


# Project Advisory Committee Meeting

April 3, 2014

by  
Stream Corridor Management Program  
Delaware County Soil & Water Conservation District



## Agenda

- Introduction
- Where have we been
  - Emergency Watershed Protection projects
  - Post-Flood Emergency Stream Intervention
  - Agricultural Community Recovery Fund (ACRF)
  - Third Brook Management Plan
  - Catskill Stream Buffer Initiative
  - Stream Management Implementation Program Grants
  - Watershed Agricultural Assistance
  - Local Flood Analysis
- Program Updates
  - Memorandum of Understanding
  - East Branch Action Plan
- Future Program Reporting Format
  - Catskillstream.org Website

## Project Advisory Committee

Graydon

## Project Advisory Committee (PAC)

- Identification of local needs with stream related issues
- Facilitate and support for programs and projects
- Work with community and resource agencies toward solutions and project implementation
- Communicate with watershed stakeholders
  - Stream related issues and concerns
    - Particularly concerning flooding
  - Community education needs
  - Need for management activities in a community
  - Represent the SCMP program to communities

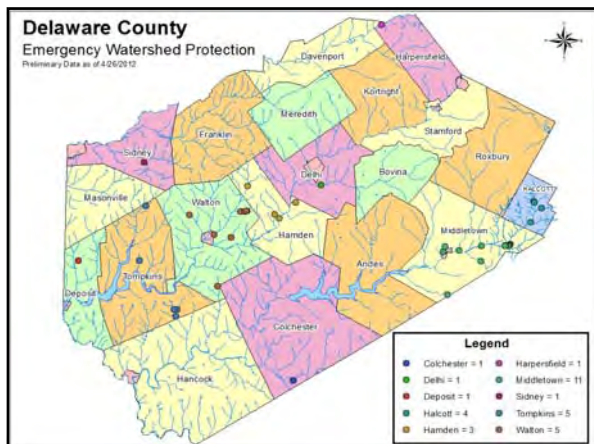
## Purpose of PAC

- To help empower local communities to take ownership of stream management on the local level
- Define a process to:
  - Advocate for Stream Corridor Management Plan (SCMP) adoption by local communities
  - Advance SCMP recommendations through the Stream Implementation Grants Program

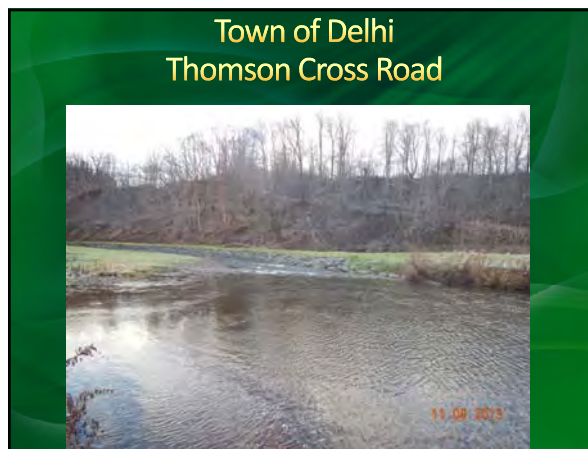
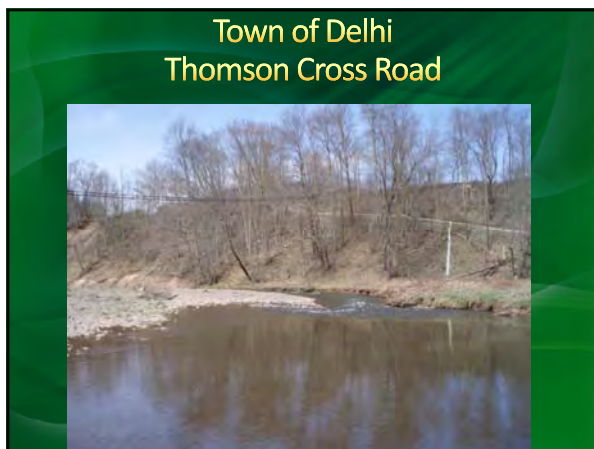
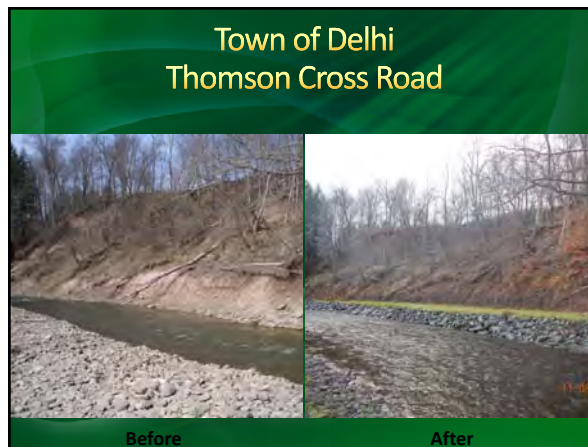
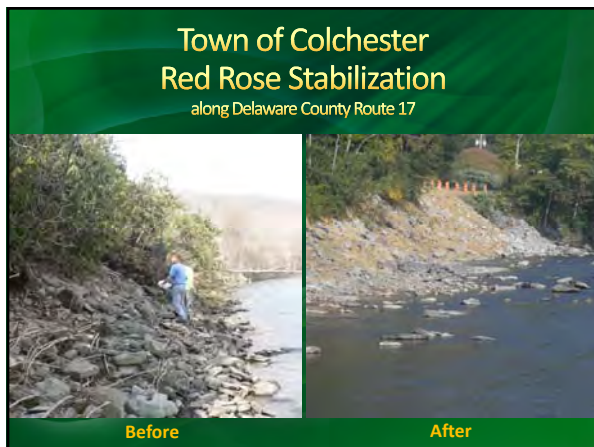
## Natural Resource Conservation Service's Emergency Watershed Protection

