

# Upper Susquehanna Coalition

# 2017 Annual Report





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# A Note from USC's Coordinator

2017 was another busy year for USC Staff and SWCD members. We were successful in completing implementation and close-out for two large grants that were previously awarded to the USC. The first being the completion of the Green Infrastructure Grant Program funded through the Environmental Facilities Corp. This grant began in July of 2012, and during that time the USC Wetland team constructed/restored 117 ephemeral wetlands in 33 wetland complexes, accounting for 196 acres of ephemeral wetland complex created/restored. We also worked on reconnecting streams to their floodplains through streamside berm removal, we removed 581,117 cubic feet of berm material on 19 different berm projects throughout the watershed.

Also, in 2017 the USC completed a multi-year National Fish and Wildlife Foundation Chesapeake Bay Stewardship Grant, where we utilized natural infrastructure rehabilitation to address stream corridor instability in the Upper Susquehanna Basin in New York. Our focus was to address the stream corridor with implementation of emergency stream intervention, the establishment of buffers and development of prescribed grazing systems. This project was also very successful and to read more about implementation under this grant check out the Ag Team section.

The USC in 2017 was recognized by a number of organizations for our coordinated regional approach, and was asked to present on this approach to help foster duplication throughout the watershed. This is a true testament to the work that the USC staff and SWCD members are completing in the watershed. In an effort to continue our implementation in the watershed and foster this regional approach, the USC continues to write grants and track implementation progress, we will continue our work in 2018 based on these successes. We also held a watershed forum in 2017 to celebrate 25 years of the USC, this event was well attended and was an opportunity for USC members and partners to interact on current and future work.

Wendy Walsh

# 2017 Board of Directors

USC Chair - Jeff Parker
USC Vice-Chair - Chip McElwee
USC Member at Large - Steve Lorraine
USC Member at Large - Amanda Barber
USC Member at Large - Wendy Walsh

# USC Staff

**Watershed Coordinator:**
Wendy Walsh

**GIS Specialist:**
Chris Yearick

**Ag Team:**
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**Buffer Team:**
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**Stream Team:**
Mike Lovegreen

**Wetland Team:**
Chris Brogdale
Ryan Ceruti
Jeremy Waddell
Melissa Yearick

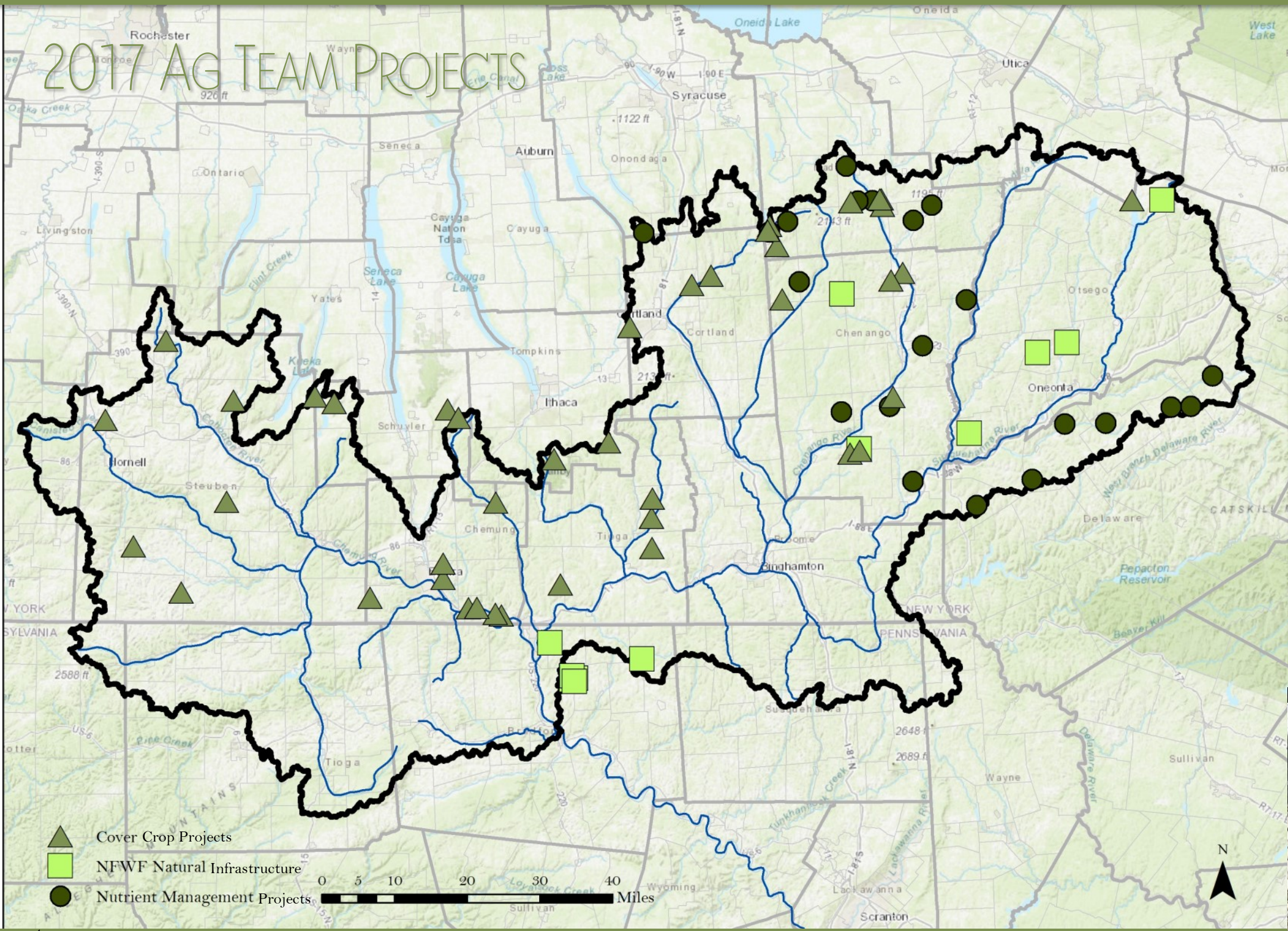
# USC at a Glance







# 2017 Ag Team Projects



## Natural Infrastructure Grant

**(2017 ONLY)**

The USC received funding from the National Fish and Wildlife Foundation starting in the Fall of 2013 to utilize natural infrastructure rehabilitation techniques to address stream corridor instability through the use of stream intervention, riparian buffers, and prescribed grazing. In 2017, through this funding source, SWCD implemented a total of 26.4 acres of riparian buffer, 4,700 feet of stream stabilization and rehabilitation, 78.1 acres of planned grazing, 11,111 feet of stream exclusion fencing, 6 stream crossings, 8.3 acres of habitat improvement, 11,433 acres of grazing fence, 4,065 feet of waterline, and 9 water troughs.



## Conservation Tillage Training

The USC partnered with Cornell Cooperative Extension and the Natural Resource Conservation Service to hold a training on Conservation Tillage on May 25, 2017. The training was held at the Chenango County SWCD office and incorporated hands on portion that was held at Cheshire Valley Farm owned by Bob and John Hofmann in Oxford, NY. Dale Gates (NRCS) and Kevin Ganoe (CCE) presented on the differences in tillage types, as well as provided training on how to measure residue and recognize different tillage characteristics in the field.

