
Stakeholder Council 2019 Membership

The Ashokan Stakeholder Council is comprised of:

The Executive Council:

2 representatives from each of the active AWSMP working groups.

Both representatives of a working group should not come from the same organization or agency.

Representatives should be chosen annually by the working group.

No person can represent more than one working group on the Stakeholder Council.

Staff: (CCE Ulster County, UC SWCD, DEP SMP Contract Manager for Ashokan Watershed)

Regular Members: Membership in the Stakeholder Council is open to any interested and knowledgeable stakeholder.



ASHOKAN WATERSHED STREAM MANAGEMENT PROGRAM STAKEHOLDER COUNCIL MEETING NOTES

AWSMP Program Office, Shokan, NY 12481

November 13, 2019 from 1:30pm-4:00pm

In Attendance: Jim Sofranko, Town of Olive; Burt Samuelson, Ulster County Planning; Sylvia Rozzelle, Town of Olive; Mike Flaherty, NYS DEC; Brian Burns, Town of Olive; Sierra Smith, Town of Olive; Kathy Nolan, Ulster County Legislature/Catskill Mountainkeepers; Tim Koch, CCE Ulster; Aaron Bennett, Ulster County Environment; Andrew Emrich, Ulster County DPW; Leslie Zucker, CCE Ulster; Amanda LaValle, Ulster County Environment; Brent Gotsch, CCE Ulster; Beth Reicheld, NYC DEP; Chester Karawatoski, Trout Unlimited/Local Resident; Chris Tran, NYC DEP

Next scheduled meeting: April 2020

Introductions and Stakeholders Announcements

The NYS DEC is drafting a new plan for inland trout stream management. A series of public meetings were held across the state to introduce a new approach DEC is considering for management of New York's trout streams. The new approach could result in changes to trout stocking policies, as well as trout fishing regulations. After public meetings, the plan will be released early

next year followed by a comment period for 45 days. There is more information at this website:

<http://www.dec.ny.gov/outdoor/111015.html>

The Natural Resources Defense Council and Catskill Mountainkeeper are developing a letter to the US EPA on the human health effects of neonicotinoid insecticides. The organizations are looking for individual signers with scientific credentials. For more information, contact Kathy Nolan at [Catskill Mountainkeeper](#). Neonicotinoids have also been investigated for harmful effects on honeybees and aquatic organisms.

Special Announcement

The AWSMP honored retiring Town of Olive Supervisor Sylvia Rozzelle with a "Friends of the Creek Award." The award included a gift certificate and complimentary native stream buffer tree to be planted with help from CSBI program staff at the Ulster County SWCD.

Sylvia has served as town supervisor since 2014 and announced earlier this year she would not run for reelection in 2019. The AWSMP has been so pleased to work with Sylvia to complete five Stream Management Implementation Program (SMIP)-funded projects totaling \$680,944 to benefit the town. In addition to SMIP-funding, Sylvia obtained an additional \$732,000 in grant funding to advance stream management and flood mitigation since taking office. In 2017, the town

joined the Ulster County Multi-Jurisdictional Hazard Mitigation Plan and completed a Local Flood Analysis for the hamlets of Boiceville and West Shokan. The plan examined 13 flood mitigation solutions in-depth for their feasibility and cost-effectiveness. Upon completion of the LFA, Sylvia addressed all eight of the highest ranking mitigation actions and sought grant funding to implement five of the projects.

The AWSMP staff expressed their admiration for Sylvia's leadership, administrative prowess, and "damn the torpedoes" approach. We hope Sylvia will stop by the stream program office whenever she wants.

AWSMP Updates

Leslie Zucker and Adam Doan delivered the attached presentation with AWSMP updates.

SMIP Update

Leslie Zucker provided the attached presentation on the SMIP fund balance and status of current and proposed projects for funding.

AWSMP Working Group Reports

Aaron Bennett delivered a Flood Hazard Mitigation report - see attached presentation.

The meeting was adjourned. The AWSMP Stakeholder Council will meet again in April 2020.



Ashokan Watershed
Stream Management Program

AWSMP Project Updates

Stakeholder Council Meeting, November 13, 2019

Updates

- Ashokan Watershed Month
- Projects Recently Completed
 - Shandaken
 - Olive
 - Woodstock
 - Ulster County
 - Basin-wide

Town of Shandaken

SMIP Projects:

- Local Flood Analysis for Shandaken and Allaben - COMPLETE
- Shandaken Flood Mitigation Plan: Required Five-Year Update – COMPLETE
- Design for Fox Hollow Grade Control - COMPLETE
- Community Rating System (ongoing)