Hurricane Irene & Tropical Storm Lee  
Delaware and Greene Counties  
2011

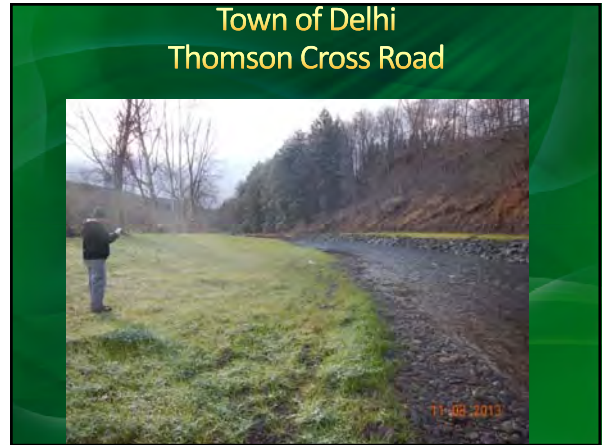
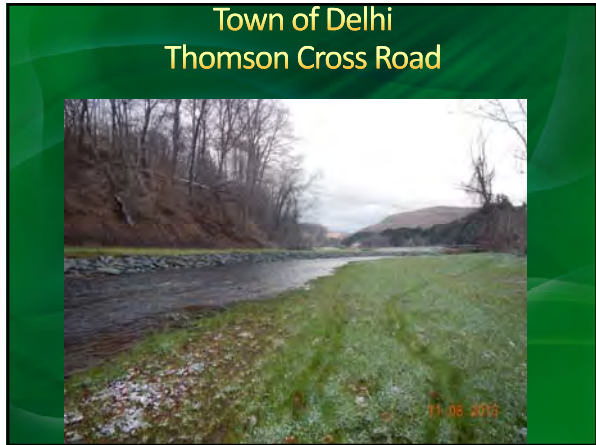
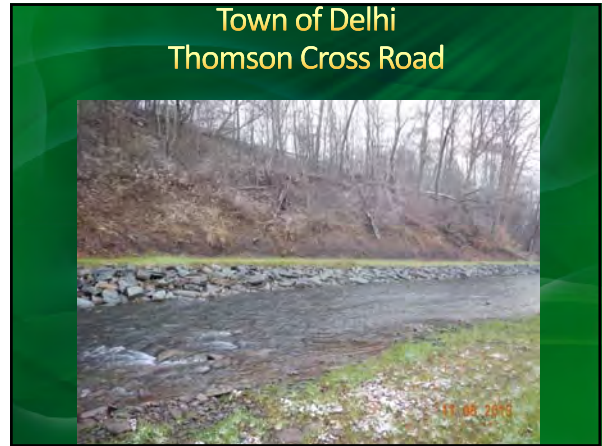
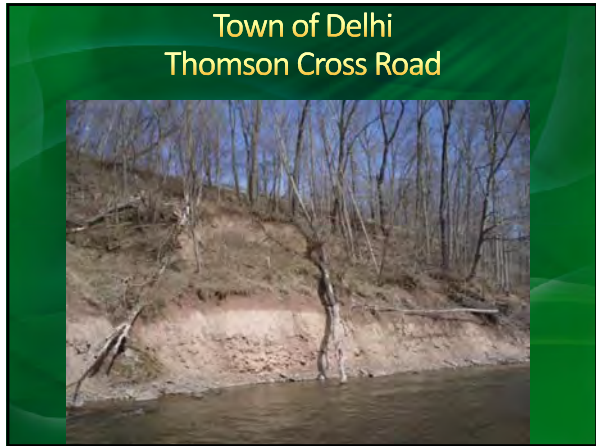
Gale

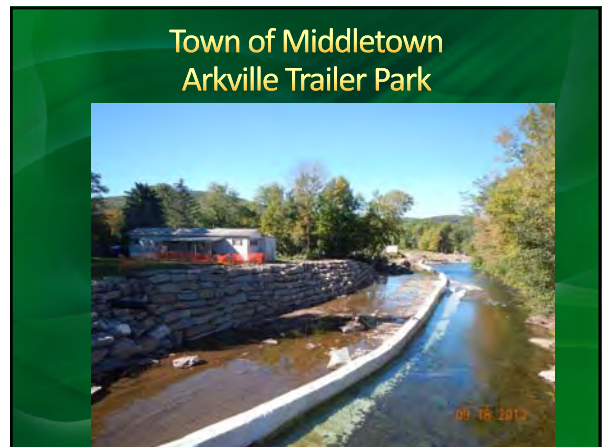


Completed 2012 Emergency Watershed Protection Projects							
Project	Location	Lead Agency	DSR number	DSR Estimate	Engineer Estimate	Construction Cost	Contractor
Route 17	Colchester	DCDPW	DSR-D-TC-01	\$488,910.00	\$444,200.00	\$444,200.00	New Century
Thomson Cross Road	Delhi	DCSWCD	DSR-D-TM-01	\$135,452.80	\$128,414.40	\$94,422.27	Boyle Excavating
Deerfoot Rd	Depost	DCDPW	DSR-D-TD-01	\$249,109.50	\$67,404.00	\$56,500.00	David E. Stanton
Old Creek	Halcott	DCSWCD	DSR-D-TM-04	\$40,403.50	\$60,276.00	\$91,400.00	Delaware Bulldozing
Turk Hollow	Halcott	DCSWCD	DSR-D-TM-03	\$57,953.00	\$28,313.60	\$32,350.00	Delaware Bulldozing
Old Creek 1	Halcott	DCSWCD	DSR-D-TM-01	\$87,036.00	\$48,648.00	\$40,876.00	Delaware Bulldozing
Old Creek 2	Halcott	DCSWCD	DSR-D-TM-02	\$97,955.00	\$87,222.00	\$78,520.00	Delaware Bulldozing
East Brook above Phoenix	Hamden	DCSWCD	DSR-D-TM-01	\$83,272.50	\$74,419.20	\$74,500.00	LJ Dave Excavating
Holmes Hollow	Hamden	DCSWCD	DSR-D-TM-02	\$64,228.80	\$62,804.40	\$28,993.00	LaFever Excavating, Inc.
Leart Hollow	Hamden	DCSWCD	DSR-D-TM-03	\$64,470.00	\$37,107.60	\$38,924.00	LaFever Excavating, Inc.
Johnson Road	Harpersfield	DCDPW	DSR-D-TM-01	\$205,485.00	\$104,400.00	\$76,971.00	Tweedle Construction
Kayville Trailer Park	Middletown	DCSWCD	DSR-D-TM-01	\$335,856.00	\$623,210.40	\$388,427.00	LaFever Excavating, Inc.
Reaser	Middletown	DCSWCD	DSR-D-TM-07	\$80,532.00	\$84,384.00	\$59,710.00	Hubbell Inc.
Bull Run	Middletown	DCSWCD	DSR-D-TM-08	\$73,808.00	\$64,273.20	\$46,500.00	LaFever Excavating, Inc.
Dry Brook Road	Middletown	DCSWCD	DSR-D-TM-02	\$98,658.7	\$92,970.80	\$68,709.00	Hubbell Inc.
Fleischmanns 2-3	Middletown	MMW	DSR-D-TM-04	\$289,014.210	\$319,700.00	\$270,200.00	LaFever Excavating, Inc.
Fleischmanns 4	Middletown	MMW	DSR-D-TM-04	\$285,375.50	\$612,111.00	\$612,111.00	New Century
Fleischmanns 5	Middletown	MMW	DSR-D-TM-04	\$233,194.50	\$312,100.00	\$208,650.00	LaFever Excavating, Inc.
Fleischmanns 7	Middletown	MMW	DSR-D-TM-04	\$265,118.00	\$277,300.00	\$220,864.73	Hubbell Inc.
Margaretville School	Middletown	DCSWCD	DSR-D-TM-05	\$33,398.00	\$44,604.00	\$39,300.00	LaFever Excavating, Inc.
Mill Brook Road	Middletown	DCSWCD	DSR-D-TM-03	\$72,243.00	\$47,062.80	\$29,877.00	Hubbell Inc.
Anderson Ave	Sidney	DCDPW	DSR-D-TS-01	\$35,829.50	\$15,720.40	\$22,500.00	LJ Dave Excavating
Chamberlain Brook	Tampkins	DCSWCD	DSR-D-TT-01	\$43,888.00	\$42,192.00	\$27,222.00	LaFever Excavating, Inc.
Old Swaine Road	Tampkins	DCSWCD	DSR-D-TT-03	\$245,326.00	\$87,146.00	\$63,792.00	LaFever Excavating, Inc.
Headburn Road #1	Tampkins	DCDPW	DSR-D-TT-03	\$29,464.80	\$15,214.40	\$46,405.00	Tweedle Construction
Headburn Road #2	Tampkins	DCDPW	DSR-D-TT-04	\$62,128.20	\$50,028.00	\$34,475.00	LaFever Excavating, Inc.
Rock Hill Road	Tampkins	DCDPW	DSR-D-TT-05	\$33,723.00	\$20,606.40	\$6,900.00	Robinson Bros. Excavating
Wester Brook	Walton	DCDPW	DSR-D-TW-01	\$48,600.210	\$44,457.60	\$48,500.00	LJ Dave Excavating
W-22	Walton	DCSWCD	DSR-D-TW-05	\$150,683.00	\$108,960.00	\$143,500.00	Deig Excavating
Conner Road	Walton	DCDPW	DSR-D-TW-04	\$29,520.00	\$16,562.80	\$18,500.00	David E. Stanton
MacClibbon Hollow	Walton	DCSWCD	DSR-D-TW-02	\$146,948.94	\$117,852.60	\$62,300.00	LJ Dave Excavating
Marion Hollow	Walton	DCSWCD	DSR-D-TW-03	\$29,520.00	\$14,572.20	\$5,300.00	LJ Dave Excavating
				\$4,628,650.81	\$4,454,101.40	\$3,142,213.00	