# 2017 Ag Team Snapshot

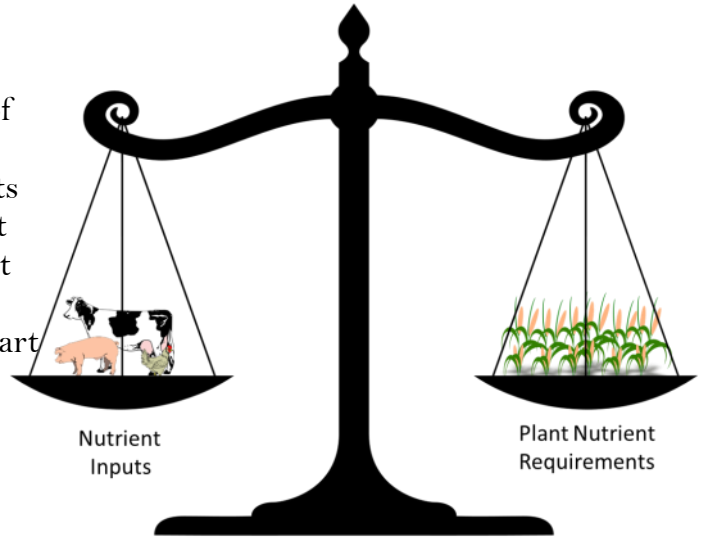






# NFWF – Nutrient Management

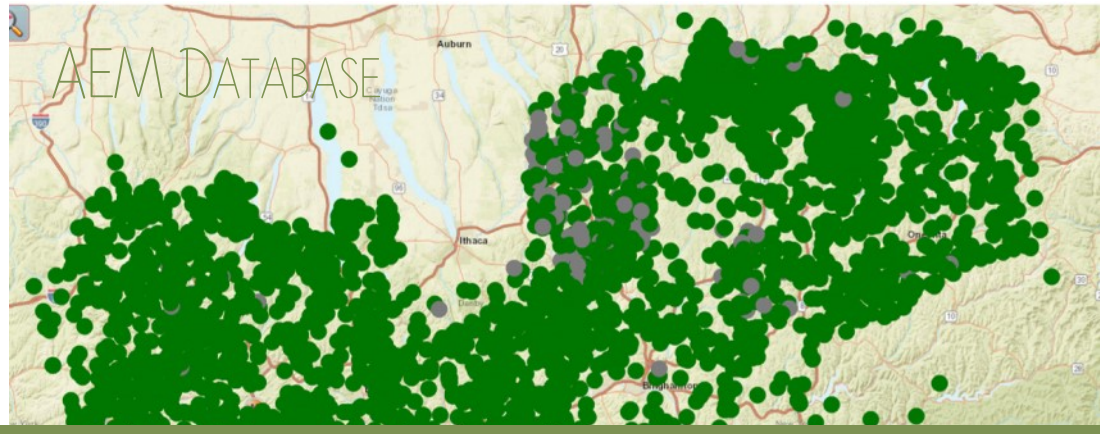
The USC received funding from the National Fish and Wildlife Foundation in the fall of 2015 to provide technical expertise to farms for Nutrient Management Planning and Precision Feed Management planning work. Five Soil and Water Conservation Districts participated in this funding source, in 2017, and implemented 14,171.9 acres of Nutrient Management planning on 32 farms, as well as implementing precision feed management components of the Nutrient Management Plans on 31 of those farms throughout the watershed. Precision feed management is only completed on dairy operations that are part of the grant funding. Also as part of this funding source, there were 386 acres of cover crop implemented as part of the BMP implementation schedules for those Nutrient Management Plans. Implementation work will continue in 2018.




# BMP Verification

As part of the USC's Quality Assurance Project Plan a framework for Best Management Practice Verification was developed to serve as a guide for New York to document the installation, function, and continued effectiveness of BMP's over time. In 2017, the member Soil and Water Conservation Districts in NY were asked to perform verification visits on a total of 91 farming operations that were randomly selected through a statistical sampling approach developed by Tetra Tech. The selected farms were then visited by SWCD staff, to verify Best Management Practices using a "whole farm approach". This approach ensured that both previously existing practices already captured by the SWCDs from prior visits to the operation are verified, but also any new practices that have been implemented are also verified. BMP Verification is also a time to provide education to our farming operations, and present them with new and upcoming funding opportunities to assist with additional practice needs that those operations may have. SWCD's also participated in Concentrated Animal Feeding Operation (CAFO) inspections alongside of NYS DEC as part of the USC's Verification protocol.

Best Management Practices Data Entry occurs on an ongoing basis for all USC member counties in NY. BMP Data is entered into the USC's "Online Tool" known as the AEM Database. The AEM Database is an online interface in which county users can input farm specific information of the operation and any practices that exist within that operation. That data is then aggregated by county and submitted for input into the Chesapeake Bay Model to monitor NY's progress toward meeting the Chesapeake Bay Total Maximum Daily Load (TMDL) requirements. In 2017, the USC reported a total of 116,685 acres of Nutrient Management, 174,962 acres of Conservation Planning, 15,614 acres of Cover Crops. 17,377 acres of Conservation Tillage, 861,344 feet of exclusionary fencing, 32,000 acres of prescribed grazing, 40 farms participated in Precision Feed Management, and 214 manure storages.