Total Funded 2014-2019: \$186,103

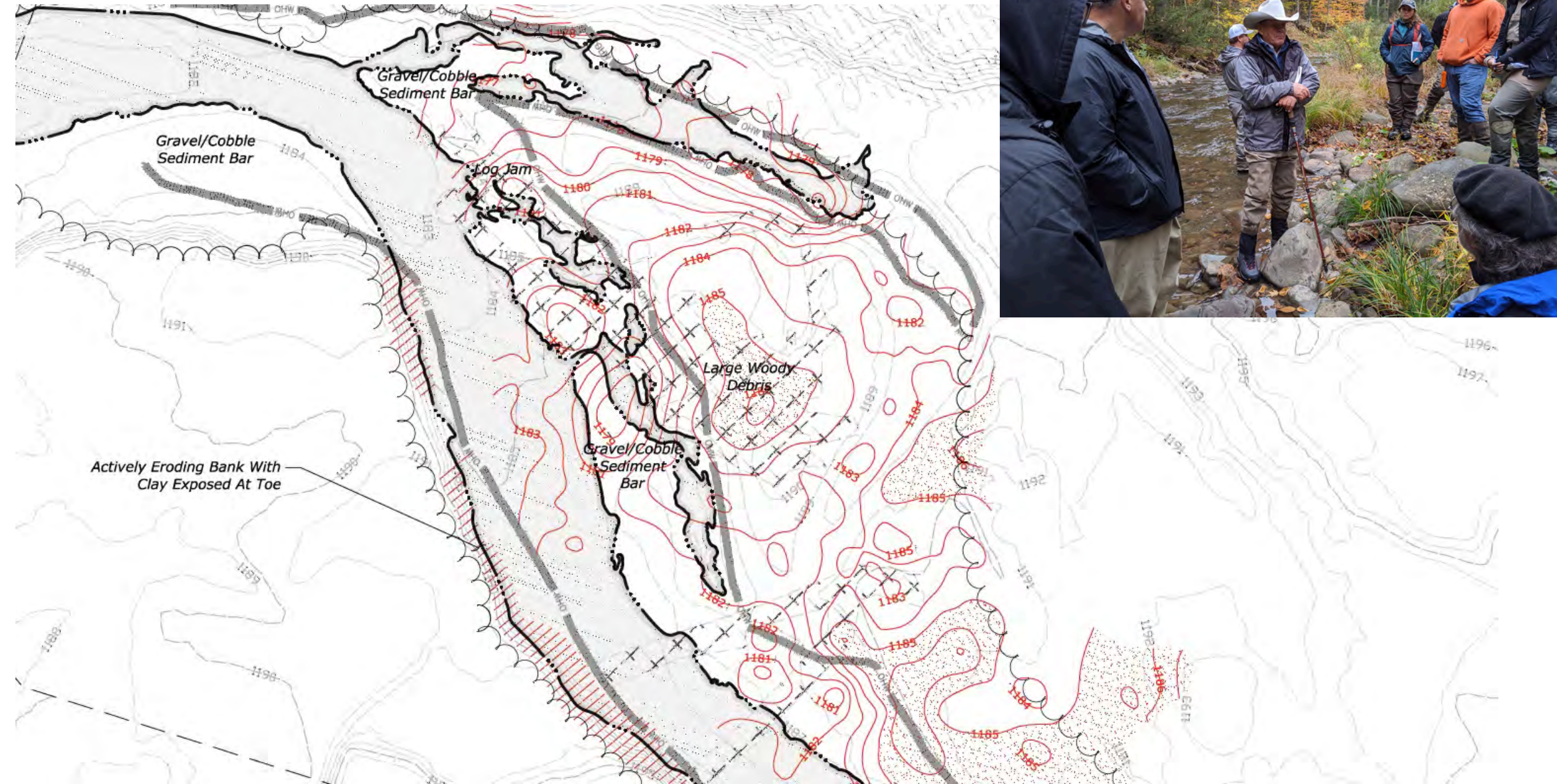
4 projects

10-Year Total: \$499,523

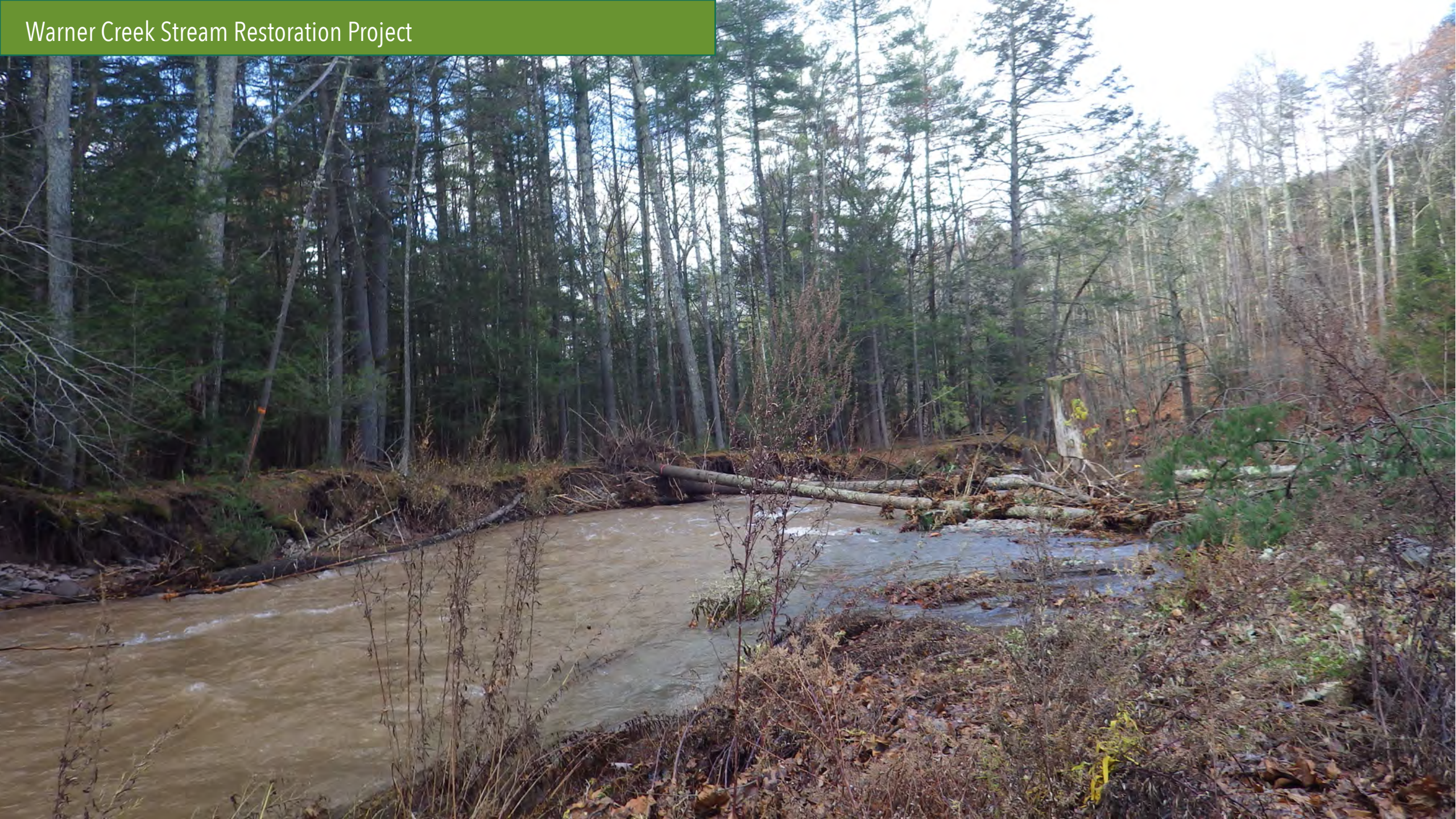
16 projects



Warner Creek Stream Restoration Project



Warner Creek Stream Restoration Project



SMIP Projects:

