New Bridge Prevents Flood Damages

Historically disasters occur in this area as a result of nor'easters, hurricanes, ice storms, and river and coastal flooding.
Cattaraugus County, a Southern Tier County located on the New York/Pennsylvania State line, enjoys a year-round tourist business. Winter sports are a major area attraction. The confluence of Elk Creek and Great Valley Creek occurs just outside the central business and residential area of the Village of Ellicottville.

The Martha Street Bridge abutments supporting a one-lane thoroughfare caused floodwaters to backup into the village during repeated floods.

The alignment of the two creeks as they approach the bridge aggravated the condition. With even moderate rains and snowmelt, the area tended to flood and cause major traffic problems that affected both the residential and commercial areas. The bridge was closed as a result of the January 1996 flood because of ongoing structural problems and scour damage to its abutment.

Funding for the replacement of the bridge under FEMA's Hazard Mitigation Grant Program (HMGP) reduced future flood potential throughout the Village of Ellicottville. The bridge replacement removed channel restrictions just south of the confluence caused by the bridge and ensured emergency access throughout the village during flood events.

Prior to this mitigation action, requests for FEMA and SBA assistance were received on a regular basis. Damage to 51 residential and 20 commercial properties at over $125,000 were reported annually. As a result of the 1996 flood, a total of $371,000 in damages occurred to 42 residences, five businesses, and a mobile home park.
The new two-lane bridge was built wider to accommodate greater traffic and allow pedestrian access. The abutments were widened to allow more water to pass under the bridge during flood events. The channel approaching the structure was also reconfigured.

The new Martha Street Bridge has been in place during two floods that previously would have resulted in residential and commercial flooding. To date, the Village has not experienced flood damages due to a back up of water at the structure.

Thanks to this project and resulting reduction in the amount of backwater, there may be a beneficial impact on the adjacent floodplain. New flood maps are now being processed.

This replacement bridge project was completed in 1998. The total cost of the project was $421,399 of which the Federal share was $330,075 and the match of $91,324 was provided by Cattaraugus County.

It is estimated that in the next disaster, the public investment will have been entirely recouped.