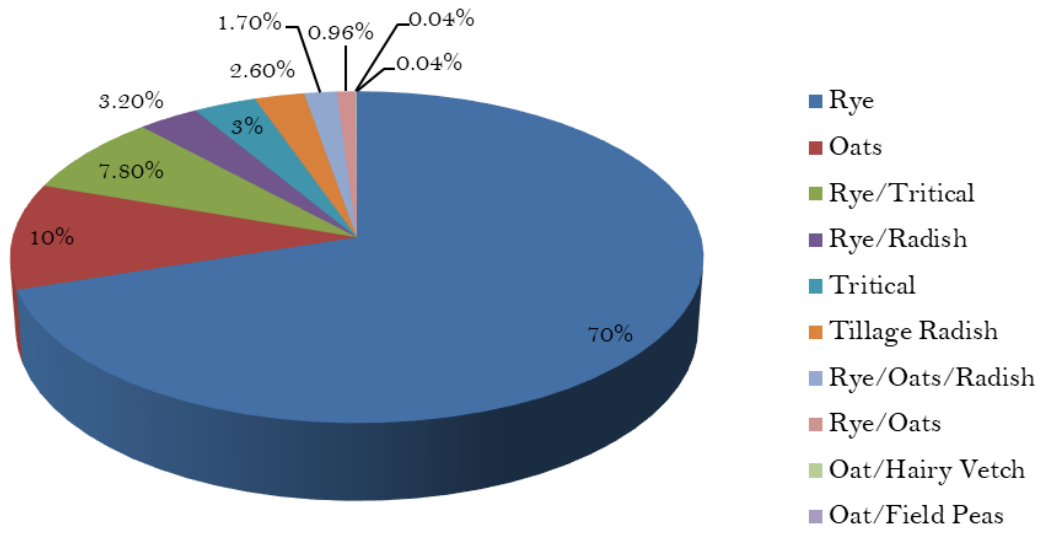








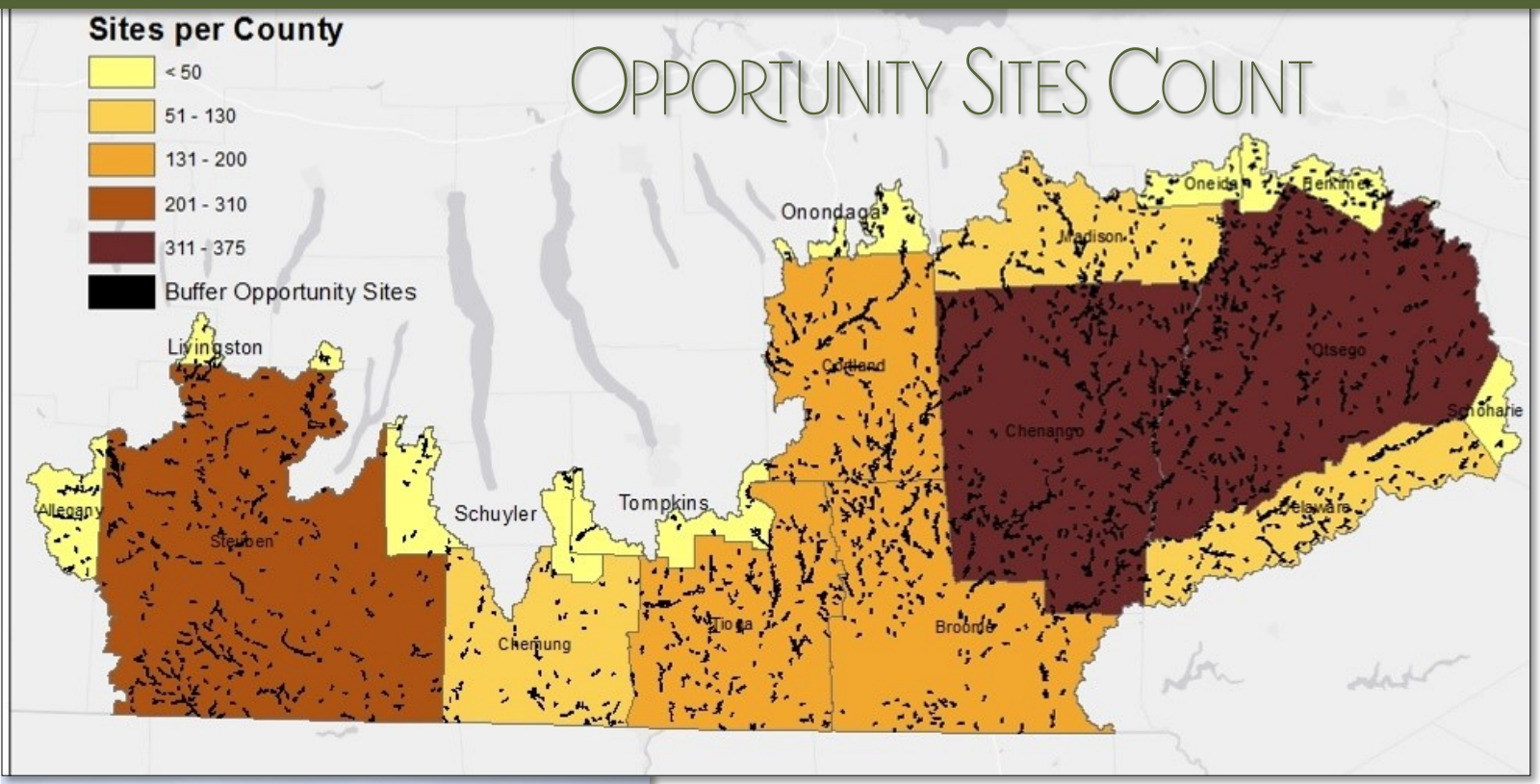

Rye growing in Late October (Madison County)




# DEC Cover Crops

The Upper Susquehanna Coalition received funding from NYS DEC to support the implementation of 2,000 acres of Cover Crops through the Upper Susquehanna Watershed. Through this funding the USC was able to implement 2,494.3 acres cover crops throughout 10 counties including Chenango, Cortland, Madison, Onondaga, Otsego, Schuyler, Chemung, Tompkins, Tioga, and Steuben counties. The breakup of species is as follows: 1741.2 acres of Rye, 257.23 acres of Oats, 196.6 acres of Rye/Triticale Mix, 82.4 acres of Rye/Tillage Radish mix, 80.2 acres of Triticale, 66.27 acres pf Tillage Radish, 44.4 acres of Rye/Oats/Tillage Radish mix, 24 acres of Rye/Oats mix, 1 acre of Oats/Hairy Vetch mix, and 1 acre of Oats/Field Peas mix. Additional Funding will be provided in 2018 to establish new cover crops acres across the watershed.

# Opportunity Sites Count




## Prioritization Tool

Under the USC Buffer Coordinator supervision, an intern has been developing a targeting tool for riparian buffers. The tool will identify and rank opportunity areas that will disproportionally contribute to water quality and habitat functions in a few specific areas of the watershed. This work will be accomplished by Spring 2018. Very basically, the tool has identified the opportunity sites in each county within the coalition based upon riparian corridor land use, seen left.




## Buffer Tracking Tool

The buffer tracking tool is fully developed and continually updated by USC staff for tracking, monitoring and reporting purposes.

The first pilot project was completed in April, 2017 where member SWCD completed a maintenance project on a CREP project to ensure the properties compliance for re-enrollment. This project consisted of planting trees, and installing tree tubes with rebar stakes on 4.33 acres of riparian forest buffer.

The second pilot project was to install shrub tubes with all deer browse-prone shrubs. This project began in time for fall implementation and will continue through spring 2018. This picture (left) shows shrub tubes installed at a project in Tioga County. The tubes purchased were Tubex shrub tubes, from 24"-30" tall. The inspiration for installing these tubes came from monitoring already installed projects where from time to time we would find a thriving shrub that was accidentally tubed with a tree tube. At times, this would be the only surviving shrub on site. In 2018 we will be installing tubes that are specifically shrub tubes, as well as tubes that are the same height, but categorized as tree tubes. We also anticipate purchasing a diversity of weed mats, such as the coconut fiber mats to test their effectiveness.

## USC Buffer Pilot Program

Funded by NFWF, the USC Buffer Coordinator and collaborating USC buffer workgroup members developed a program aimed at increasing the implementation of riparian buffers and prescribed grazing through conventional and innovative programs. Two rounds of funding were held during 2017. Through this program, 15 project applications will be funded ranging from $2,400 to $58,500 in total project costs (amount requested from the USC Buffer Pilot Program ranged from $400 to $31,500). In 2017, four projects were implemented, resulting in 27 acres of riparian buffer and 266 acres of prescribed grazing implemented. The average width of the riparian buffer implemented is 107.5 feet. Of the buffer acres implemented, 2.1 acres is grass, and 25.1 acres is forested. The CREP was utilized to facilitate implementation on 8.1 of those acres, while the remainder were implemented using landowner or New York State program funds. It is anticipated that the USC Buffer Pilot Program will fund the implementation of 77 acres of riparian buffer and 440 acres of prescribed grazing. Full implementation is anticipated to be accomplished by Fall of 2018. At one Buffer Pilot Program Site, CREP is creating a grass buffer for part of the property, but on other parts of the farm, have an ephemeral stream that cattle have full access to. This stream is ineligible under CREP because of the limited width of the riparian area (there are structures in some areas adjacent to the stream) and because it is fully forested. Therefore, the USC Buffer Pilot Program is going to fund the grazing infrastructure necessary to exclude the cattle from this stream in an effort to create a functional riparian forest.