- Town of Olive Flood Hazard Mitigation Plan - COMPLETE
- Engineering Design for Upper Boiceville, DeSilva, and Burgher Road Crossings (ongoing)

Total Funded 2014-2019: \$680,944

5 projects

10-Year Total: \$702,321

8 projects

Town of Woodstock

SMIP Updates:

- Design and Construction of Mink Hollow Bridge Upsizing (ongoing)

Total Funded 2014-2019: \$185,000

2 projects

10-Year Total: \$393,788

9 projects

Ulster County DPW

SMIP Updates:

- Design Services Maltby Hollow Bridge Upsizing – SPENDING COMPLETE (ongoing)

Total Funded 2014-2019: \$511,116

5 projects

10-Year Total: \$565,430

13 projects

Completed Basin Wide

SMIP Projects:

- Catskill Heritage Brook Trout Study (APW Chapter Trout Unlimited)
- Educational Program About Licensed Guides (Phoenicia Library)
- HEC-RAS Workshop for Modeling Bridges & Culverts (Milone & MacBroom)
- Analysis of Strategies to Monitor and Detect Change in Fish Assemblages (USGS)
- BANCS Model Calibration and Validation: Ashokan Watershed Predictive Regional Curve (Stantec)
- Pilot Chemical Control of Select *Oliveria* Japanese Knotweed Stands (Catskill Center)
- Ashokan Quarry Trail Educational and Interpretive Signage (Catskill Mountain Club)
- Catskill Waters (Forge Collective)

Basin Wide

SMIP Projects:

- Riparian Buffer Demonstration Project at the Catskills Visitor Center (ongoing)
- Measure Stream Temperature in Upper Esopus Creek Watershed (ongoing)
- Suspended Sediment Monitoring Woodland Creek (ongoing)

Total Funded 2014-2019: \$1,981,837

39 projects

10-Year Total: \$4,289,992

85 projects

Assessment & Monitoring

Stream Assessments:

- Completed SFI for Upper Esopus: Oliveria to Bushnellsville (Town of Shandaken)
 - 3.5 miles re-assessed
- Re-surveyed Maltby Hollow bank erosion sites (Town of Olive)

Project Monitoring:

- Woodland Creek SRP (Town of Shandaken)
- Bushkill Bioengineering Project (Town of Olive)
- Bushkill at Watson Hollow Slope Stabilization (Town of Olive)



Catskill Streams Buffer Initiative

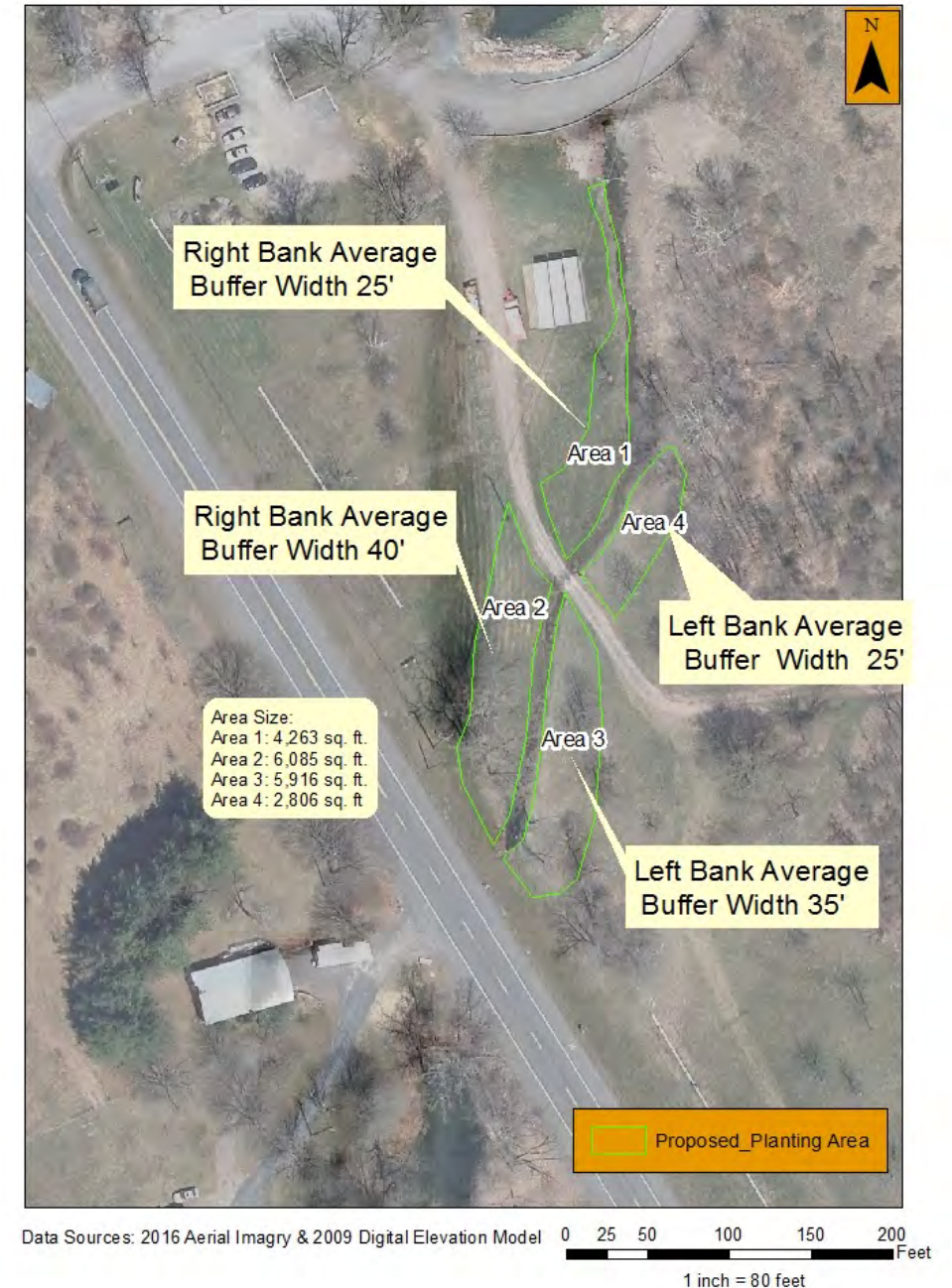


CSBI:

