

# **NY Rising Community Reconstruction (NYRCCR) Program Public Meeting #3**

**Narrowing Our Project Focus in  
SHANDAKEN AND HARDENBURGH**

**February 18, 2014  
7:00 p.m.  
Shandaken Town Hall**



# Welcome

- Meet Your Local NY Rising Community Planning Committee Members
  - Shandaken Members
  - Hardenburgh Members
- Meet the NY Rising/ DOS/ Tetra Tech Team





# What's This About?

- **NY Rising Community Reconstruction Program**
  - Provide additional rebuilding and revitalization assistance to communities severely damaged by Hurricanes Sandy and Irene, and Tropical Storm Lee
  - Facilitate community redevelopment planning and community resilience
  - Provide up to \$3 million/community for community reconstruction and resiliency projects
- **The Power of Regional Collaboration**
  - Teaming Shandaken and Hardenburgh

# What's Been Done So Far?

## Task

## Status

- Planning Committee Meetings
- Visioning, Needs Assessment
- Conceptual Plan
- Critical Asset Inventory
- Public Meetings
- Qualitative Outreach, Analysis
- Hydraulic Modeling
- Risk Assessment
- Cost-Benefit Analysis  Spring/Winter 2014
- Prospective Funding Matrix  Spring/Winter 2014



# How Is a Project Funded?

**Understanding the Community Development Block  
Grant Disaster Recovery Assistance (CDBG-DR)**

# Qualifying for CDBG-DR

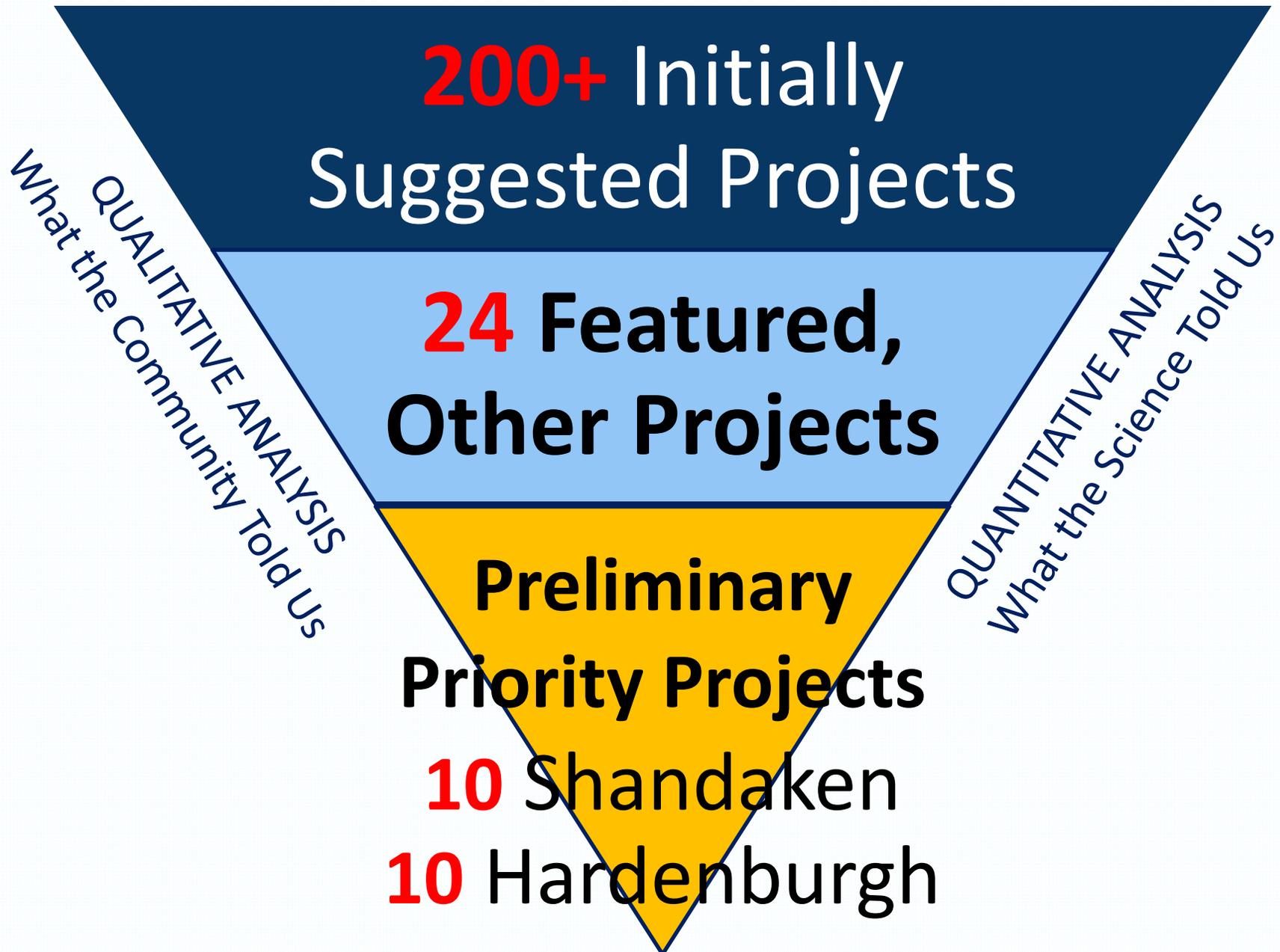
- Is the project eligible under traditional CDBG?
  - Public facilities and improvements, and privately-owned utilities
  - Relocation planning, capacity building
  - Acquisition of real property
  - Clearance, rehabilitation, reconstruction, and construction of buildings
  - Economic development assistance
- Is there a direct link between the project and the disaster?
  - Does it address damage caused or exacerbated by a storm?
  - Does it address emerging issues that have been exposed and identified as a result of the storm?
  - Does it create greater resiliency against future storms?



# Qualifying for CDBG-DR

- Does it contribute to CDBG National Objectives?
  - Benefits low/moderate income households
  - Removes blight conditions
  - Urgent need
- Can it be completed/funds spent in two years?
- Does each project cost less than \$3M?  
(specific to NY Rising Community Reconstruction Program)
- Has it already commenced?
- Does the project have unmet needs not funded through other recovery programs?

