.ny.us/index.cfm>**

Main Points

- Heavy and continuous rainfall during the storms led to a surge from uphill streams that overwhelmed a culvert carrying water under Eagles Nest Road. With the culvert blocked by debris, a torrent of water undermined the road bed and washed out a section of the highway and its underlying material.
- At the request of Governor George E. Pataki, President George W. Bush signed a major disaster declaration for New York State as a result of the storms.
- A major FEMA and SEMO policy goal is to mitigate, where it is cost effective, when restoring damaged infrastructure so the repaired facility is better able to withstand future disaster damages. A little extra money spent now may save untold funds later.



Culvert replacement project