- 5 Fall projects
- Town's of Woodstock, Shandaken and Olive

Emerson Resort Proposed Planting Areas

Created: June 2019 by CSBI Coordinator





*Little One
and the Water,*
Book Signing at
Golden Notebook,
Woodstock, NY
Sept. 2019





Ashokan Watershed
Stream Management Program

SMIP Updates

Fall 2019 Funding Round

2019-2024 Stream Management Implementation fund

Proposed SMIP Funding Fall 2019

Budget Category	5-Year Budget 2019-2024	Awarded thru Nov 2019	Balance	Recommend Fall 2019	Est. Fund Balance
Regular SMIP					
Expense	800,000	52,651	747,349	159,192	588,157
Capital	1,680,000	159,485	1,520,515	52,500	1,468,015
Subtotal:	\$ 2,480,000	\$ 212,136	\$ 2,267,864	\$ 211,692	\$ 2,056,172
Local Flood Analysis					
Expense	500,000	0	500,000	0	500,000
Capital	2,000,000	97,498	1,902,503	1,497,960	404,543
Subtotal:	\$ 2,500,000	\$ 97,498	\$ 2,402,503	\$ 1,497,960	\$ 904,543

Local Flood Analysis Implementation Estimated Spending 2019-2024

Project Title	Applicant	Timeframe	Cost
Construction Upper Boiceville Rd Culvert	Town Olive	2020	465,000
Construction DeSilva Rd Culvert	Town Olive	2020	352,500
Construction Old Route 28 Culvert Removal	Town Olive	2020	352,500
Construction Inspection Services	Town Olive	2020	177,960
Engineering Services Maltby Hollow Rd Bridge	Ulster County	2020	150,000
Sub-Total 2019-2020:			\$ 1,497,960
Engineering Services Construction Burgher Rd Culvert	Town Olive	2021	110,000
Feasibility Study (includes Bridge St. Bridge) and Design Phoenicia Floodplain Bench	Town Shandaken	2020-2021	250,000
Engineering Services Construction Phoenicia Floodplain Bench	Town Shandaken	2022-2023	142,040
Sub-Total 2021-2024:			\$ 502,040
TOTAL FOR 7 PROJECTS:			\$ 2,000,000

Additional \$500K in LFA Expense



C.R. 139 (Rt 42) Culvert Replacements

Proposed:

- Ulster County DPW
- Winchell Brook high priority in multiple plans
- Upsize to pass 50-year, embedded for natural channel bed
- Design review by AWSMP
- County cost-share

SMIP Request: **\$52,500**





Notch Inn Wall

Proposed:

- Town of Hunter
- Repair abutment made of old hemlock logs and stone
- Funds materials only
- Timeline 2020?

SMIP Request: **\$70,000**

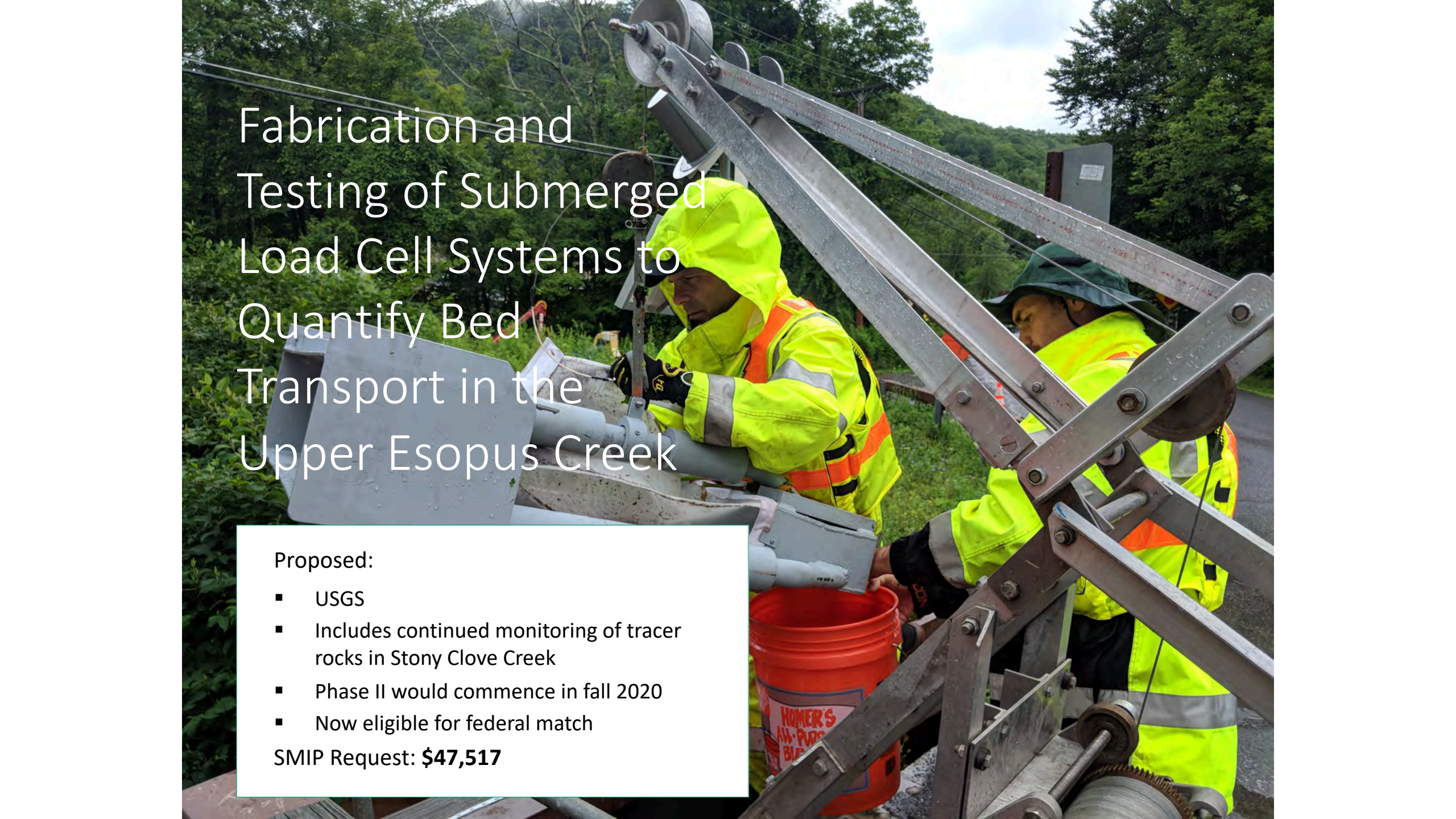


Continued Monitoring of the Wilmot Way Sediment and Turbidity Reduction Project in the Woodland Creek Watershed