# How Did We Get To This Point?



# Qualitative Input, Analysis

## **What the Community Told Us**



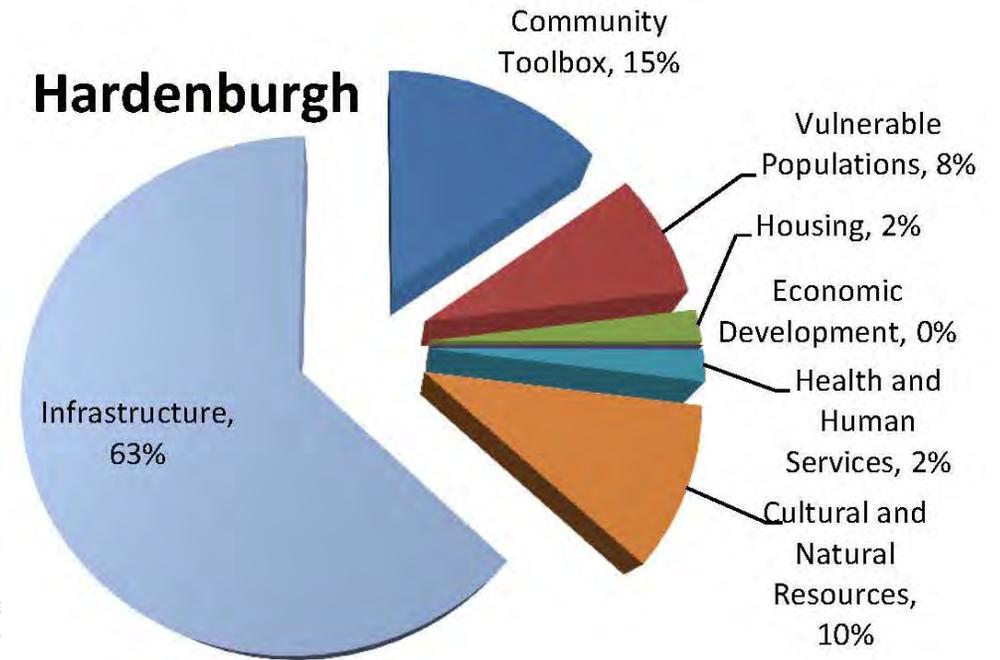
# What the Community Told Us

- ✓ Repair, Improve Infrastructure
- ✓ Improve Stream Management
- ✓ Continue Recovery Efforts
- ✓ Improve Access to Critical Facilities  
(shelter, food, health care, emergency services, utilities, government facilities)
- ✓ Enhance Economic Development
- ✓ Protect, Enhance Natural and Cultural Resources
- ✓ Improve Local/Regional Connectivity
- ✓ Improve Safety

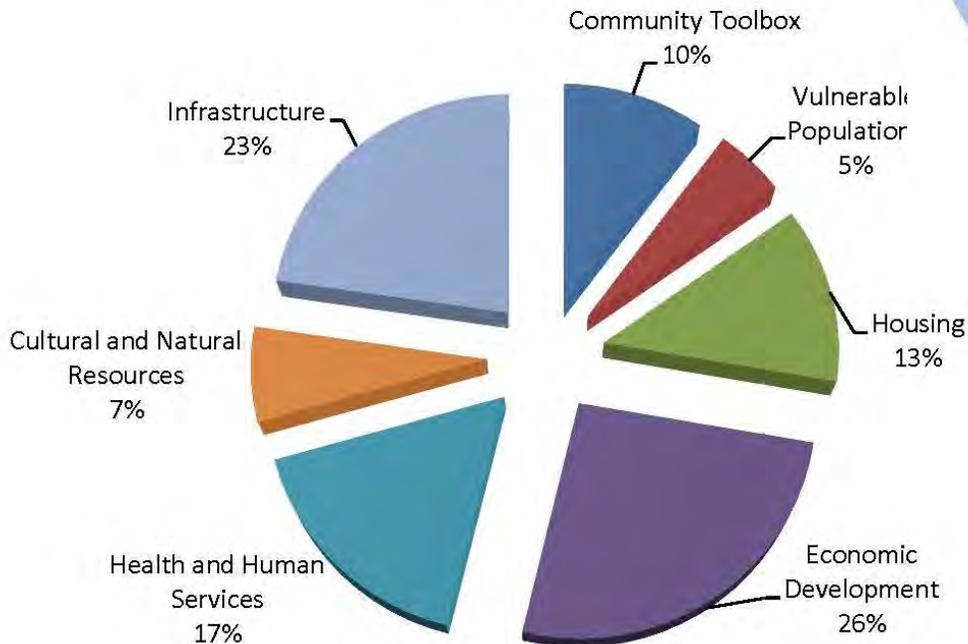


# Public Meeting #1 Voting Results

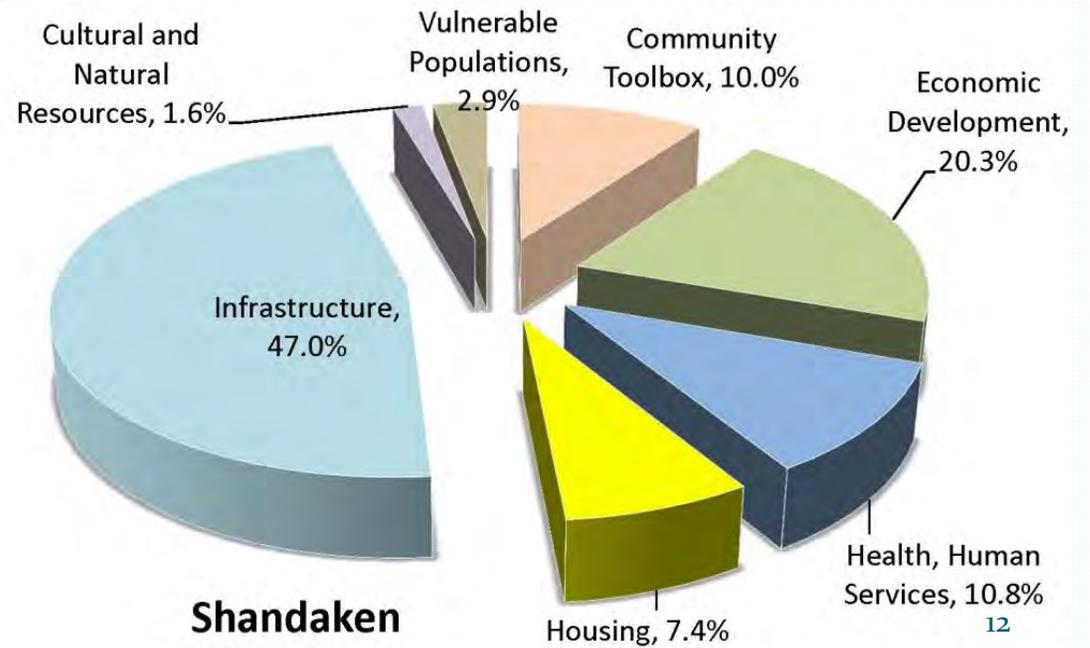
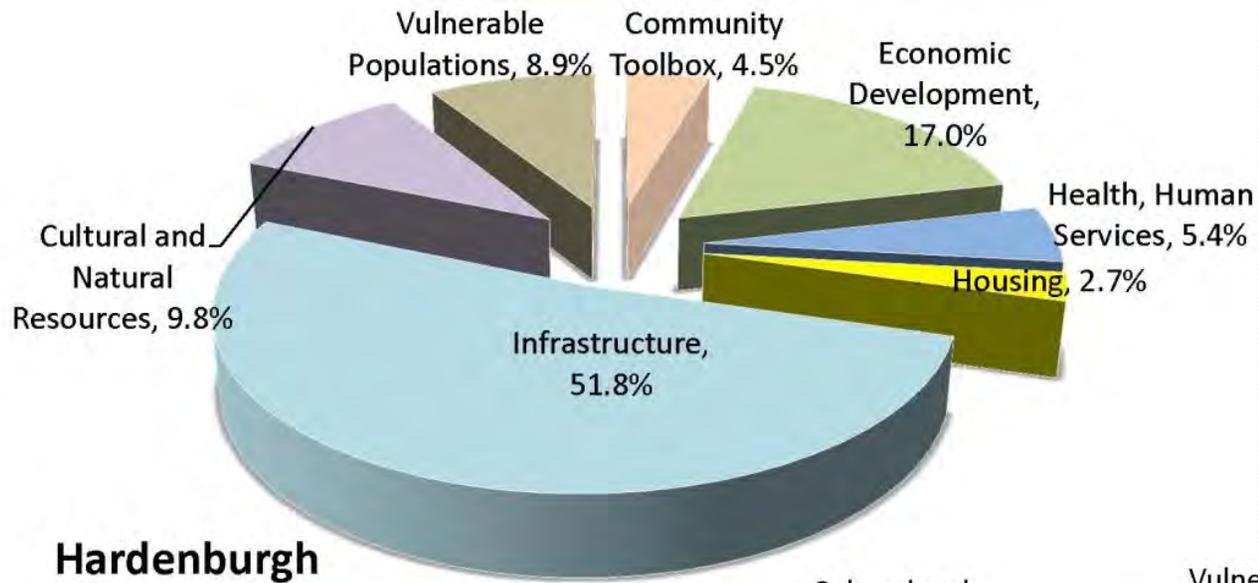
## Hardenburgh