## CREP

Since the CREP Conservation Plan Development Training in February 2017, the USC Buffer Coordinator has been a resource to district staff in developing the CREP conservation plans, and has acted as a point of contact for NRCS staff in delegating plan workload. Furthermore, the USC administering the Contribution Agreement between NRCS and USC member districts to further promote reimbursement for program development.

CREP Conservation Plan development took place in the following counties: Tioga, Madison, Chenango, Otsego, Delaware, Broome, and Schuyler.

A new USC buffer technician was hired in July, 2017, and this individual has also been trained by the USC Buffer Coordinator to develop CREP conservation plans. In 2017, she aided in the development of 2 conservation plans and began technical assistance to landowners in need of planting plans, specifically in Cortland County.

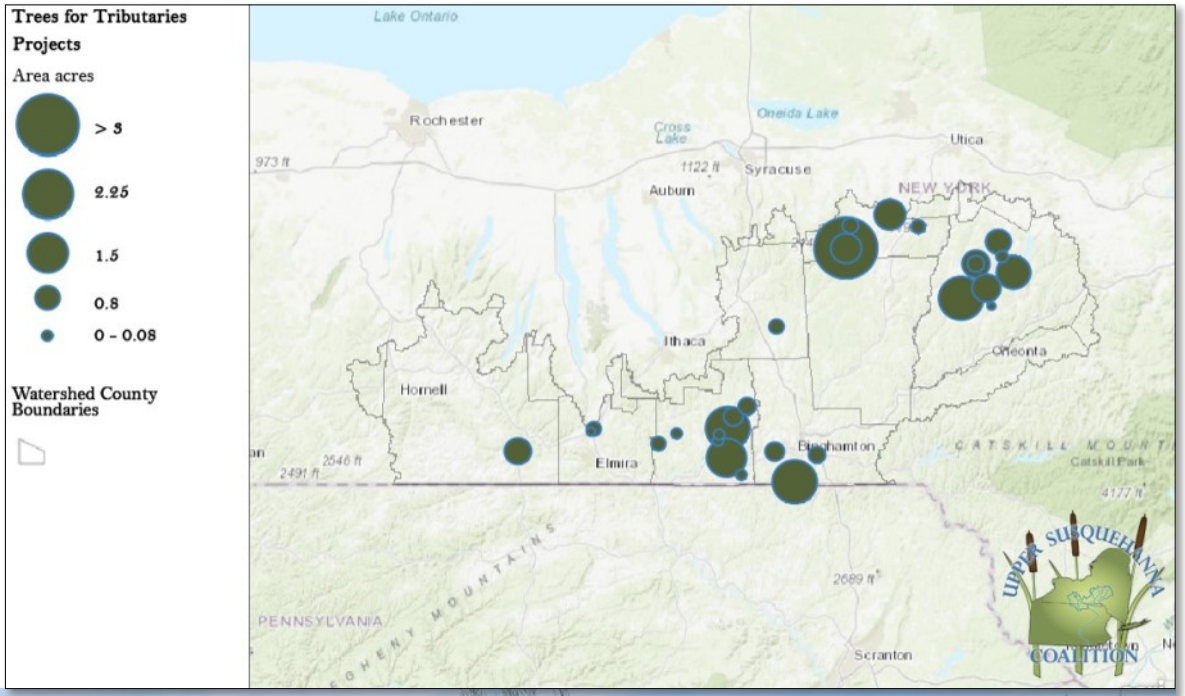
# 2017 Buffer Team Snapshot







# Trees for Tribs Acreage and Projects




This year, several projects were implemented, resulting in approximately 6 acres of riparian forest buffer planted by the USC, district staff and volunteers. To date, after utilizing the program for two years, over 23 acres have been implemented with most projects being 1-acre or less in size. This map (left) shows the location and relative size of the forested buffer implemented through this program since coordination by the USC began. The picture below left shows one of the implementation sites that took place in spring of 2017. This farm is a vegetable farm where the buffer is expected to enhance pollination and stream stability.

Approximately 20 acres has been planned for implementation in 2018 through 12 projects. Plan development assistance has expanded beyond just the USC buffer coordinator at this point. Several other districts are now planning their own projects using the program, with overall program coordination being provided by the USC Buffer Coordinator and USC Riparian Forester.

The USC Buffer Coordinator and USC Riparian Forester will continue to implement a larger project with Madison County SWCD on what will be a 13-acre forested buffer, (see picture below). In 2017, the team planted over 300 potted stock on several acres. Nearly 700 plants are planned to be planted this Spring.











## 2017 Buffer Team Outreach

The USC Buffer Team presented riparian buffer material to landowners, farmers, planners and technical service providers through several events in 2017:

- In January, the USC promoted buffer programs by tabling at the Cornell Cooperative Extension organized Winter Crop Meeting in Ithaca, NY. There are typically 150+ attendees at this event.
- Sundae's at the farm took place in August in both Tioga and Chemung Counties. At both events the USC had a table promoting riparian buffers and wetlands as conservation practices. In Tioga County, more than 700 people attended, and in Chemung county, more than 300 people attended.
- In February, the USC and USDA partners hosted a workshop titled "CREP Conservation Plan Development Training." This workshop was to educate USC member SWCD staff on the requirements of developing a CREP Conservation Plan, specifically for CP 21 and 22. This workshop was to align with the new USC-NRCS contribution agreement for CREP conservation plans that just developed. Over 30 people were in attendance representing 11 different SWCDs.
- At the annual Water Quality Symposium, the USC Buffer Coordinator presented during two workshops; the Stream Assessment Protocol (on how to assess a riparian area), and the Climate Resilient Practice workshop (on how buffers can be implemented as a climate resilient practice).
- In May, a volunteer planting day was held for SUNY Oneonta students. The students planted about 300 plants in one day on a CREP site that was lacking trees and shrubs. This site is owned by SUNY Oneonta, but rented by a local producer, so there are several interested parties in seeing this area succeed.
- At the annual Conservation Skills Workshop in September, the USC coordinated a course in partnership with the Catskill Stream Buffer Initiative titled "All About Buffers." There were about 25 participants in the one-day course where we visited three different sites; one that had a forested area adjacent to it, one site was an herbaceous buffer, and the last site was a newly planted forested buffer. Participants had an opportunity to assess riparian vegetation and buffer potential, as well as take a look at different types of protective material.



# 2017 Buffer Team Snapshot

# 2017 Buffer Team Funding Updates

**DEC Buffer Protection Funding:** The USC was awarded nearly $670,000 for 80 acres of buffer restoration on permanently protected lands. All restoration sites have been identified and restoration on 17.5 acres is anticipated to take place Spring 2018.

**USFS Riparian Forester Grant:** The USC was awarded funds in 2017 to hire a riparian forester. In July, Laura Grant filled that position and has taken over most of the coordination for the Trees for Tributaries program implementation, worked on several outreach pieces for local outlets, and has begun to develop CREP Conservation Plans.

# Buffer Team Maintenance and Monitoring

In 2017 the USC Buffer Coordinator coordinated the maintenance and monitoring of riparian forest buffer projects throughout the watershed. Of these projects, 12 projects were monitored on 21.5 acres, and maintenance plans were developed for each site. Maintenance occurred on 10 of the 12 project sites, or 12.4 acres. The other two projects will be replanted in Spring of 2018.

Maintenance activities consisted of standing up tree tubes, replacing materials, replanting and weed whacking.