Proposed:

- USGS
- Continue monitoring one year to match pre-construction SRP monitoring period
- Analysis completed in 2021 with DEP funds
- Now eligible for federal match

SMIP Request: **\$14,953**

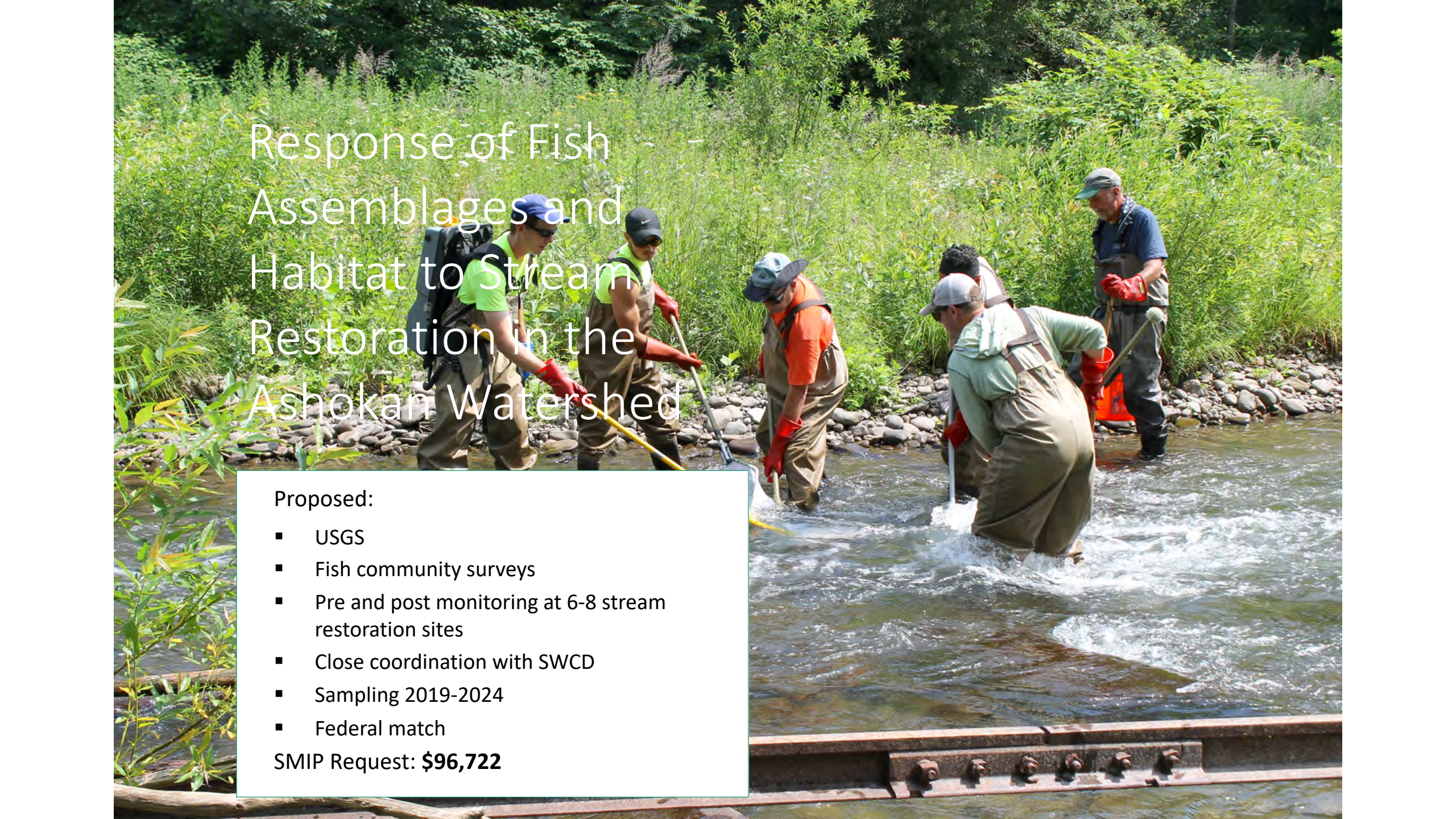
A photograph showing two workers in high-visibility yellow safety gear and hard hats working on a large, complex metal structure, likely a bridge or a large-scale testing apparatus. The structure is made of heavy steel beams and has various pulleys and cables attached. The workers are focused on their task, with one worker in the foreground and another slightly behind. The background shows a lush green forest and a clear sky, suggesting an outdoor setting. The text "Fabrication and Testing of Submerged Load Cell Systems to Quantify Bed Transport in the Upper Esopus Creek" is overlaid on the left side of the image.

Fabrication and Testing of Submerged Load Cell Systems to Quantify Bed Transport in the Upper Esopus Creek

Proposed:

- USGS
- Includes continued monitoring of tracer rocks in Stony Clove Creek
- Phase II would commence in fall 2020
- Now eligible for federal match

SMIP Request: **\$47,517**



Response of Fish Assemblages and Habitat to Stream Restoration in the Ashokan Watershed

Proposed:

- USGS
- Fish community surveys
- Pre and post monitoring at 6-8 stream restoration sites
- Close coordination with SWCD
- Sampling 2019-2024
- Federal match

SMIP Request: **\$96,722**

A photograph of a road crossing a stream. A wooden bridge with a railing is in the foreground, and a person wearing a red hat and a dark jacket is walking on it. The road is paved and curves to the left. The stream is in the foreground, and the background is a forest of bare trees. The text "Construction of Culvert Replacements" is overlaid on the image.