## Shandaken



# Public Meeting #2 Voting Results



# Quantitative Input, Analysis

## What the Science Told Us



# Applying the Science: Hydraulic Analysis

- Used US Army Corps of Engineer's Hydrologic Engineering Center River Analysis System (HEC-RAS)
- Created effective models from existing

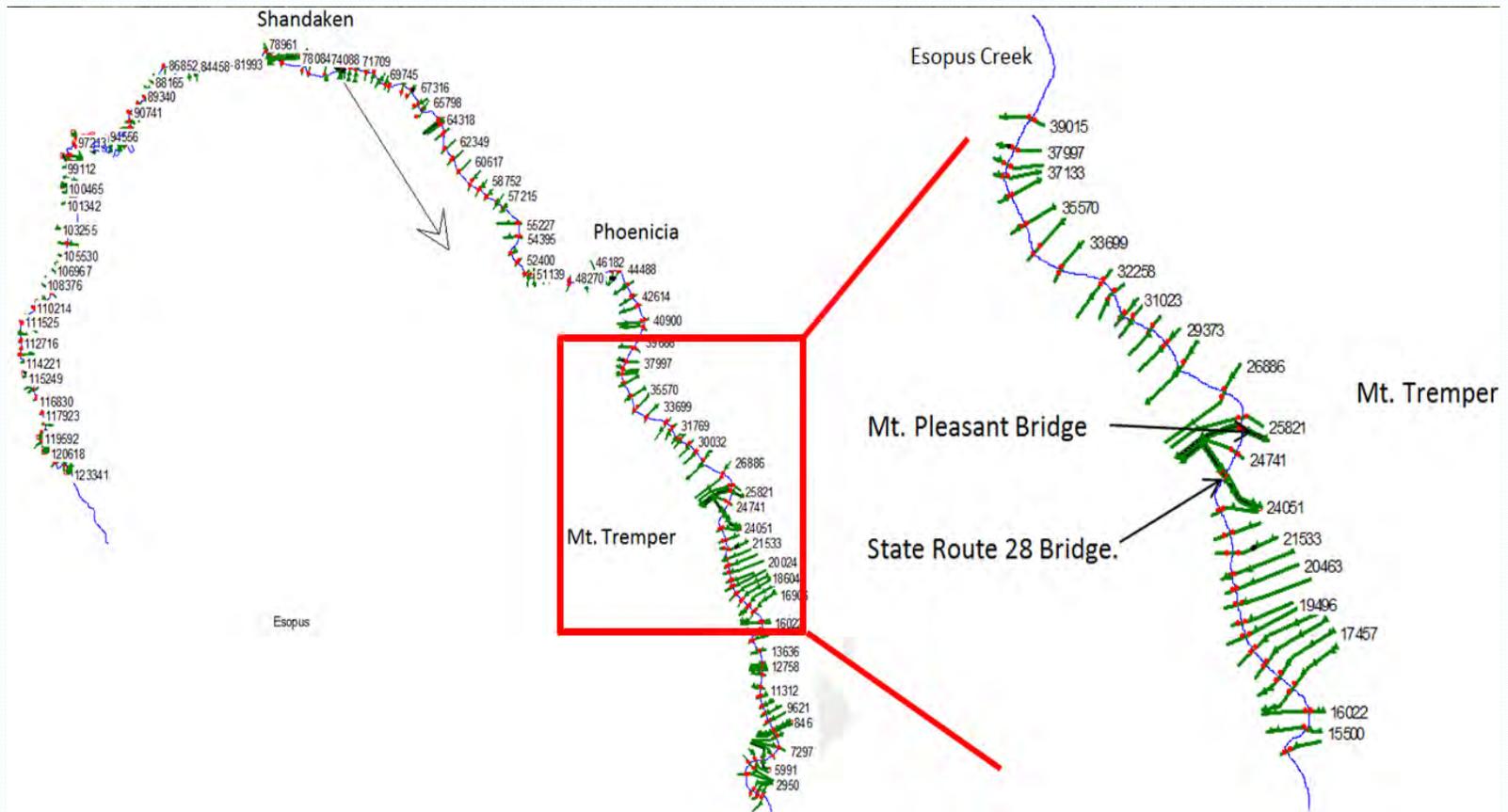
## **SHANDAKEN MODELS**

- Esopus Creek
- Fox Hollow Creek
- Peck Hollow Creek
- Beaver Kill
- Woodland Creek
- Stony Clove Creek