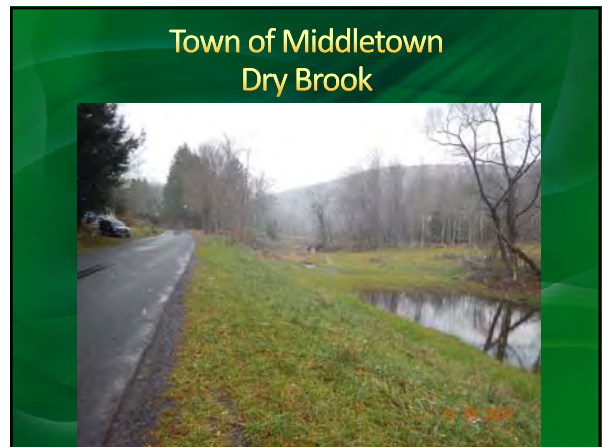
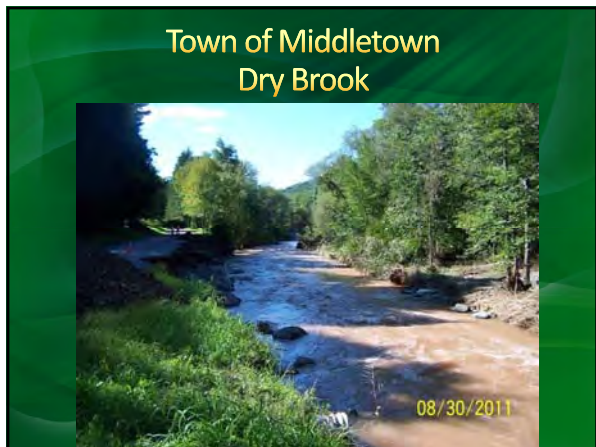
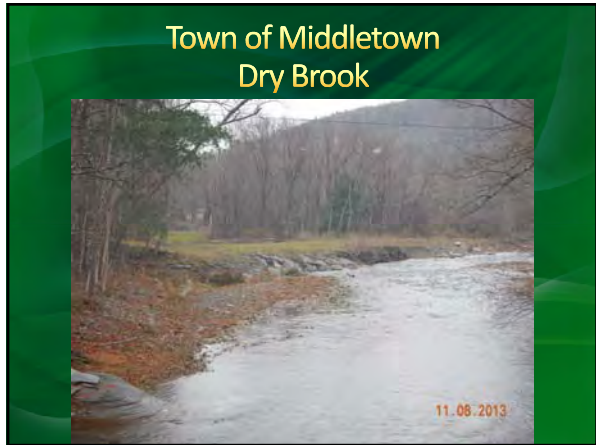
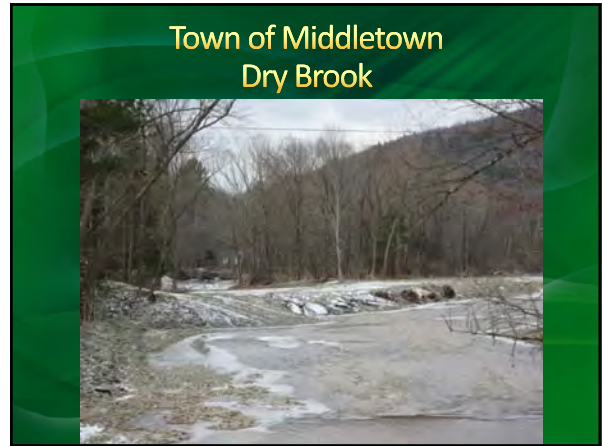