Construction of Culvert Replacements – Upper Boiceville Road, DeSilva Road, and Old Route 28 Crossings

Proposed:

- Town of Olive
- Boiceville Local Flood Analysis
- SMIP funded design
- Phased construction 2020
- Includes engineering services

SMIP Request: \$1,347,960



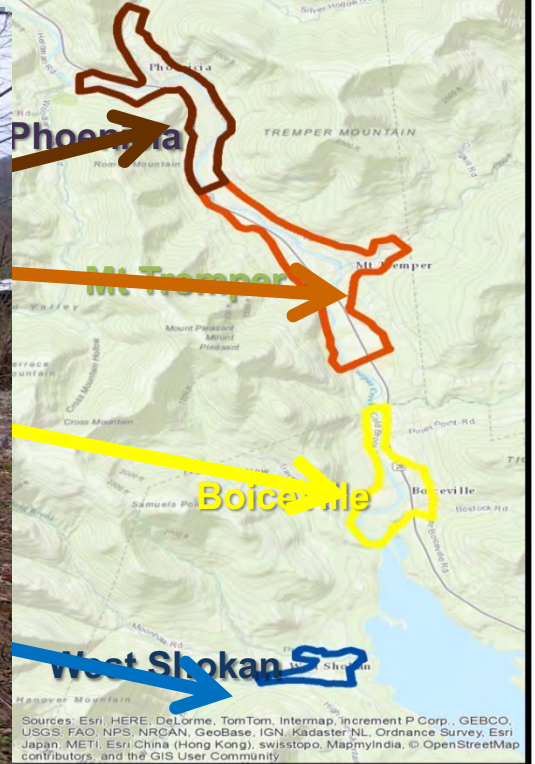
Construction Inspection Services for Maltby Hollow Bridge Replacement

Proposed:

- Ulster County DPW
- West Shokan Local Flood Analysis
- Construction 2020
- Full time representation on site
- SMIP (partial) funding of design
- Seeking CWC funding of construction

SMIP Request: **\$220,000**

UPDATE on LFA IMPLEMENTATION
2016 - PRESENT



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



Fox Hollow Rd, Shandaken, after TS Irene

General Recommendations for Boiceville & West Shokan

The Town should seek to assist in the elevation or relocation of the most flood-vulnerable properties to areas outside of the floodplain where there is owner interest and funding available through federal, state, or local sources, such as the voluntary NYC-Funded Flood Buyout Program (NYCFFBO), or the Catskill Watershed Corporation's (CWC) Flood Hazard Mitigation Implementation program (FHMIP).

All habitable structures that have the potential to receive 3 feet or more of floodwater against the structure should be considered a high priority for mitigation by the Town. Owners of these properties are encouraged to seek input from the Town on possible mitigation actions.

Local officials should promote, and eligible property owners (properties within the 0.2% annual risk floodplain) should be encouraged to take advantage of the tank anchoring / relocation program through the Catskill Watershed Corporation.

The Town should prevent any new development in the floodplain and floodway.

The Town should undertake actions to identify and remove vacant/abandoned structures in the floodplain to prevent potential flooding hazards.

Table 57: Local Flood Mitigation Implementation Plan

Flood Resiliency Strategy	Strategy Name	Note
1	Relocate Fire House #5	No flood protection system can be designed to protect this facility to FEMA standards. It is also within the footprint of the flood protection levee system (section 4.3.7)
2	Boiceville Plan #12 - Planning and Relocation	The Town must make a decision to protect the hamlet of Boiceville in place or begin to relocate buildings out of harm's way. If the town chooses the latter, several buildings are eligible for relocation/buyout (Section 4.3.10). The Town should undergo a planning exercise to identify areas that could be rezoned for building relocation and identify what if any future growth should occur in flood prone areas. The first priority group of eligible buildings that could be relocated are the three anchor businesses (Boiceville Market, Boiceville Pharmacy, and the Maverick West Health Building). The second priority group of eligible buildings are buildings B14 and B15 within a potential flood protection facility. This activity may also be undertaken at the same time as #6 "Structural Improvements"
3	Upper Boiceville Road Plan #1 - Upper Boiceville Road Crossing	This is a critical alternative route to State Route 28 and the crossing is in structurally "fair" condition and is prone to flood damage (Section 4.4).
4	Bushkill and Maltby Hollow Debris Removal	Establishing permanent monitoring sections will allow the Town to understand if these water bodies are filling with obstructions that could lead to worsened flooding conditions (Sections 5.5.4 and 5.3.7).

- 6 parcels vetted by Town/OFD
- Chosen parcel subdivided and now being acquired (w/\$155,000 of local LFA funding)
- 2 applications (for new construction) submitted for combined \$1.31M
 - 1 awarded for \$577,400 (w/local LFA funding)



Table 57: Local Flood Mitigation Implementation Plan

Flood Resiliency Strategy	Strategy Name	Note
1	Relocate Fire House #5	No flood protection system can be designed to protect this facility to FEMA standards. It is also within the footprint of the flood protection levee system (section 4.3.7)
2	Boiceville Plan #12 - Planning and Relocation	The Town must make a decision to protect the hamlet of Boiceville in place or begin to relocate buildings out of harm's way. If the town chooses the latter, several buildings are eligible for <u>relocation/buyout (section 4.3.10)</u> . The Town should undergo a planning exercise to identify areas that could be rezoned for building relocation and identify what if any future growth should occur in flood prone areas. The first priority group of eligible buildings that could be relocated are the three anchor businesses (Boiceville Market, Boiceville Pharmacy, <u>and the Maverick West Health Building</u>). The second priority group of eligible buildings are buildings B14 and B15 within a potential flood protection facility. This activity may also be undertaken at the same time as #6 "Structural Improvements"
3	Upper Boiceville Road Plan #1 - Upper Boiceville Road Crossing	This is a critical alternative route to State Route 28 and the crossing is in structurally "fair" condition and is prone to flood damage (Section 4.4).
4	Bushkill and Maltby Hollow Debris Removal	Establishing permanent monitoring sections will allow the Town to understand if these water bodies are filling with obstructions that could lead to worsened flooding conditions (Sections 5.5.4 and 5.3.7).

