



## Simple Fix for Village of Greene Wastewater Treatment System

### Full Mitigation Best Practice Story

#### *Chenango County, New York*

**Albany, NY** – Not all projects to reduce future flooding damages require complex solutions - sometimes a simple fix serves just as well.

For example, take the three lift pump stations located in Chenango County's village of Greene. The pumps are about 20 to 25 feet deep in a manhole and are part of the wastewater treatment system that was knocked off line by flooding in June 2006.



Before the flood, the manhole cover was on a metal collar that lifted the entry point about a foot above ground level. During the flood the water rose approximately three to four feet deep at the pump locations, knocking out the motors and threatening to compromise the entire wastewater treatment system.

Extraordinary work by village managers minimized the threats, but the village still needed a long-term solution. In the end, another four feet of manhole collar was welded on top of the existing manhole collars. This lifted the manhole entries roughly a foot above the flood of record for this area.

When President Bush signed a major disaster declaration for New York State because of the 2006 flooding, it triggered the Public Assistance (PA) Program in Chenango County to reimburse government entities and certain non-profits for emergency protective measures and the repair of damaged public infrastructure.

The Federal Emergency Management Agency (FEMA) provides 75 percent of the grant funding. New York State funds the remaining 25 percent. The New York State Emergency Management Office (SEMO) administers the PA program.

A major FEMA and SEMO goal is to mitigate, where cost effective, when restoring damaged infrastructure so the repaired facility is better able to withstand future disaster damages. Extra money spent now can reduce future impacts and costs.

Altogether FEMA and SEMO have provided about \$98,000 to repair flood-affected parts of the village's wastewater treatment system. While the elevated collars on the lift pump stations were small in cost, about \$2,250 per collar, the dividends are huge.

"When it comes to wastewater," said Village of Greene Superintendent of Public Works Bob Nowalk, "you don't want to have the lift pump stations compromised. That is where the raw waste is collected to be pumped to the treatment plant. If the pump fails, that waste may run out into the Chenango River – the river runs right through the village. That could result in a real health hazard and degradation of the environment. We are very pleased with the state and FEMA for all the help they have provided"

Director of the New York State Emergency Management Office and State Coordinating Officer John R. Gibb is also pleased with the changes. "Mitigation activities such as these are a smart way of doing business. It makes more sense to spend the money now to lessen the threat of future events," said Gibb.

FEMA Federal Coordinating Officer Marianne C. Jackson agrees. "This is an excellent example of an investment in improvements that will pay dividends for years to come," said Jackson.

The treatment plant serves 1,700 residents who call the town and village of Greene home.

### Activity/Project Location

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

FEMA Region: **Region II**

State: **New York**

County: **Chenango County**

City/Community: **Greene**

### Key Activity/Project Information

Sector: **Public**

Hazard Type: **Flooding**

Activity/Project Type: **Elevation, Utilities**

Structure Type: **Light Gauge Metal**

Activity/Project Start Date: **08/2006**

Activity/Project End Date: **06/2007**

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

Funding Recipient: **Local Government**

Funding Recipient Name: **Village of Greene**

### Activity/Project Economic Analysis

Cost: **\$98,000.00 (Actual)**

Non FEMA Cost:

### Activity/Project Disaster Information

Mitigation Resulted From Federal  
Disaster? **Yes**

Federal Disaster #: **1650 , 07/01/2006**

Value Tested By Disaster? **No**

Repetitive Loss Property? **No**

### Reference URLs

Reference URL 1: <http://www.semo.state.ny.us/>

Reference URL 2: <http://www.fema.gov/hazard/flood/index.shtm>

## Main Points

- The pumps in the three lift pump stations in Chenango County's village of Greene are about 20 to 25 feet deep in a manhole and are part of the wastewater treatment system that was knocked off line by flooding in June 2006.
- During the flood the water rose approximately three to four feet deep at the pump locations, knocking out the motors and threatening to compromise the entire wastewater treatment system.
- The need for a long-term solution resulted in another four feet of manhole collar being welded on top of existing manhole collars raising manhole entries roughly a foot above the flood of record.
- Altogether FEMA and SEMO have provided about \$98,000 to repair flood-affected parts of the village's wastewater treatment system. While the elevated collars on the lift pump stations were small in cost, about \$2,250 per collar, the dividends are huge.



The elevated entry way to one of the village's wastewater treatment plant's lift stations.



Improved manhole leads down to the lift pump.