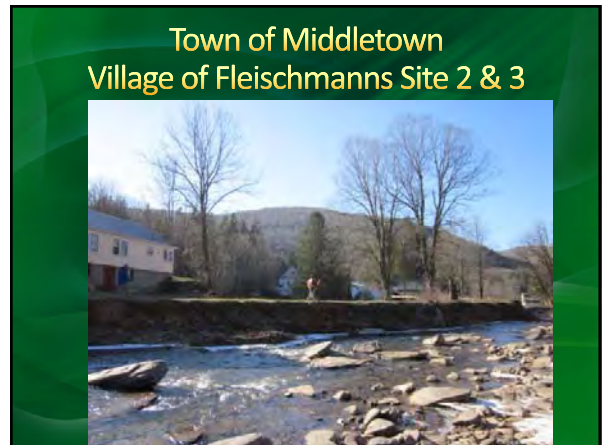
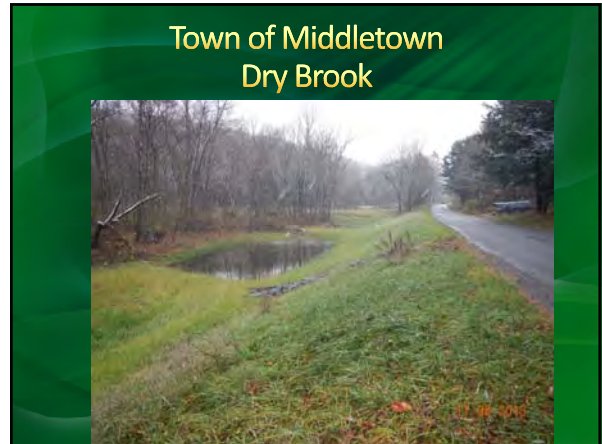
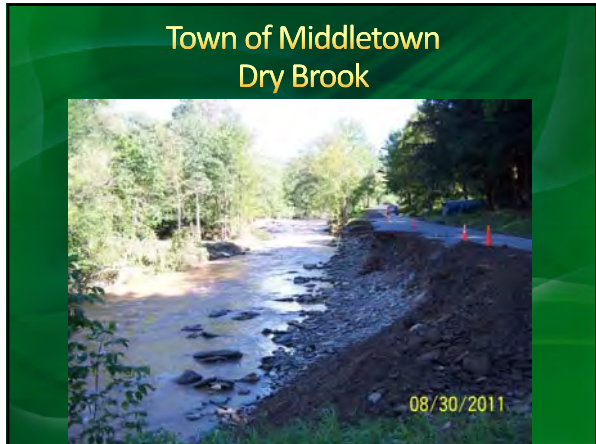




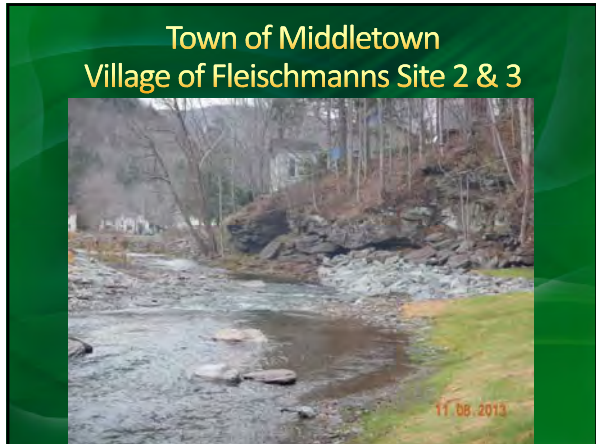


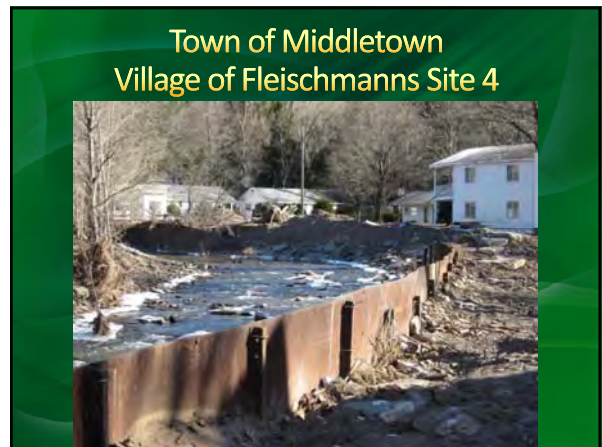
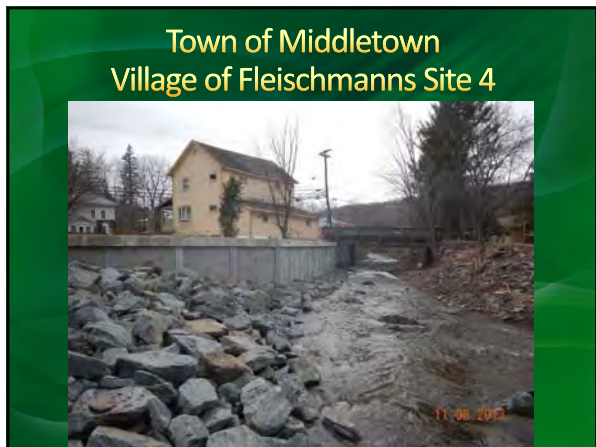
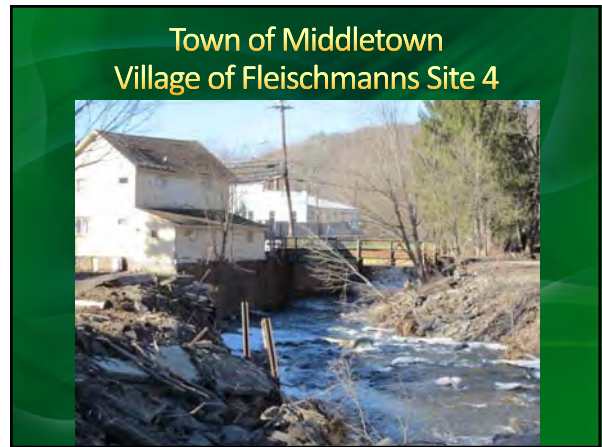
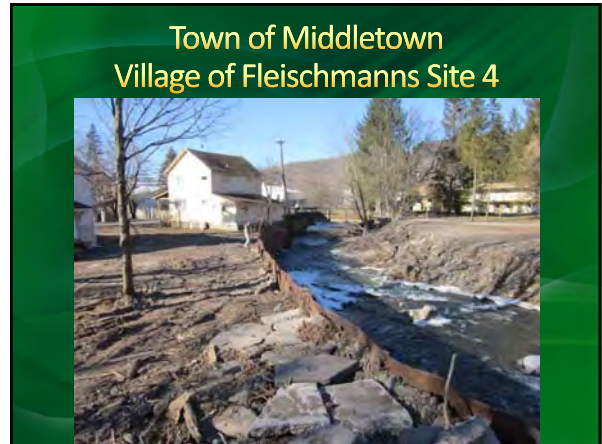














Town of Middletown  
Village of Fleischmanns Site 4



Town of Middletown  
Village of Fleischmanns Site 7



Town of Middletown  
Village of Fleischmanns Site 7



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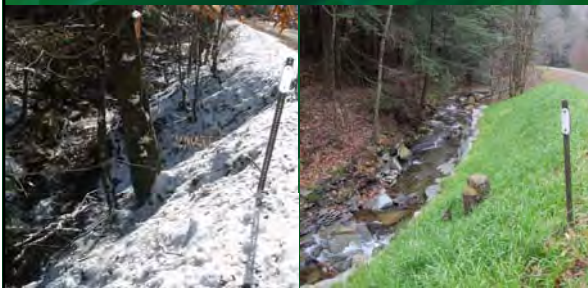
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Village of Fleischmanns Site 7