Throughout 2017, the USC Buffer Coordinator worked with USDA service centers and USC member SWCDs to identify landowners in need of monitoring and maintenance. Once identified, the site was monitored and a maintenance plan was developed. This photo (right) demonstrates the type of sites that were monitored in partnership with CREP. This buffer in particular, enrolled as natural regeneration, had no trees actually grow. A maintenance plan was necessary in order for this site to be eligible for re-enrollment in CREP. The maintenance plan outlines the necessity of planting tree species to complement the variety of volunteer shrubs already present. This site will be fully implemented in Spring, 2018.



# NFWF - Natural Infrastructure Stream Corridor Rehabilitation

Funded through the National Fish and Wildlife Foundation, this project was able to address stream corridor issues from both a management and resource needs issues in a comprehensive way that bridged gaps in existing programs. The project criteria looked at getting the best "bang for bucks" through the comprehensive addressing of Stream corridor & riparian area needs.



The USC Stream Team is based on USC Member SWCDs/CDs that have developed stream channel expertise they are willing to share thus building on the collective capacity of the entire Upper Susquehanna Coalition.

The fact that SWCDs/CDs have long history of being integrated into local communities and recognized as a capable local resource gives us access to the landowners and managers that directly manage the stream resources. The basic philosophy of the USC is building on that local capacity to expand network of local resources.




The inherent context and philosophy of Soil and Water Conservation Districts in how they approach natural resource management needs in their respective Counties is reflected in the USC approach and verbalized in a set of "guiding principles" that the stream team utilizes.

- Systemic manner considering whole watershed condition and impact
- Stream issues will be approached with clearly identified restoration objectives
- Restoration includes consideration of geomorphic, hydrologic, habitat, water quality, riparian, social and economic values
- Stream issues will be approached in a pragmatic manner
- Education in order to effect cultural change in how we manage our streams and watersheds
- Creative, cost effective approaches to stream restoration
- Information learned in our region regarding stream restoration (what works and what doesn't work) will be shared and networked
- Local empowerment through education, training, actual experience, etc. is a primary objective
- Further research of regional stream system elements is needed to better understand the complexity of our local streams




# 2017 Stream Team Snapshot











# Quality Assurance

As a vital component of any conservation practice, the USC strives to assure both sound design and quality implementation of all practices. This is reinforced in the formalization of quality assurance and quality control, QA/QC, as part of our involvement with programs related to USDA, DEC and the Chesapeake Bay Program. The Stream Team has functioned under the following protocol for design and implementation of all stream projects and worked towards formalizing this under the Bay Program in 2017.

These QA/QC component include:

**Documented request and justification**

- Inventory & Evaluation Assessment
- Project Justification (Stream Project Ranking Criteria)
- Design Criteria
- Reporting Protocol
- O&M
- Project Monitoring



# Municipal Emergency Stream Intervention (ESI)

The ESI program achieves several of the USC objectives: that of providing the training and tools to build capacity to manage stream resources at the local level. To date the USC has nearly a dozen trained facilitators within its ranks to deliver this invocative program to local contractors, municipal officials, engineering firms and other agency personnel. These facilitators have trained over 1,900 individuals in and out of the watershed. While assisting the Ontario SWCD in delivering the ESI program was the only workshop held in 2017, funding was secured from DEC and NFWF sources to hold additional workshops scheduled for 2018 within the Susquehanna Watershed.





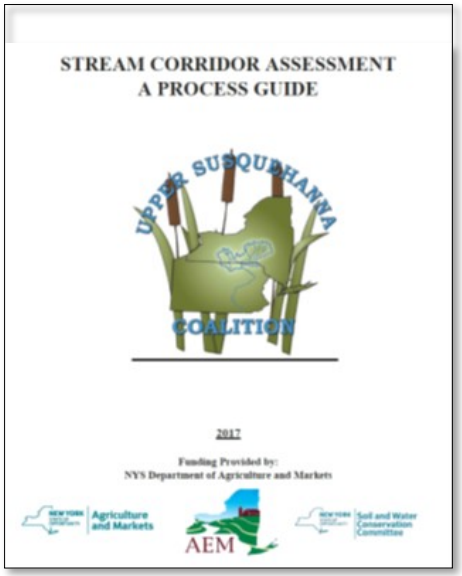





## Stream Corridor Assessment Guide

Funded through the NY Dept. of Ag and Markets, the USC Stream Team developed an assessment guide to aide in the recognition of environmental stressors on the integrated components of a stream corridor. This guide was developed under changing climates funds in order to provide an understandable tool for non-stream experts. While the planning protocols are focused for climatic resiliency in stream corridor management on farms, the tool works successfully for evaluating all corridor landuses. The Guide was developed and beta tested by a number of volunteer groups to assess their local watersheds. Trainings on the Guide included:

- 2017 PA Watershed Conference
- 2017 NY Water Quality Symposium
- 2016 Conservation Skill Workshop
- Butternut Volunteer Watershed Assessors
- Pony Hollow Watershed Assessors
- Trout Run Watershed Assessors