Planning effort w/\$20,000 grant secured

(w/local LFA funding) ;

- Final Report by end of 2019

Town & Maverick West Relocation effort

underway — will seek \$20,000 local LFA grant



Table 57: Local Flood Mitigation Implementation Plan

Flood Resiliency Strategy	Strategy Name	Note
1	Relocate Fire House #5	No flood protection system can be designed to protect this facility to FEMA standards. It is also within the footprint of the flood protection levee system (section 4.3.7)
2	Boiceville Plan #12 - Planning and Relocation	The Town must make a decision to protect the hamlet of Boiceville in place or begin to relocate buildings out of harm's way. If the town chooses the latter, several buildings are eligible for relocation/buyout (section 4.3.10). The Town should undergo a planning exercise to identify areas that could be rezoned for building relocation and identify what if any future growth should occur in flood prone areas. The first priority group of eligible buildings that could be relocated are the three anchor businesses (Boiceville Market, Boiceville Pharmacy, and the Maverick West Health Building). The second priority group of eligible buildings are buildings B14 and B15 within a potential flood protection facility. This activity may also be undertaken at the same time as #6 "Structural Improvements"
3	Upper Boiceville Road Plan #1 - Upper Boiceville Road Crossing	This is a critical alternative route to State Route 28 and the crossing is in structurally "fair" condition and is prone to flood damage (Section 4.4).
4	Bushkill and Maltby Hollow Debris Removal	Establishing permanent monitoring sections will allow the Town to understand if these water bodies are filling with obstructions that could lead to worsened flooding conditions (Sections 5.5.4 and 5.3.7).

Critical Crossings – Upper Boiceville Rd coupled with Burgher Rd culvert (next slide) and DeSilva Rd (also LFA recommendation) –

Approximately \$1.5M in local LFA funding



Burgher Rd crossing showing backwater

Flood Resiliency Strategy	Strategy Name	Note
5	Dry Brook Plan #1 – Burgher Road Crossing	This culvert can be damaged to the point of needing repair during moderately sized flooding events. This would isolate several homes leaving them with no vehicular access (Section 5.4)
6	Boiceville Plan #13 - Structural Improvements (Property Protection)	Depending on the results of Flood Resiliency Strategy #2 (Plan #12) some buildings are best for the community to remain where they are. In this case, they should be protected (elevated with wet floodproofing) to prevent future flood damage (Section 4.3.11)
7	Boiceville Plan #9 - Flood Levee Protection System	If the Town chooses to protect the hamlet of Boiceville in place, then as part of Flood Resiliency Strategy #2, Buildings B14 and B15 relocation should be prioritized in relocation (Section 4.3.7). As the funding for this system is the primary obstacle, an effort to find funding can be initiated early after completion of the LFA.
8	Maltby Hollow Plan #1 - Maltby Hollow Bridge	This crossing would be inundated by floodwaters during a very large flood event. If this would occur than emergency response times would increase to unacceptable levels and several hundred people would need to make a 60 mile detour if traveling to West Shokan.

Boiceville Market Floodproofing Feasibility Study

(w/\$5000 local LFA funding



Flood Resiliency Strategy	Strategy Name	Note
5	Dry Brook Plan #1 – Burgher Road Crossing	This culvert can be damaged to the point of needing repair during moderately sized flooding events. This would isolate several homes leaving them with no vehicular access (Section 5.4)
6	Boiceville Plan #13 - Structural Improvements (Property Protection)	Depending on the results of Flood Resiliency Strategy #2 (Plan #12) some buildings are best for the community to remain where they are. In this case, they should be protected (elevated with wet floodproofing) to prevent future flood damage (Section 4.3.11)
7	Boiceville Plan #9 - Flood Levee Protection System	If the Town chooses to protect the hamlet of Boiceville in place, then as part of Flood Resiliency Strategy #2, Buildings B14 and B15 relocation should be prioritized in relocation (Section 4.3.7). As the funding for this system is the primary obstacle, an effort to find funding can be initiated early after completion of the LFA.
8	Maltby Hollow Plan #1 - Maltby Hollow Bridge	This crossing would be inundated by floodwaters during a very large flood event. If this would occur than emergency response times would increase to unacceptable levels and several hundred people would need to make a 60 mile detour if traveling to West Shokan.

No local grant funding available for this

Spoke at length with US Army Corps staff regarding steps in their process, timeframe, costs and BCR. etc

Approached NYSDOT about their ability / willingness to construct to protect NYS Rte 28

Flood Resiliency Strategy	Strategy Name	Note
5	Dry Brook Plan #1 – Burgher Road Crossing	This culvert can be damaged to the point of needing repair during moderately sized flooding events. This would isolate several homes leaving them with no vehicular access (Section 5.4)
6	Boiceville Plan #13 - Structural Improvements (Property Protection)	Depending on the results of Flood Resiliency Strategy #2 (Plan #12) some buildings are best for the community to remain where they are. In this case, they should be protected (elevated with wet floodproofing) to prevent future flood damage (Section 4.3.11)
7	Boiceville Plan #9 - Flood Levee Protection System	If the Town chooses to protect the hamlet of Boiceville in place, then as part of Flood Resiliency Strategy #2, Buildings B14 and B15 relocation should be prioritized in relocation (Section 4.3.7). As the funding for this system is the primary obstacle, an effort to find funding can be initiated early after completion of the LFA.
8	Maltby Hollow Plan #1 - Maltby Hollow Bridge	This crossing would be inundated by floodwaters during a very large flood event. If this would occur then emergency response times would increase to unacceptable levels and several hundred people would need to make a 60 mile detour if traveling to West Shokan.

Ulster County DPW bridge replacement

- \$220,000 for Engineering & Design (local LFA funding pending)
- \$2,500,000 for construction (local LFA funding pending)



Shandaken Town-Wide LFA Recommendations

Some of the homes in the floodplain are rarely flooded. Residents and businesses may benefit from minor individual property improvements. Providing landowners with information regarding individual property protection is recommended.

During the public meeting process, flooding was reported throughout both study areas associated with undersized culverts and smaller drainageways that are not part of Esopus Creek, Stony Clove Creek, or the Beaver Kill. While these flooding sources were not evaluated as part of this LFA, they should be investigated and addressed.

Effort should be made to identify parcels that could benefit from securing or relocating fuel tanks to eliminate a potential source of man-made pollution and apply for funding through the CWC.

Figure A-16. Big Indian-3 Repetitive Loss Area



Recommendations for Phoenicia Study Area

All habitable structures that receive 3 feet or more of floodwater against the structure are considered a high priority for "Property-Specific Mitigation."

Floodplain enhancement in combination with the replacement of the Bridge Street bridge would reduce but not eliminate flooding along Main Street in Phoenicia.

- Water surface elevations would be reduced by up to 1.2 feet along Main Street during a flood event similar in magnitude to Tropical Storm Irene.
- The scenario would require relocation of some homes and businesses along both sides of Esopus Creek.