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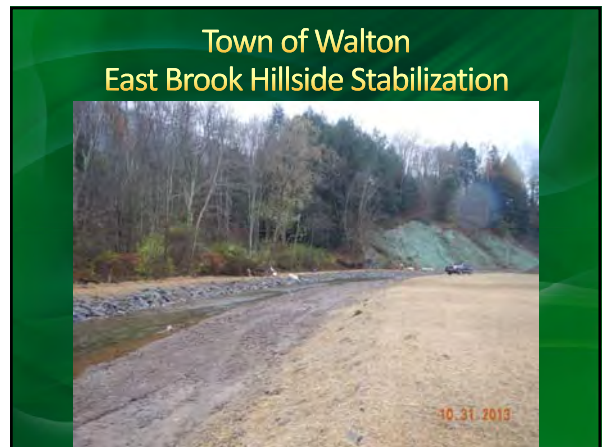
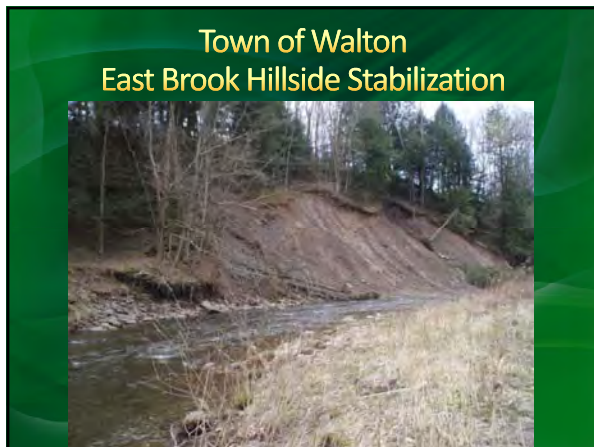
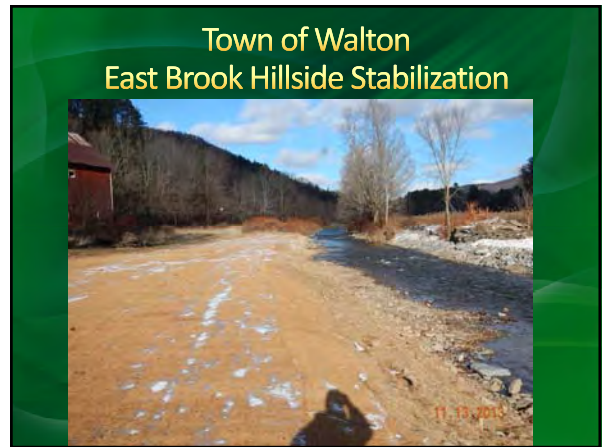
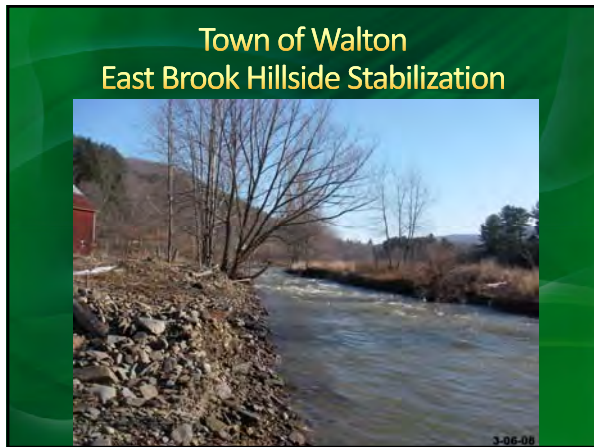
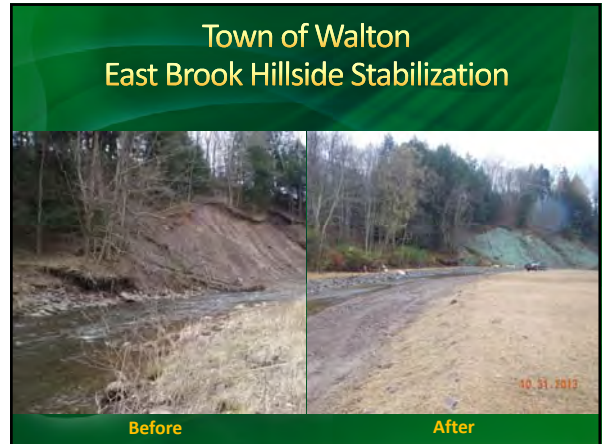
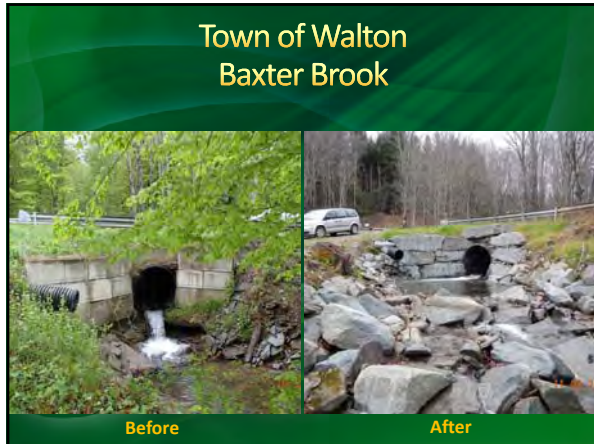
Town of Tompkins  
Chamberlain Brook