## **HARDENBURGH MODELS**

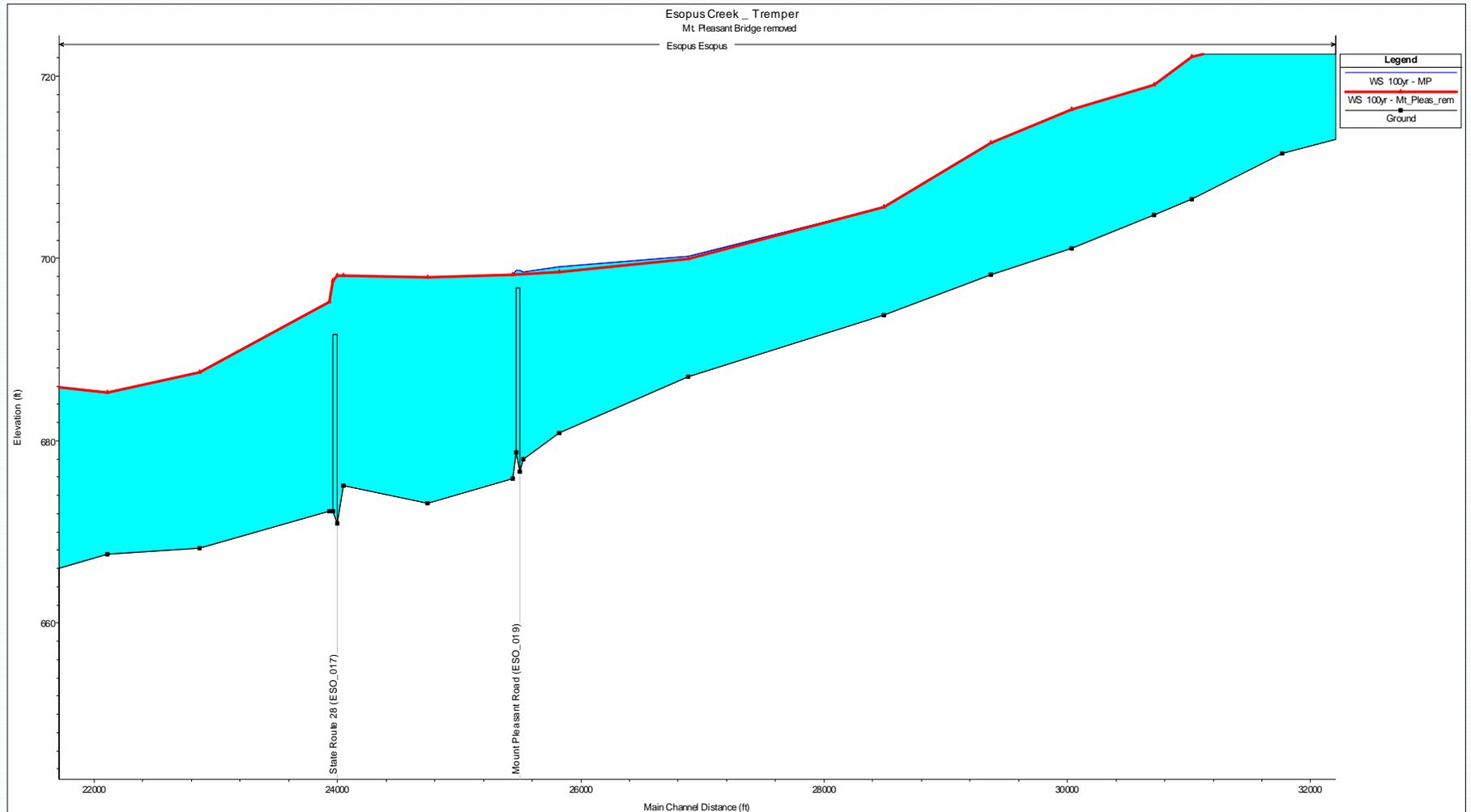
- Dry Brook Creek
- Rider Hollow
- Mill Brook Creek