STREAM CORRIDOR ASSESSMENT
A PROCESS GUIDE

UPPER SUSQUEHANNA COALITION

2017

Funding Provided by:
NYS Department of Agriculture and Markets

Agriculture and Markets

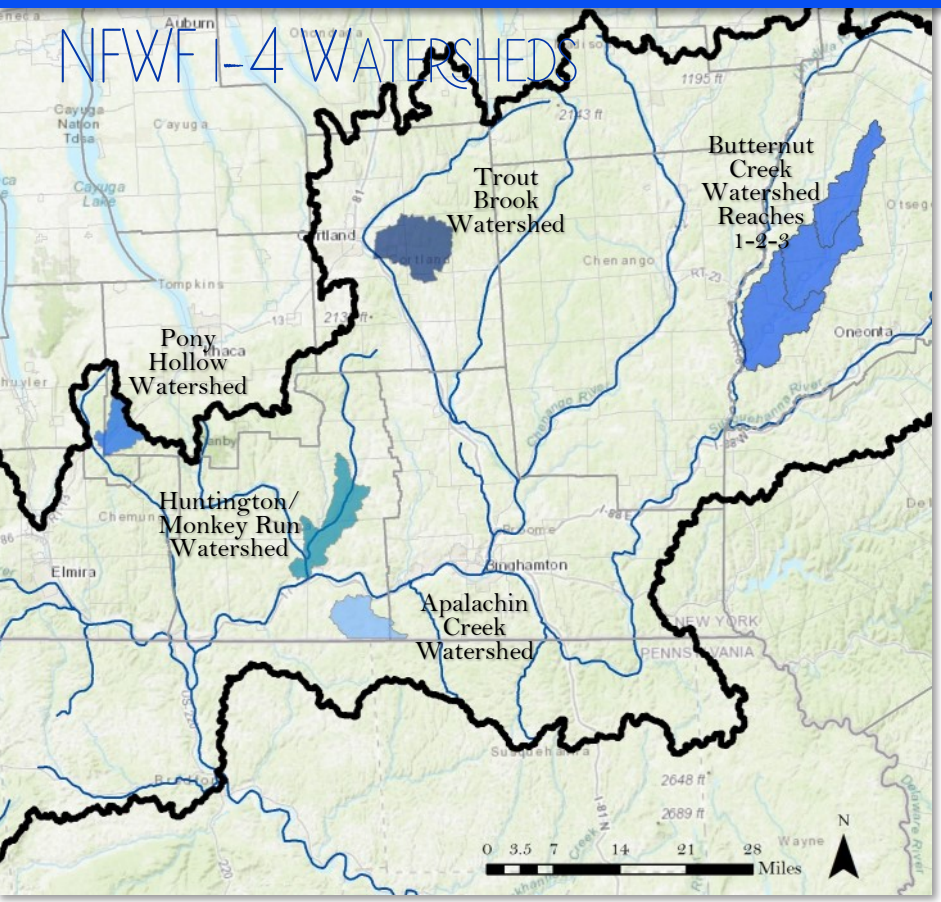
AEM

Soil and Water Conservation Committee

## North Atlantic Aquatic Connectivity Collaborative (NAACC)

NAACC provides a protocol for stream crossing assessments that has been adopted by 19 federal, state and regional departments and organizations. The protocol provides a common platform for determining the individual and ultimately watershed wide needs of aquatic organisms in their passage through the watershed that is often blocked by man-made stream crossings. Additionally, Cornell University has added a hydraulic model component to the assessment tool. The USC received a grant to train local SWCD staff as well as local volunteers to participate in the program. Funding through the USFWS enabled the USC to purchase tablets, rangefinders and other survey tools to begin targeted assessment. Additionally a training tool was developed to create awareness among local municipal authorities as to stream crossing importance. Accomplishments on this project include:

- Purchase of survey equipment for lending to SWCD's to conduct inventories
- Stream crossing inventories utilizing NAACC protocol in 7 watersheds completed
- Development of an educational presentation for local municipal officials
- Presentation of educational tool at Tioga and Cortland culvert workshops




# NFWF I-4 Project

Building local capacity is the cornerstone of the NFWF I-4 Project which progressed through 2017. Seven watershed communities were selected and working with the local SWCD the following accomplishments were realized:

**Project Organization**

- Upper Susquehanna Coalition Steering committee formed and meetings held to develop watershed selection criteria
- Watershed selection criteria developed and incorporated into application and sent to 19 SWCDs in USC region for watershed nominations
- Project orientation and overview developed and presented at USC Annual retreat and to Binghamton University meeting
- 7 Watershed Projects selected and initiated
  - ◊ Pony Hollow – Tompkins County
  - ◊ Trout Brook – Cortland County
  - ◊ Butternut – Reaches 1-2-3 – Otsego County
  - ◊ Apalachin Creek – Tioga County (NY) and Susquehanna County (PA)
  - ◊ Huntington/Monkey Run – Tioga County
- Watershed Coordinators named and periodic meetings held
  - ◊ Floodplain regulation training held
  - ◊ NAACC refresher training held

**Project Progress**

**Community Outreach**

Community Meetings held with watershed stakeholders in 6 of the watershed reaches

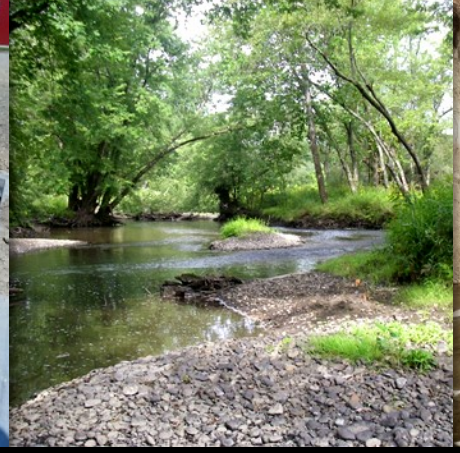
- Pony Hollow - Good participation from Cornell & Ithaca College
- Trout Brook - Good participation from SUNY Cortland
- Butternut Reaches 1-2-3 - Good participation from Otsego County Conservation Assoc., SUNY Oneonta, Catskill Headwaters Research Group, Butternut Valley Alliance
  - ◊ Public meetings held fall '16 and spring '17
  - ◊ Field training held Oct. 2016
- Apalachin Creek - Organizational meeting held with representatives from 2 Conservation Districts (Tioga-NY & Susquehanna PA) and local municipal officials Sept. 2016
  - ◊ Public outreach meeting held Oct. 2016
- Huntington Creek - Scheduling public meetings

**Watershed Background Reports**

- Pony Hollow – Report Completed
- Butternut 1-2-3 – Data compiled, report(s) being drafted
- Apalachin – Report drafted
- Huntington/Monkey Run – Report drafted
- Trout Run – Report 1/3 completed

**Watershed Assessments**

- Pony Hollow – Watershed physically assessed; Culvert assessment completed
- Butternut 1-2-3 – Mainstream physically assessed; Tributaries underway; Culvert assessment completed on upper watershed
- Apalachin – Watershed physically assessed; Culvert assessment not begun
- Huntington/Monkey Run – Watershed physically assessed; Culvert assessment not begun
- Trout Run – Watershed physical assessment nearing completion; Culvert assessment not begun




# Other Accomplishments/ Projects

**Berm removal** – reconnection of channel to floodplain

**Workshops & Trainings**

A number of workshops and trainings were held throughout and outside the watershed with USC member assistance, including:

- Stream Crossing workshops in Tioga and Cortland County
- Culvert Training for USC members in Cortland and Tioga
- Floodplain training for I-4 Watershed Coordinators
- Watershed meetings in Apalachin Creek, Butternut,
- NAACC trainings in Cortland
- PA Watershed Conference

**NRCS streambank design support**

USC stream team member worked with NRCS to survey and develop stream best management practices on a number of EQIP and EWP sites

**Chesapeake Bay Program**

The USC is represented on the Chesapeake Bay Stream Health Workgroup as well as sub-groups that are addressing BMP verifications, stream project permitting and stream work credits to model

**Hellbender support**

The USC continues to provide input and design and construction assistance to restoring Hellbenders to their natural habitat within the watershed.

**NYS DOT project monitoring**

USC stream team members continued to partner with NY DOT to conduct monitoring of several stream channel restoration sites.

**USC Member Assistance**

The USC Stream Team continues to provide educational, technical, assessment and design assistance to its member SWCDs

**Water Trails Assistance**

The USC has continued to partner with Counties and organizations such as the Chesapeake Bay Conservancy, the Endless Mts. Heritage Region and others to move forward with a comprehensive approach to water trails throughout the Susquehanna Basin