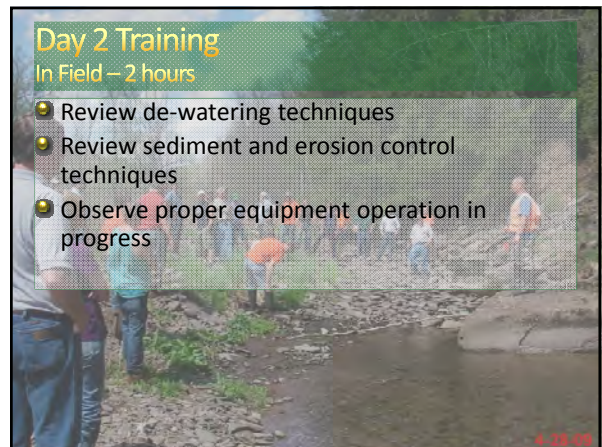
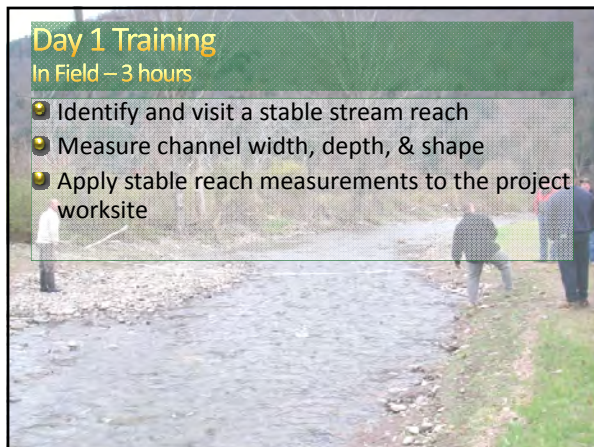
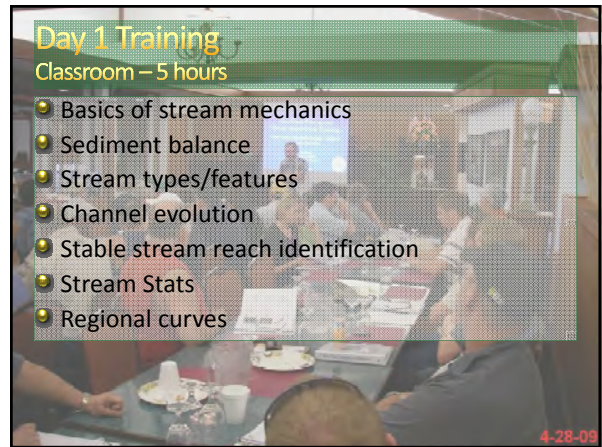
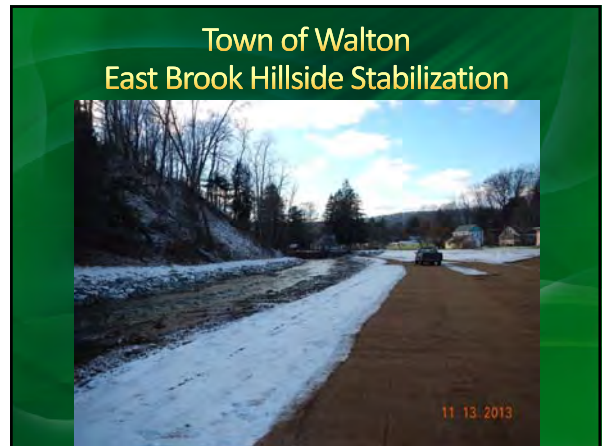
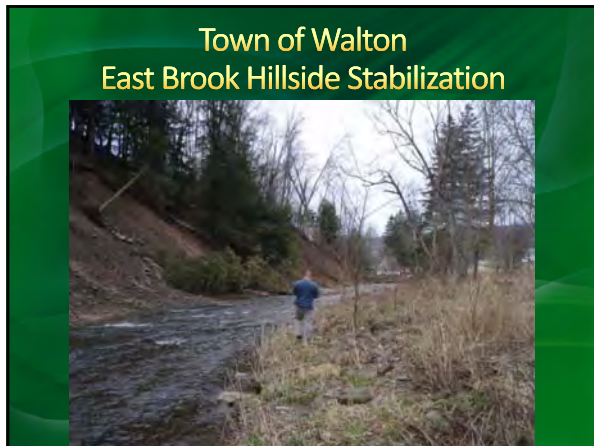
Town of Tompkins  
Readburn Road Site #2














### Day 3

- In Field – 2 hours
  - Inspect and review finished project
  - Review construction techniques
  - Future Needs for long-term stability
    - Additional work / structures needed
    - Vegetation
- Classroom – 4 hours
  - Review Session
  - Stream Stats
  - Regional Curves
  - Stream dynamics
  - Quiz
  - Certificate of Training

### Post-Flood Emergency Stream Intervention Training

- Completed 3-Day Training = 202
  - Constructed 5 projects
- Completed 4-Hour Training = 979



### State Wide Post Flood Emergency Stream Intervention




### ACRF Agricultural and Community Recovery Fund

Hurricane Irene & Tropical Storm Lee  
Delaware and Greene Counties  
2011



Larry

### ACRF Projects

Delaware County	Watershed	Final Cost
Gerry Ruestow	Susquehanna	\$ 17,400.00
Henry Greenblatt	Susquehanna	\$ 11,500.00
Don Smith	Susquehanna	\$ 1,180.00
Dave Holley	New York City	\$ 4,000.00
Larry Darling	New York City	\$ 7,650.00
Marty & Peg Liddle	New York City	\$ 1,000.00
Richard LaTourette	New York City	\$ 33,000.00
Hull-Cockel	New York City	\$ 14,100.00
James Hull	New York City	\$ 5,980.00
Clarence VanValkenburgh	New York City	\$ 12,500.00
Donald Dunbar/Joe Branigan	New York City	\$ 14,470.88
Robert Sanford	New York City	\$ 15,011.00
<b>Greene County</b>		
Scott Tuttle	New York City	\$ 113,380.00
Tim Johnson	New York City	\$ 43,977.00
Kory & Kip O'Hara	New York City	\$ 17,000.00
John Falke	New York City	\$ 18,987.00
Chris DiBenedetto	New York City	\$ 8,800.00
JJ Farber	New York City	\$ 27,850.00
Robert Kiley	New York City	\$ 31,000.00
Edsal Partridge	New York City	\$ 24,000.00
		<b>\$ 423,725.88</b>

### Dave Holley

A stream avulsion on the Holley farm through a crop field. ACRF returned the stream to its proper channel.




## Richard LaTourette

Floodwater severely eroded into prime hayland

Streambank stabilized and field edge re-established with ACRF

## Robert Kiley

Gravel and downed trees.

Fields cleared of debris.

## Tim Johnson

Gauged field at Johnson's in Halcott Center.

filled gouges and field repairs.

## Third Brook Management Plan


Graydon

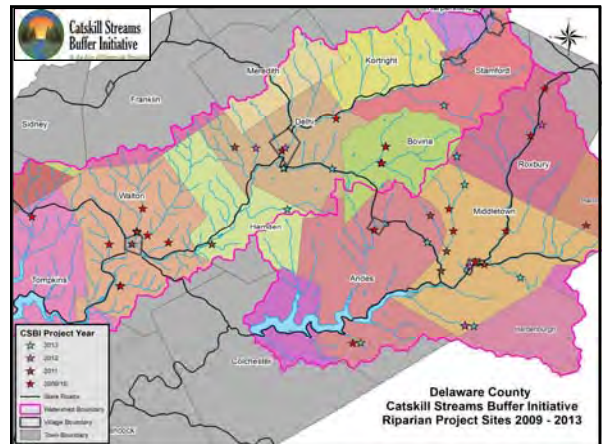
## Third Brook Management Plan

- Plan was completed
  - December 2013
- Next steps:
  - Implement recommendations
  - Utilizing WRDA funds to stabilize failing slopes