# Example Hydraulic Analysis

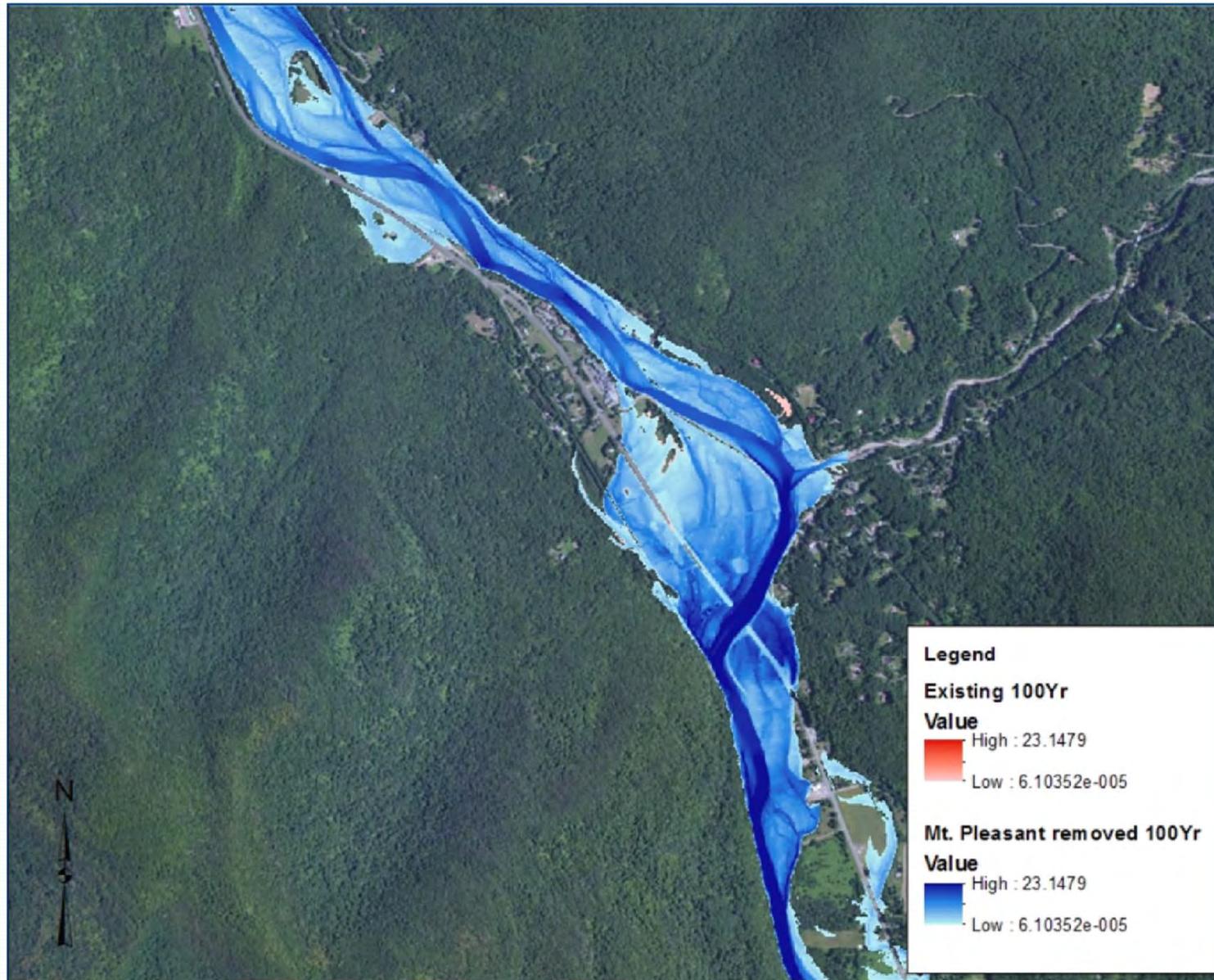




# Flood Profile – Remove Bridge



# Inundation Map



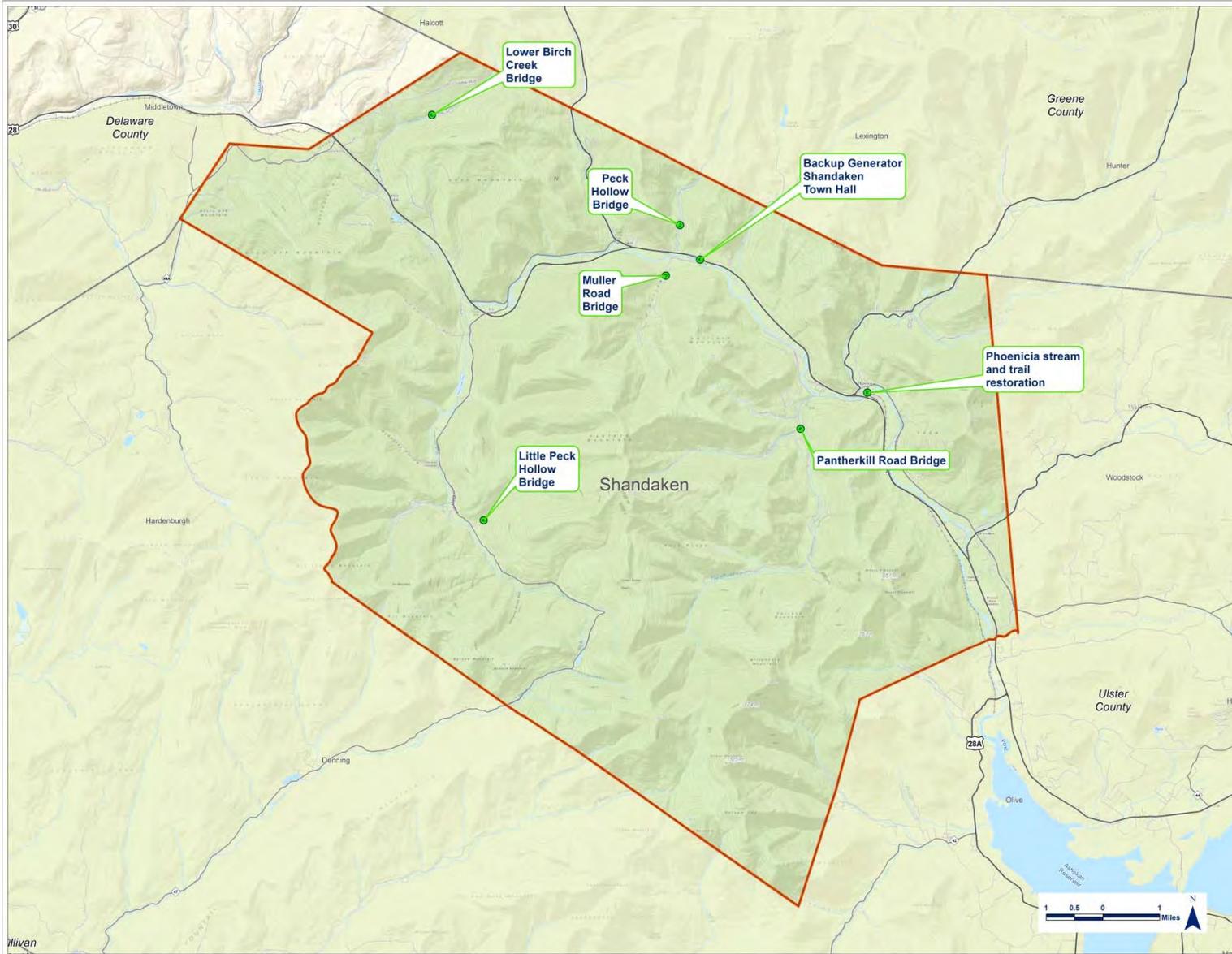
# Preliminary Priority Projects

## SHANDAKEN

- Muller Road Bridge Upgrade
- Lower Birch Creek Bridge Upgrade and Road Alignment
- Peck Hollow Road Bridge Replacement
- Little Peck Hollow Road Bridge Replacement
- Pantherkill Road Bridge Replacement
- \*Phoenicia Stream Restoration & Recreation Trail\*
- Municipal Emergency Operations, Evacuation and Health Center
- Improved Data Collection, Storage
- Fire District Improvements
- Back-up Power Generator – Fixed Installation

\*Potential move to “Featured Project”

# Shandaken Preliminary Priority Projects



Town of Shandaken  
Ulster County  
New York

Project Location Map

### Legend

- Planning Area
- Priority Project
- US Highway
- State Highway
- State Road
- Railroad
- Linear Hydrography
- Water
- County



This map is for reference only.  
Project locations are approximate.  
Data Sources:  
ESRI - Topo  
NYS - Railroad, Water Bodies, Boundaries  
Tetra Tech - Project Locations



# Muller Road Bridge Upgrade

## Description

- Widen distance between abutments and raise deck elevation

## Benefits

- Allow conveyance of 1% annual chance of flood flow
- Increase vehicular safety
- Increase local road access

## CDBG-DR Eligibility

- Meets an urgent community need
- Public facility improvement



Est. Total Cost: \$350,000

# Lower Birch Creek Bridge

## Upgrade and Road Alignment

### Description

- Realign Lower Birch Creek Rd.
- Reconstruct/enhance bridge
- Widen distance between abutments and raise bridge deck

### Benefits

- Address deteriorating bridge
- Alleviate existing roadway flooding
- Improve stream flow
- Increase road safety
- Increase local road access



### CDBG-DR Eligibility

- Meets an urgent community need
- Public facility improvement

Est. Total Cost: \$377,000

# Peck Hollow Road Bridge Replacement

## Description

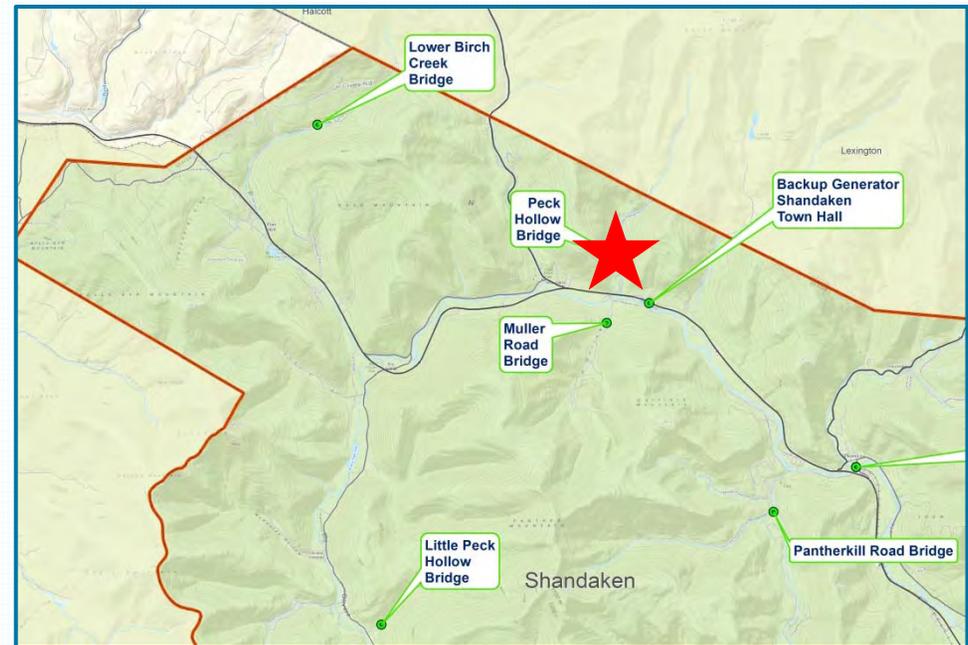
- Replace bridge

## Benefits

- Flood risk mitigation
- Improve flow capacity
- Convey flood waters
- Increase key assets resiliency
- Strong community support
- Increase road safety, access