**Assistance to Other USC Committees**

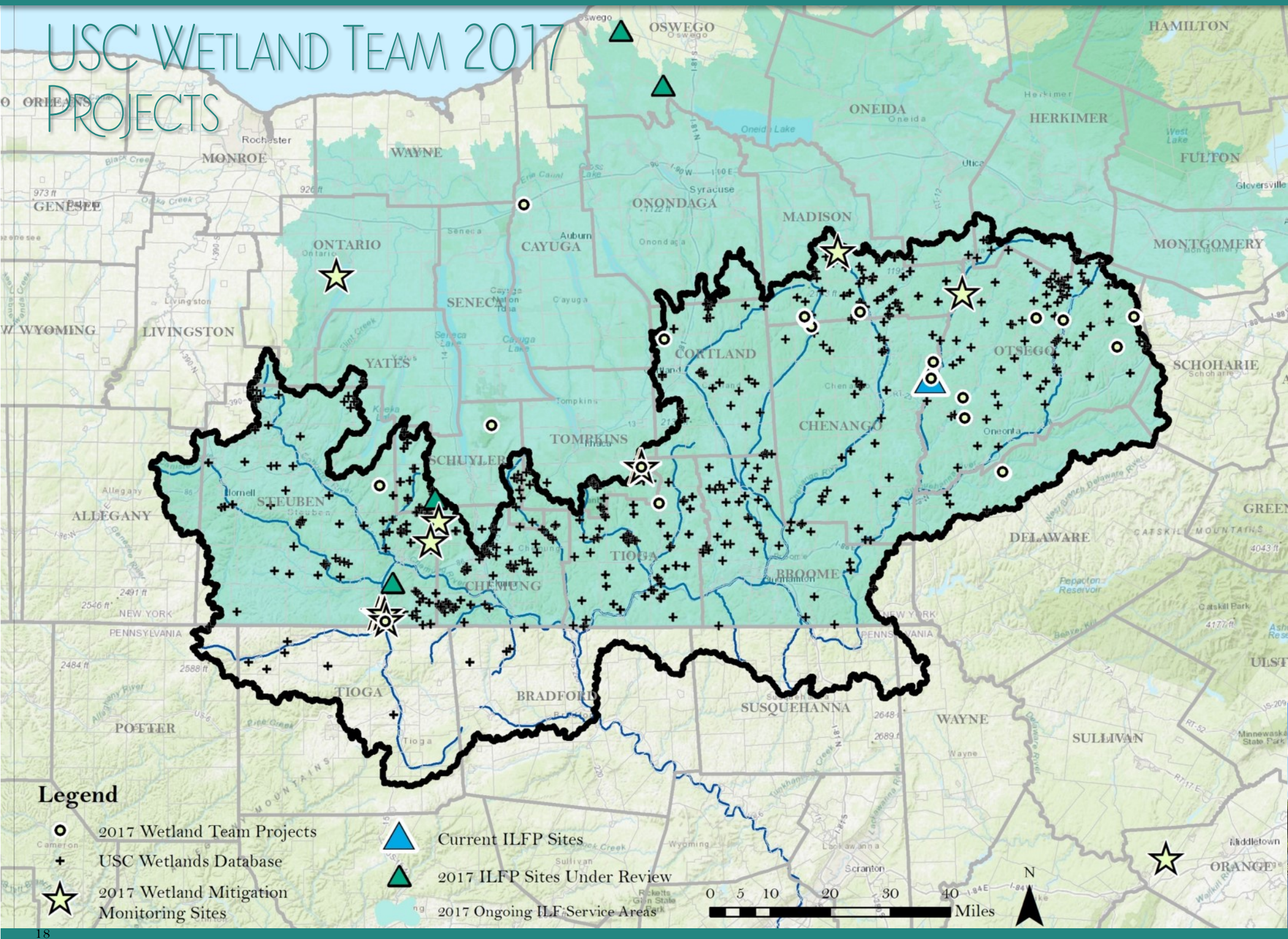
Technical and assessment assistance has been provided to the other active USC Committees in developing their respective programs and assessing project sites

**Participation in USC Watershed Forum**

**PA Dept. Conservation of Natural Resources Buffer Advisory Committee**

The USC participates in attending and providing assistance to neighboring agencies in PA in developing innovative approaches to stream buffer implementation

# USC Wetland Team 2017 Projects



# USC Wetland Team 2017 Projects

**Hellbender Rearing Facility – Agrafarma**

- Installed 30 aquariums in 6 recirculation systems

**DEC WQIP Berm and Wetland Project**

- Constructed 6 wetland features at Honey Hill State Forest in Otsego County
- Removed approx. 550 lineal feet of streamside berm at OLT Brookwood Point Preserve along an un-named tributary to Otsego Lake
- Removed approx. 1,400 lineal feet of streamside berm at the Stalter Farm in Delaware County along Treadwell and Ouleout Creeks
- Assisted Steuben County with the removal of approx. 900 lineal feet of streamside berm along an un-named tributary to Mud Creek
- Removed approx. 550 lineal feet of streamside berm at the McMahon Farm in Cortland County along Factory Brook

**EQIP Stream Projects**

- Installed approx. 900 lineal feet of rock rip-rap and 2 in-stream structures at the Beecher Farm Streambank Stabilization Project along Calhoun Creek in Otsego County
- Installed approx. 300 lineal feet of rock rip-rap at the Stalter Farm along Treadwell Creek in Delaware County

**Parslow Road Project – Otsego Land Trust**

- Constructed 4 wetland features and restored approx. 2 acres of grassland habitat at the Parslow Road Preserve

**DEC Buffer Protection**

- Assisted with development of buffer projects at Birdseye Hollow State Forest in Steuben County
- Completed culvert removal and in-stream structure at the O'Keefe Site in Otsego County

**Lusczcek Farm Project**

- Assisted Tioga SWCD with installing 2 culverts and approx. 150 lineal feet of constructed riffle

**Finger Lakes national Forest Project**

- Assisted USFS with the construction of 5 wetland features and culvert removal in Schuyler County

**NYS DOT Wetland Mitigation**

- Constructed 0.8 acres of wetlands and installed 3 in-stream structures at the NYSDOT Flatiron Road Wetland Mitigation Site in Tompkins County

**Mill Book Flood Control Site**

- Excavated approx. 0.2 acres of accumulated sediments from the Mill Brook Flood Control Site in Chenango County

Continued on next page….

# 2017 Wetland Team Snapshot









Salt Marsh Mitigation Bank - Constructed in July 2017

# Salt Marsh Mitigation Bank

The USC Wetland Team partnered with The Wetland Trust, a NY based land trust, to construction an Inland Salt Marsh Mitigation Bank in Cayuga County. This project involved the development of a saline spring head, and the redirection of that spring from it's previous outlet, a ditch that drained directly to Crane Brook, into the constructed 1.8-acre wetland basin. Next steps will include planting and monitoring this mitigation bank, one of the only of its kind, and representing a globally rare wetland community type.

# Wetland Mitigation Sites

In 2017 USC Wetland Team staff was responsible for monitoring 15 wetland mitigation sites throughout New York State. Monitoring of these sites requires visits throughout the year to collect vegetative community composition data, invasive species data, inventories of woody plant material, hydrology records and soils data and the compilation of collected data along with narrative and proposed maintenance need into report format for submission the Army Corps of Engineers. Each mitigation site has a defined number of monitoring years, ranging from 5 to 10 years. In 2017, USC completed monitoring on two mitigation sites (pictured left), and received Army Corps notification of their successful completion. The Millennium Flatiron site was USC's first 10-year mitigation project to receive Army Corps "signoff" and approval, an accomplishment to celebrate.