## 2013 Overview

<p># Projects: 12</p> <p>&gt; Contracts: 8</p> <p>&gt; Volunteer/Intern: 4</p> <p>Acreage: 5.8</p> <p>Stream Feet: 9,745</p> <p>Miles of Stream: 1.85</p> <p>Acres IS Control: 0.72</p> <p>East Branch: 6</p>	<p>Total Plants: 2,278</p> <ul style="list-style-type: none"> <li>&gt; Trees: 533</li> <li>&gt; Shrubs: 605</li> <li>&gt; Sedges: 1,140</li> </ul> <p>Bioengineering:</p> <ul style="list-style-type: none"> <li>&gt; Geo-Block: 1,140 ft</li> <li>&gt; Branch Packing: 25 ft</li> <li>&gt; Fascines: 1,140 ft</li> <li>&gt; Live Stakes/Bundles: 3,745</li> </ul> <p>Total Ft Bio: 2,305</p> <p>Total Vegetation: 6,023</p> <p>West Branch: 6</p>	
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## SUNY Delhi OEC – Little Delaware

Acres	Stream Feet	Plants	Stakes	Native Seed	Other	IS
Varies	2400	300	-	-	-	-

Buttonbush (*Cephalanthus occidentalis*)      Sycamore (*Platanus occidentalis*)




Planted May 2011

## Little Delaware Tributary - Knotweed Control

Acres	Stream Feet	Invasive Species Control
0.18	540	Knotweed Control – Glyphosate Injection

Before Treatment (Year 1)  
September 2012



One Year After Initial Treatment  
September 2013



## Little Delaware Tributary - Knotweed Control

Acres	Stream Feet	Invasive Species Control
0.18	540	Knotweed Control – Glyphosate Injection

Before Treatment (Year 2)  
September 19, 2013



Three Weeks After Treatment  
October 10, 2013



## Thompson Hollow Knotweed – New Kingston

Acres	Stream Feet	Invasive Species Control
0.20	3500	Knotweed Control: Manual & Glyphosate Injection

Before Initial Treatment (Year 1)  
July 2011



One Year After Manual Treatment  
September 2012



One Year After Herbicide Treatment  
September 2013



### Thompson Hollow Knotweed – New Kingston

Acres	Stream Feet	Invasive Species Control
0.34	2600	Knotweed Control - Glyphosate Injection

Before Herbicide Treatment (Year 1)  
September 2012

One Year After Herbicide Treatment  
September 2013

### Beech Hill Brook Knotweed

Acres	Stream Feet	Invasive Species Control
0.34	2600	Knotweed Control - Glyphosate Injection

Before Treatment  
August 2013

3 Weeks After Treatment  
October 2013

### Bagley Brook – Hamden

Acres	Stream Feet	Plants	Stakes	Native Seed	Other
.6	420	660	325	0.45	Branch Packing & Fascines

Before  
April 2013

1 Month After Installation  
June 2013

### Branch Packing (Used on small slumps)

### Bagley Brook – Hamden

Fascine Construction

Installed Fascines

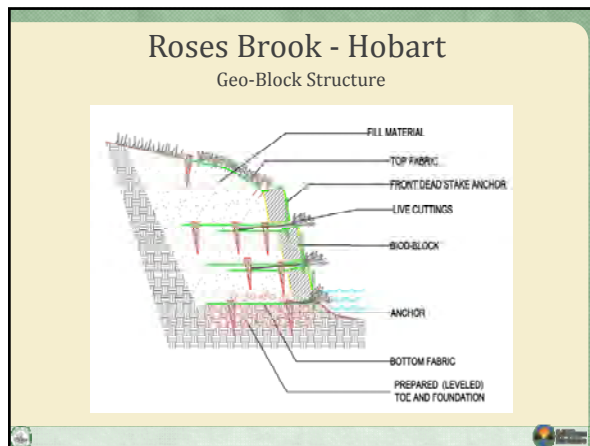
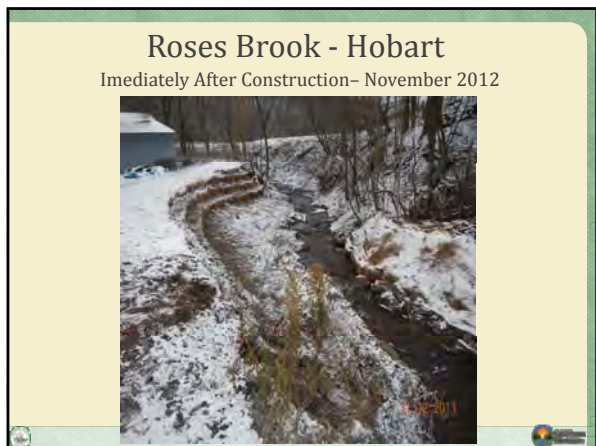
### Roses Brook - Hobart

Acres	Stream Feet	Plants	Stakes	Native Seed	Geo-Block
.50	900	388	1060	.50	280 Ft

Before – October 2012

During – November 2012





### Thompson Hollow Brook - New Kingston

Acres	Stream Feet	Plants	Stakes	Native Seed	Geo-Block	Fascines
.40	850	417	620	.30	200 Ft	130 Ft

Before: July 2013

Immediately After Construction: November 2013

### Bryant's Brook - Andes

Acres	Stream Feet	Plants	Stakes	Native Seed	Geo-Block	Fascines
.55	600	343	750	.50	660 Ft	200 Ft

Before: June 2013

Immediately After Construction: November 2013

### Bryant's Brook - Andes

Acres	Stream Feet	Plants	Stakes	Native Seed	Geo-Block	Fascines
.55	600	343	750	.50	660 Ft	200 Ft

Before: October 2013

Immediately After Construction: June 2013

### 2014 Sneak Preview

Applicants:	17	Project Type:	
EWP Projects:	2	Planting:	6
DR: East Branch	10	Bioengineering:	7
DR: West Branch	7	IS Control:	4
		Estimates:	
		> Stream Feet:	11,922
		> Miles:	2.26
		> Acres:	8.86

### Grand Totals

2009 - 2013

ITEM	Grand Totals
# Projects	69
Acreage	50.56
Stream Feet	48,635
Miles	9.21
Potted Plants	21,390
Plugs/Herbs	22,193
Stakes	12,882
<b>Grand Total Vegetation</b>	<b>56,465</b>
Feet Other Bio-engineering	3,141
Acres Seed	14.24
Acres Knotweed Control	2.52
Acres Mull Flora Rose Control	0.52
Tons KW Removal	10.53
Total Acres IS Control	3.03

Projects per Basin		%
East Branch	28	41%
West Branch	41	59%
	69	

## Stream Management Implementation Program Grant

Graydon

### Completed Stream Grants

Grant	Sponsor	Cost
Mallory Brook Culvert replacement	Hamden	\$178,652.00
Pines Brook Culvert Outfall	Walton	\$8,500.00
Hydroseeder	Walton	\$95,227.00
O'dell Lake Road	Harpersfield	\$29,008.23
Roxbury Mountain Rd. Culvert	Stamford	\$240,833.67
USGS Flood Inundation Mapping	Village of Delhi	\$15,000.00
Purchase of 6" & 8" pumps	DC DPW	\$109,200.00
EWP – Pine Swamp Road	Tompkins	\$48,952.00
EWP – MacGibbon Hollow	Walton	\$49,948.00
<b>Total:</b>		<b>\$775,321.00</b>