## CDBG-DR Eligibility

- Meets urgent unmet community need
- Public facility improvement



Est. Total Cost: \$396,000

# Little Peck Hollow Road Bridge Replacement

## Description

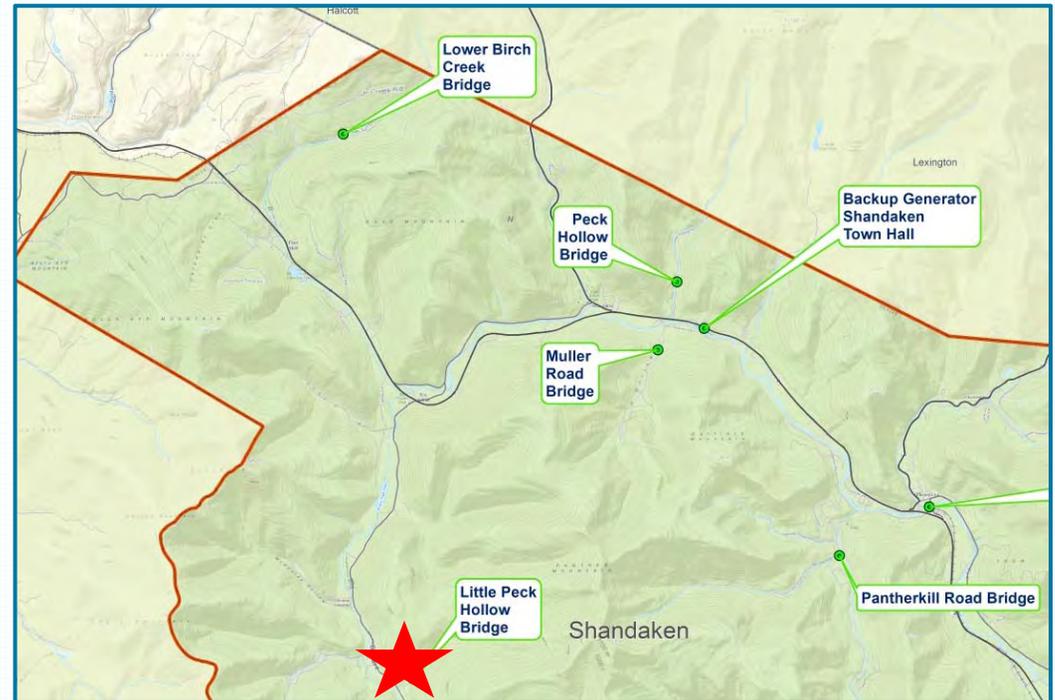
- Replace bridge

## Benefits

- Flood risk mitigation
- Improve flow capacity
- Convey flood waters
- Strong community support
- Increase road safety, access
- Increase local road access

## CDBG-DR Eligibility

- Meets urgent unmet community need
- Public facility improvement



Est. Total Cost: \$382,000

# Pantherkill Road Bridge Replacement

## Description

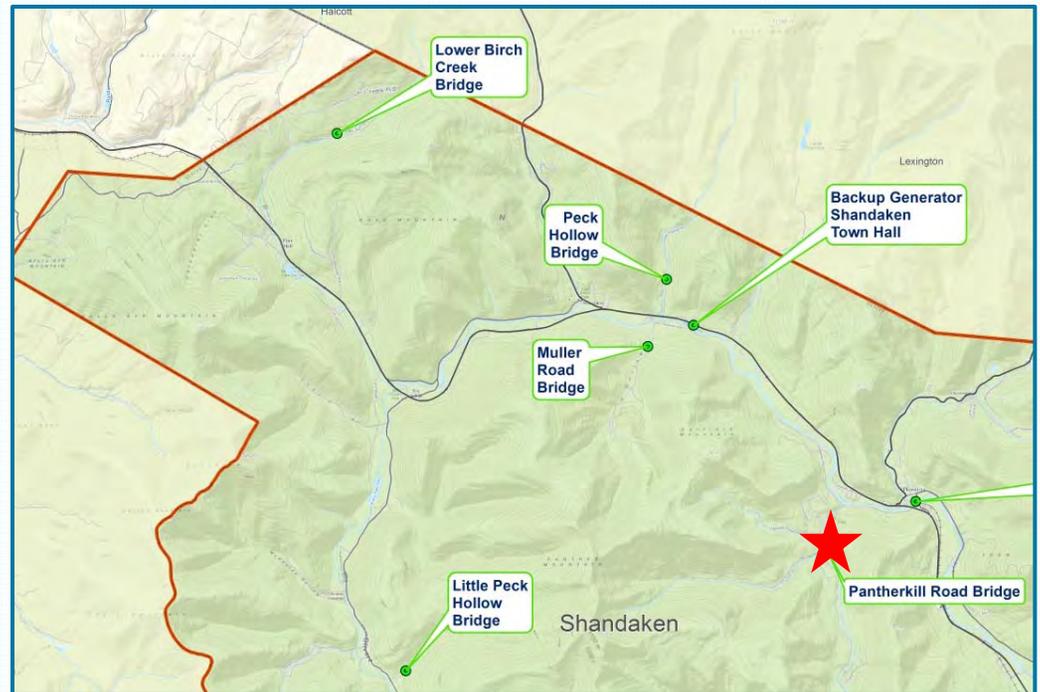
- Reconstruct, enhance bridge and abutment

## Benefits

- Improve flow capacity
- Convey flood waters
- Increase vehicular safety
- Increase local road access

## CDBG-DR Eligibility

- Meets an urgent community need
- Public facility improvement



Est. Total Cost: \$350,000

# Phoenicia Stream Restoration & Recreation Trail

## Phase II: Realignment/Replacement of Bridge St. Bridge

### Description

- Create recreational trail network
- Replace Bridge St. Bridge with longer, higher elevated structure

### Benefits

- Flood risk mitigation in biz district
- Protects, enhances economic dev.
- Connectivity with/protection of historic, cultural elements
- Increases access, safety



Est. Total Cost: \$2,800,000

### CDBG-DR Eligibility

- Meets urgent community need
- Public facility improvement

# Municipal Emergency Operations, Evacuation and Health Center

## Description

- Convert Town-owned library to multi-purpose Center
- Relocate EMS Ambulance Garage from floodplain
- Include modern weather monitoring systems, communications
- Solar energy/generator for uninterrupted power capability

## Benefits

- Community wellness/conferencing center during non-disasters
- Increase capacity for sheltering
- Increase functionality of essential services
- Increase capability and response times
- Provide extra secure storage facilities for recovery materials

## CDBG-DR Eligibility

**Est. Total Cost:** \$1,300,000

- Public facility improvement,  
meets an urgent community need

# Improved Data Collection, Storage

## Description

- Install elevation monuments/markers in public locations to lower costs associated with obtaining elevation certificates

## Benefits

- Provide more detailed elevation in relation to flood elevations
- Provide earlier notification/warning of flooding
- Increase safety during hazard events
- Drive economic growth
- Address short/medium/long-term risks
- Promote obtaining elevation certificates
- Easier, efficient tracking of disaster-damaged properties
- Enable immediate permit issuance to assist in a quicker recovery

## CDBG-DR Eligibility

Est. Total Cost: \$100,000

- Meets an urgent community need
- Public facility improvement

# Fire District Improvements

## Description

- Provide funding for up to three volunteer fire districts' upgrades to better serve first responders and support command posts during and immediately after disasters.
- \$ 90,000 for 3 generators
- \$258,000 for Big Indian Fire Company

## Benefits

- Increase safety and efficiency
- Fire and Emergency Medical Services serve as localized response centers due the large geographic area of the Town.