Additionally, the Town was awarded a \$20,000 (local LFA funding) grant to do a business relocation feasibility study for the 38 Main St building – completed in 2018



Recommendations for Mt Tremper Study Area

The scenario that combines the flood reduction benefits of **floodplain enhancement that results in substantially reduced water surface elevations under a range of flood events with the benefits of the replacement of the Route 28 bridge** that results in substantial flood reduction during larger (i.e., 100-year) flood events should also be investigated.

NYSDOT price tag of >\$32M



NYSDOT rendering of Route 28 Bridge and berm removal in 2022

Additional LFA recommendation to remove upstream, defunct Mt Pleasant bridge – Ulster Co awarded \$900,000 in local LFA funding – removal planned in 2020

Shandaken Town-Wide LFA Recommendations

1. Seek to relocate the most flood-vulnerable properties where there is owner interest and programmatic funding available through either FEMA, NYCDEP, or CWC flood buyout and relocation programs.
2. All habitable structures that receive 3 feet or more of floodwater against the structure are considered a high priority for "Property-Specific Mitigation." Property owners are encouraged to seek town input on possible mitigation actions.
3. Move existing structures out of the floodway.
4. Disallow any new development in the floodway and require new construction to meet NFIP criteria.



Recommendations for Shandaken/Allaben

Relocation of Town Hall Complex

Conduct hydraulic assessments at
3 Bridges (2 on Fox Hollow & Creekside Dr); potential
sediment management at Creekside

Structures within FEMA Floodway

- remove existing structures if
owner interest
- Disallow new structures

Levee Repair – work with NYSDEC to
repair the toe of the levee

Anchor Fuel Tanks

\$105,000 grant for purchase of parcel (local LFA
funding)

**\$400K For CT Male Feasibility Study to
construct new facility** (NY Rising)



Recommendations for Shandaken/Allaben

Relocation of Town Hall Complex

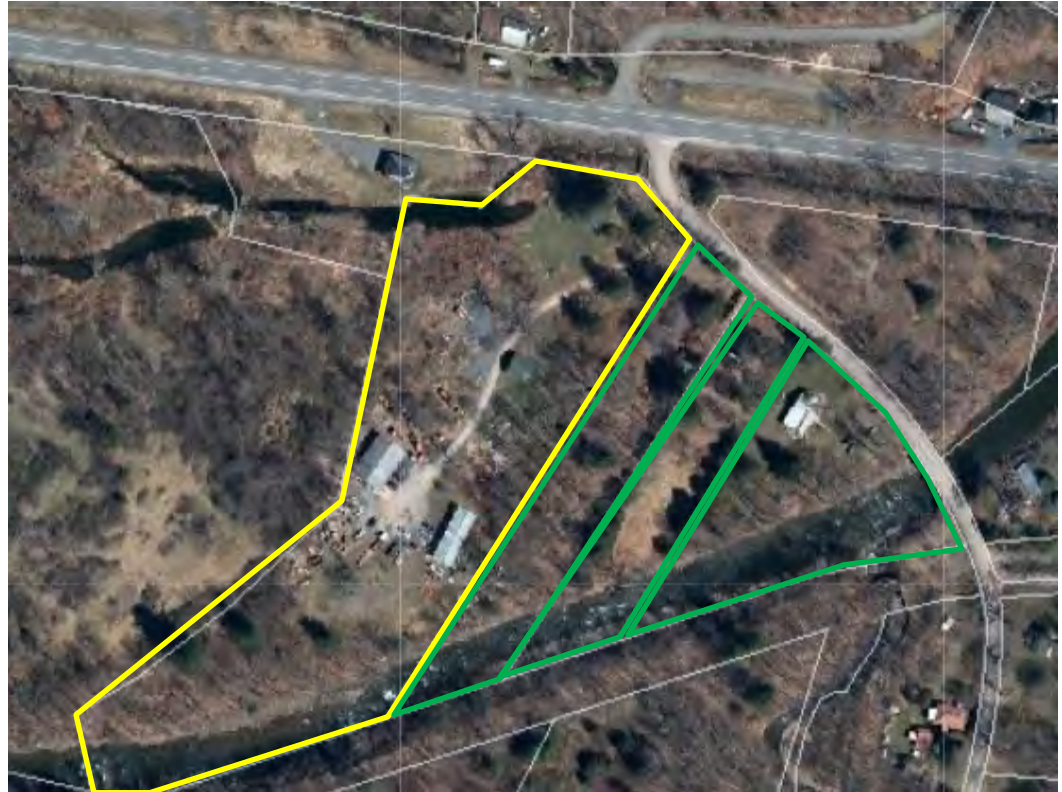
Conduct hydraulic assessments at 3
Bridges (2 on Fox Hollow & Creekside Dr);
potential sediment management at Creekside

Structures within FEMA Floodway

- Remove existing structures if owner interest
- Disallow new structures

Levee Repair – work with NYSDEC
to repair the toe of the levee

Anchor Fuel Tanks



Recommendations for Shandaken/Allaben

Relocation of Town Hall Complex

Conduct hydraulic assessments at

3 Bridges (2 on Fox Hollow & Creekside Dr)
potential sediment management at Creekside

Structures within FEMA Floodwa

- Remove existing structures
owner interest
- Disallow new structures

Levee Repair – work with
NYSDEC to repair the toe of
the levee

- No Local \$ needed!

Anchor Fuel Tanks



9-5-19



2013

OLIVE	
OFD Relocation Parcel/Survey, etc	\$155,000
OFD New Fire Station	\$577,400
Boiceville Plannning Study	\$20,000
IGA FHM Feasibility Study	\$5,000
Upper Boiceville Road Culvert/DeSilva/Burgher E&D	\$207,500
Upper and DeSilva construction (not Burgher)	\$1,300,000
Maltby Hollow E&D	\$220,000
Maltby Hollow construction	\$2,500,000
	\$4,984,900
SHANDAKEN	
Town Hall Parcel	\$114,000
Town Hall Relocation Feasibility Study	400,000
Phoenicia Floodplain Renderings	\$5,000
38 Main Street FHM Feasibility Study	\$20,000
Mt Pleasant Bridge Removal	\$900,000
	\$1,439,000
NYSDOT bridge / berm project	\$32,000,000
NYSDEC Berm Repair	?
Buyouts and Acquisitions....	?