### Project Scheduled 2014

Project	Location	Planning Estimate
Chamber Hollow	Hamden	\$20,000.00
Beers Brook Site 8a	Walton	\$27,720.00
Beers Brook Site 8d	Walton	\$14,400.00
Moose More	Hamden	\$450,000.00
Little Delaware	Bovina	\$138,672.00
Little Dingle Hill	Andes	\$46,700.00
Holiday Brook	Andes	\$18,150.00
Gulf Brook	Andes	\$13,750.00
Briggs Road	Roxbury	\$33,600.00
Lake Brook/Odell Lake	Harpersfield	\$25,400.00
Townsend Hollow	Halcott	\$58,044.00
Close Hollow	Andes	\$14,350.00
Third Brook Slope Failures	Walton	\$675,000.00
<b>Total:</b>		<b>\$1,535,786.00</b>

### Program Scheduled 2014

Program	Sponsor	Planning Estimate
East Branch Recreation	Water Discovery	\$55,750.00
Gravel Study	Walton School	\$9,000.00
Walton River Access	Catskill Devel.	\$12,000.00
Ballantine Park Master Plan	Andes	\$24,800.00
Medium Hydraulic Study	DC DPW	\$197,996.50
V. Delhi River Walk	Village of Delhi	\$39,750.00
Boat Launch	Hamden	\$5,000.00
Boat Launch Fitch's Bridge	Delhi	\$12,000.00
Cummings Road Design	Masonville	\$25,000.00
<b>Total:</b>		<b>\$381,296.50</b>

## Watershed Agricultural Program

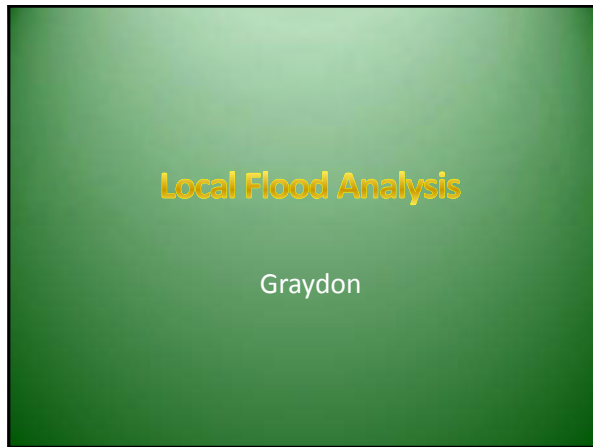
Larry





**2014 Scheduled Workload  
 Agricultural Assistance**

Project	Location	Planning Estimate
Frisbee, Willard J	Delhi	\$100,000.00
Johnson, Timothy	Halcott	\$30,000.00
Gray, James (Lanzi)	Middletown	\$60,000.00
Gray, James (Home)	Middletown	\$25,000.00
Siniscalchi, Dominick	Tompkins	\$25,000.00
Phoenix, Laura	Hamden	\$40,000.00
<b>Total:</b>		<b>\$280,000.00</b>



- The Local Flood Hazard Mitigation Analysis**
- What is it?
    - A two-phase, multi-disciplinary analysis of a community's options for reducing flood risks
      - Completely Voluntary
      - Implemented by the Community
  - Phase I
    - Flood Engineering Analysis:
      - Identifies the *specific causes* of flood inundation hazards in population centers
  - Phase II
    - Local Flood Hazard Mitigation Plan:
      - Enhances the benefits and feasibility of each project selected in Phase I by the community and prepares a plan for implementing the projects viable after Phase II

- Phase I – Flood Engineering Analysis**
- Utilizes the Models that create the FEMA Flood Insurance Rate Maps
  - Uses:
    - Latest Detailed Data on Precipitation and Runoff
    - Detailed Topography Data
    - Advanced Hydraulic Modeling software
  - Evaluates:
    - Potential projects from each community's All-Hazard Mitigation Plan
    - Potential projects identified during public meetings
    - Potential projects revealed by the modeling
  - Results in:
    - Engineering Analysis Report that identifies viable projects for Community review.

- The Engineering Analysis can:
  - Identify the specific causes of flood inundation hazards in population centers
  - Evaluate a range of potential solutions to these hazards and considers:
    - How many residences & businesses are helped?
    - Is the solution cost-effective?
    - What are the pros and cons?
    - What are the water quality benefits?
    - How long will it last?
  - Clarifies community readiness to implement the solutions evaluated.

### The Local Flood Analysis Phase II

- Local Flood Hazard Mitigation Action Plan
  - Identifies and prioritizes the most cost-effective projects
  - Assesses the Communities readiness to implement various Flood Mitigation Projects
  - Identifies potential funding sources for implementation
    - Local S&WCD Stream Management Implementation Grant Program
    - CWC flood mitigation program
    - FEMA Hazard Mitigation Grant Program
    - Etc.

### Community Benefits

- Phase I
  - The community will get a scientifically based picture of the effects of flooding and what factors are contributing to the flood risks
  - Solutions are based on *the most up-to-date information*:
    - Current stream condition
    - Changes in precipitation
    - The relative sustainability of different solutions
  - Eligibility for grant programs for implementation
- Phase II
  - Better understanding of feasibility and effects of project implementation
  - Increased opportunities for funding sources
  - Implementation of projects prioritized in phase II
    - Increased Public Safety
    - Cost Effective sustainable solutions

### Town/Village of Walton

- Phase I
  - Walton Flood Commission
    - Consultant hired: Malone and Macbroom, Inc.
    - Identified initial study areas to create preliminary models on flood inundation hazards
  - Public meeting scheduled
    - Walton High School
    - May 1<sup>st</sup> at 6:30pm
    - Introduction to preliminary findings
    - Public input on additional scenarios to model

### Town of Middletown/Village of Fleischmanns

- Phase I
  - East Branch Flood Commission
    - Consultant hired: Malone and Macbroom, Inc.
  - Public meeting scheduled
    - Fleischmanns
      - April 22, 2014 at 6:00pm
    - Introduction to preliminary findings
      - May 19, 2014 at 6:00pm
    - Public input on additional scenarios to model

### Community Rising

- Village of Margaretville
  - Funded by New York State to identify flood impacted areas
  - SCMPR will assist as technical advisors
- Town of Hardenburgh
  - Funded by New York State to identify flood impacted areas
  - SCMPR will assist as technical advisors

## Program Updates

Graydon



## Next Delaware River Basin Contract


- Mou(s) need to be updated and signed for all municipalities

## Memorandum of Understanding

- Mou(s) need to be updated and signed for all municipalities
  - Need to visit municipalities

## East Branch Action Plan Update

- Comments submitted in writing by April 18th



## Future Program Reporting Format

Phil

## CatskillStreams.org Website Update



## Questions?