## CDBG-DR Eligibility

- Meets urgent community need
- Public facility improvement

**Est. Total Cost:** \$348,000

# Back-up Power Generator – Fixed Installation for Shandaken Town Hall

## Benefits

- Ensures essential services
- Supports municipal functionality during disasters
- High community support to advance
- Would provide uninterrupted service to Incident Command Center and Dept. of Public Works garage



## CDBG-DR Eligibility

Est. Cost: \$50,000

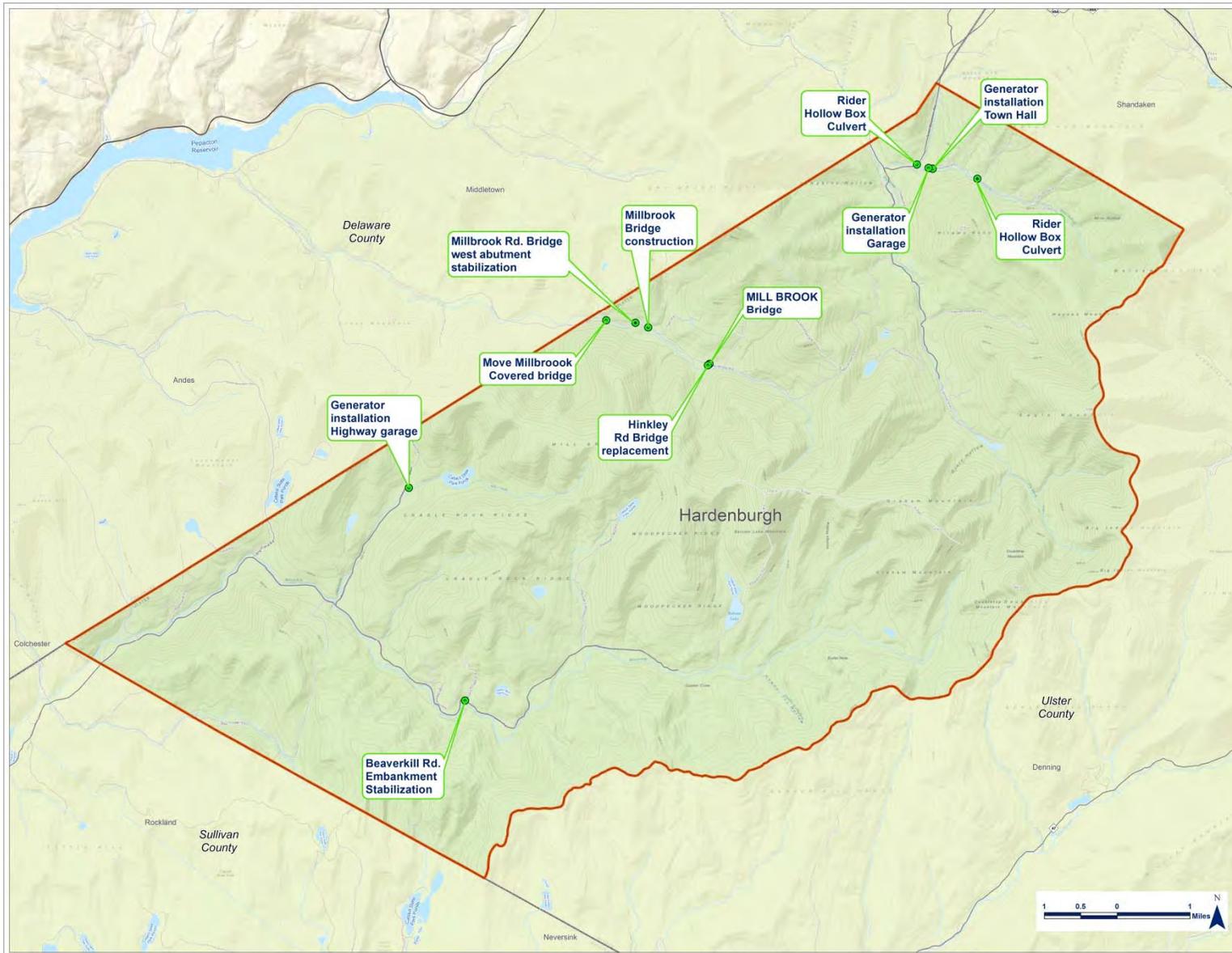
- Meets an urgent community need
- Public utility improvement

# Preliminary Priority Projects

## HARDENBURGH

- Hinkley Road Bridge Replacement
- Ploutz Road/Millbrook Road Bridge Construction
- Millbrook Road Bridge Replacement
- Millbrook Road Bridge Abutment Stabilization
- Rider Hollow Road Culvert Replacement
- Rider Hollow Road Culvert-to-Bridge Replacement
- Beaverkill Road Embankment Stabilization
- Back-up Power Generators/Fixed Installation
- Grants Mill Covered Bridge Relocation
- Old Baker Road/Rider Hollow Road Culvert-to-Bridge Replacement

# Hardenburgh Preliminary Priority Projects



**Town of Hardenburgh  
Ulster County  
New York**

**Project Location Map**

**Legend**

- Planning Area
- Priority Project
- US Highway
- State Highway
- State Road
- Railroad
- Linear Hydrography
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- County



This map is for reference only.  
Project locations are approximate.  
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# Hinkley Road Bridge Replacement

Location: on Hinkley Rd. near intersection of Hinkley Rd. and Millbrook Rd.

## Description

- Proposed widening from 39-ft. to 45-ft., single-span replacement bridge
- Conveys the 1% annual chance flood flow without roadway over-topping



## Benefits

- Flood risk mitigation
- Improve stream flow
- Increase road safety
- Increase local road access

## CDBG-DR Eligibility

- Meets an urgent community need
- Public facility improvement



**Est. Total Cost: \$325,000**

# Grants Mill Covered Bridge Relocation

Location: on Millbrook Rd., crosses Millbrook Creek

## Description

- Relocate Millbrook Covered bridge from present location to a "dry dock" location approx. 300 ft. to the east and place on concrete abutments.
- On NYS and National Historical Site list

## Benefits

- Mitigate water surface elevation
- Reduce bridge tail water conditions
- Protect historic structure
- Increase access, safety

## CDBG-DR Eligibility

- Meets an urgent community need
- Public facility improvement



**Est. Total Cost: \$350,000**

# Ploutz Rd./Millbrook Rd.

## Bridge Construction

Location: Intersection of Ploutz Road and Millbrook Road

### Description

- New structure with 20' span to cross unnamed tributary of Mill Brook Creek; replaces two undersized culverts that restrict road access during storm events

### Benefits

- Flood risk mitigation
- Increase local road access

### CDBG-DR Eligibility

- Meets an urgent community need
- Public facility improvement



Est. Total Cost: \$250,000

# Millbrook Road Bridge Replacement

Location: on Millbrook Rd. near intersection of Hinkley Rd. and Millbrook Rd.

## Description

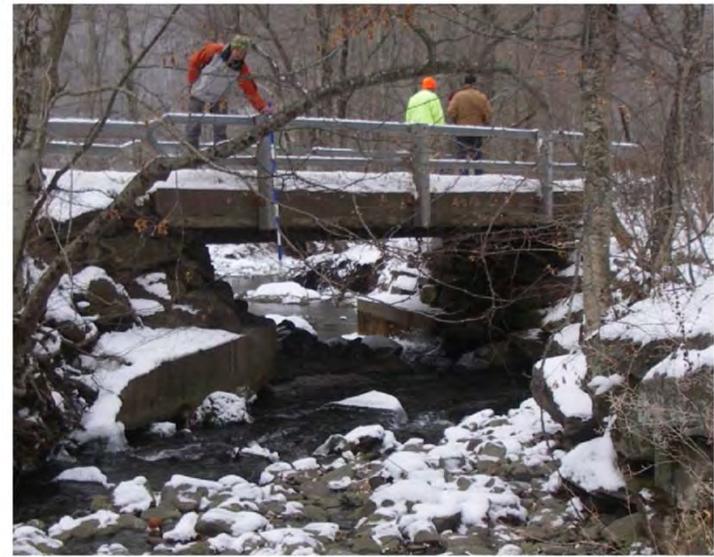
- New, 20 ft.-span bridge

## Benefits

- Flood risk mitigation
- Improve stream function
- Improve local road access and safety

## CDBG-DR Eligibility

- Meets urgent community need
- Public facility improvement



Est. Total Cost: \$400,000

# Millbrook Road Bridge Abutment Stabilization

## Description

- West abutment stabilization

## Benefits

- Address erosion under the west abutment
- Safety improvement

## CDBG-DR Eligibility

- Meets urgent community need
- Public facility improvement

Est. Total Cost: \$35,000



*This image **does not** depict the Millbrook Rd. Bridge abutment scouring, but is shown here **as a visual example** of what scouring can do to destabilize a bridge abutment.*

*(Wikimedia Free Images)*

# Rider Hollow Road Culvert Replacement

Location: Intersection of Rider Hollow Rd./Todd Mountain Rd.

## Description

- Replace antiquated 6'x6' heavy rock abutments and damaged concrete deck w/bridge structure constructed w/sheet piling, engineered strong stone precast abutments, and concrete re-enforced deck sized to hydraulic needs.

## Benefits

- Alleviate roadway flooding
- Improve stream function
- Allow floating debris to pass
- Improve local road access and safety

## CDBG-DR Eligibility

- Meets urgent community need
- Public facility improvement

Est. Total Cost: \$75,000

# Rider Hollow Road

## Culvert-to-Bridge Replacement

Location: Intersection of Rider Hollow Rd./Todd Mountain Rd.

### Description

- Proposed 40-ft. single-span replacement bridge that conveys the 1% annual chance of flow without roadway overtopping

### Benefits

- Alleviate roadway flooding
- Improve stream function
- Allow debris to pass
- Improve local road access, safety

### CDBG-DR Eligibility

- Meets urgent community need
- Public facility improvement

Est. Total Cost: \$900,000

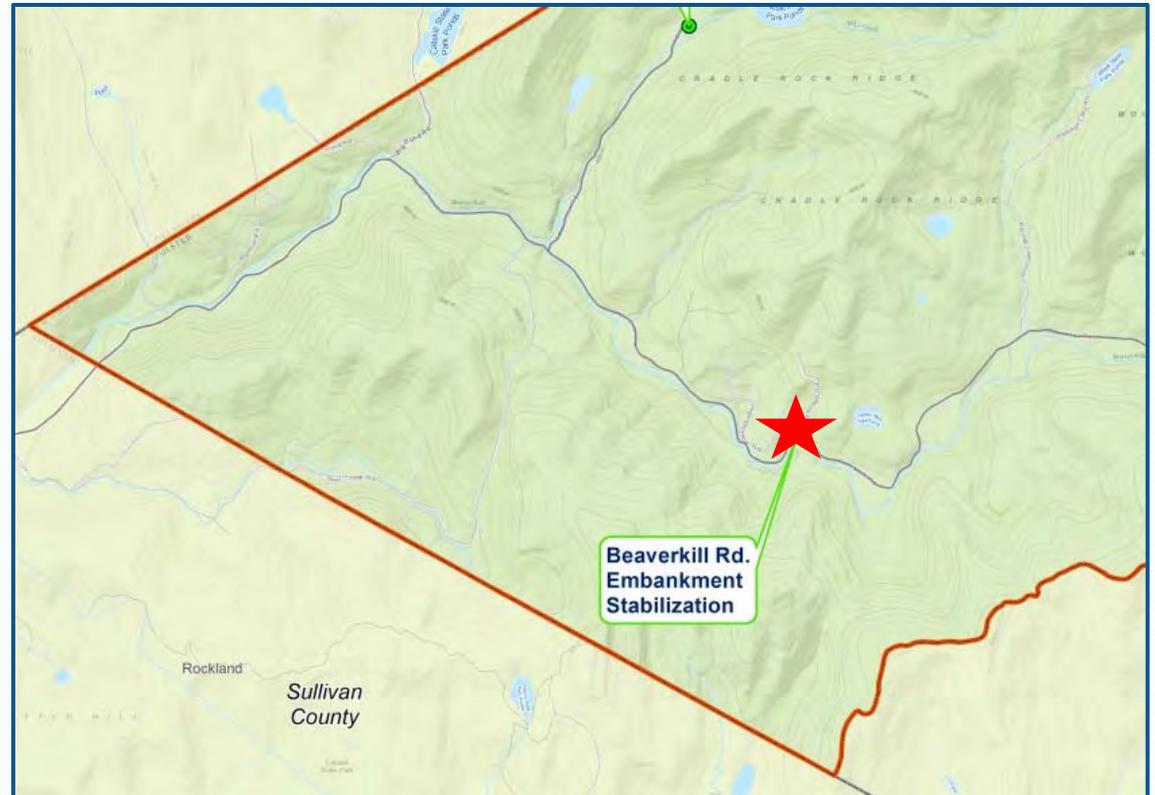
# Beaverkill Rd. Embankment Stabilization

## Description

- Stabilize road embankment

## Benefits

- Increase road safety



## CDBG-DR Eligibility

- Meets urgent community need
- Public facility improvement

Est. Total Cost: \$225,000

# Back-up Power Generators

(Fixed Installation)

## Description

- Install back-up propane generators for key community facilities
- Include back-up propane generators for Town Hall and 2 Hwy Garages



## Benefits

- Supports municipal functionality, ensures essential services during disasters

## CDBG-DR Eligibility

- Meets an urgent community need
- Public utility improvement

Est. Cost: \$75,000

# Old Baker Rd., Rider Hollow Rd.

## Culvert, Bridge Replacement

Location: Intersection of Old Baker and Rider Hollow Roads

### Description

- Replace antiquated 6'x6' heavy rock abutments and damaged concrete deck w/bridge structure constructed w/sheet piling, engineered strong stone precast abutments, and concrete re-enforced deck sized to hydraulic needs.

### Benefits

- Alleviate roadway flooding
- Improve stream function
- Allow floating debris to pass
- Improve access and safety

### CDBG-DR Eligibility

- Meets urgent community need
- Public facility improvement

Est. Total Cost: \$75,000

# Next Steps

## February

- » Complete Projects Cost-Benefit Analysis (CBA)

## March

- » Final Project Selection and Profile Submission
- » Pre-application Submission
- » Begin preparations for implementation strategies
- » Submit Final Plan

## April - May

- » NYRCR Posts Final Plan on Community Web Site (April)
- » Public Meeting - Focus on projects and implementation strategies (May)



# Public Comment



# Adjournment

Thank you for joining us to improve our  
Towns' resiliency.

Visit the NYRCR Community Website

<http://stormrecovery.ny.gov/nyr-cr/community/town-shandaken-and-town-hardenburgh>