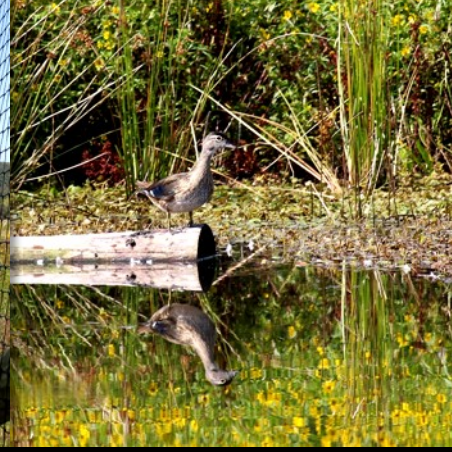


Millennium Flatiron Wetland Mitigation Site



Broome Airport Wetland Mitigation Site



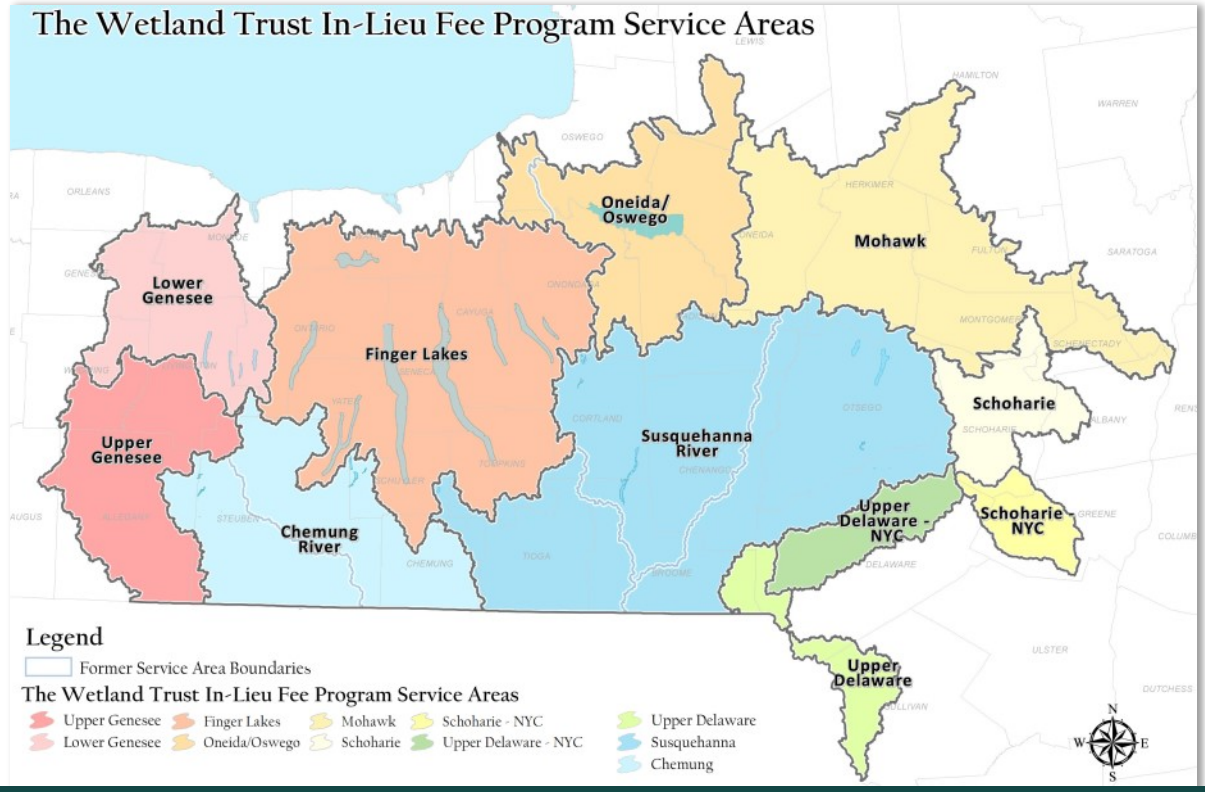



# Susquehanna Basin and Surrounding Watersheds In-Lieu Fee Program

The USC Wetland team, again partnering with The Wetland Trust, continued work on the ILFP in 2017, assisting in the writing and planning of projects in watersheds throughout central New York. As indicated on the page 20 wetlands map, USC is currently working on 4 new ILF projects in 6 watersheds, and several adjacent watersheds are expected to come online soon with one large site already moving to the monitoring phase (*photos above are from the Golf Course ILF site*).

Development of ILFP project sites require:

- the identification of potential acquisition properties along with the evaluation of those properties for wetland restoration potential;
- review of possible negative aspects to the site including invasive species and permitting concerns;
- working through site acquisition including price negotiation, and working with surveyors and lawyers to ensure no roadblocks arise;
- completing a wetland mitigation plan for the site including grading, planting, and site plans stipulating success criteria;
- construction of the site following plan specifications including 10 years of site maintenance, and finally,
- monitoring the site to ensure all deliverables are met.



Upper Susquehanna Coalition

# 25 Years and Counting

## Upper Susquehanna Watershed Forum

In Celebration of the USC's 25 Year anniversary, we hosted the 2nd Annual Watershed Forum at Binghamton University. During the morning session Rich Batiuk (U.S. EPA Chesapeake Bay Program Office) gave a keynotes presentation, followed by members of the USC Teams highlighting the milestones accomplished over the last 25 years. The afternoon session included a wide variety of quest speakers, 27 in total, on the emerging challenges faced in the coming years, science based watershed management, and resiliency in the watershed. In addition to the speakers, 21 organizations hosted display tables, 12 poster presentations submitted, and there were over 200 attendees!

This celebration would not have been possible without our dedicated partners; American Dairy Association North East, Binghamton University Center for Integrated Watershed Studies, New York State Department of Environmental Conservation, SUNY Oneonta, and the U.S. EPA Chesapeake Bay Program.









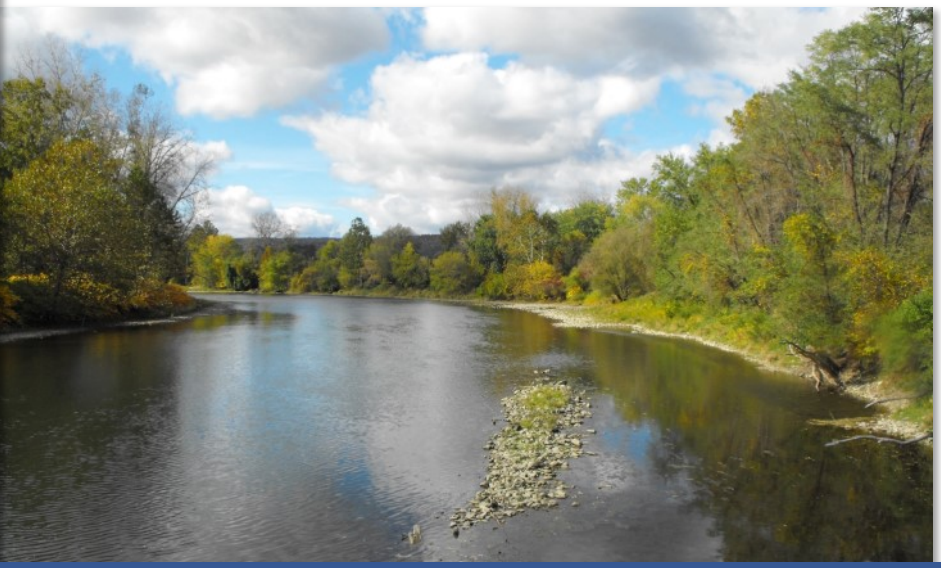




## More to Come

With 25 years of collaboration, implementation and innovation under our belts we're looking ahead to more to come. We are pleased with the trajectory of our program as our teams expand and tackle new and rising issues, strive to overcome hurdles to effective projects, and have a larger impact on our watershed.

Thank you to all of our partners and members who have helped every step of the way!



## New Funding opportunites

- NYSDEC WQIP Expanding Wetland Restoration in the Susquehanna River Basin ($314,000 for wetland restoration on private property) - striving to increase wetland restoration across the watershed through improved partnerships and implementation.
- NFWF Building Upon an Integrated Watershed Approach ($877,210 for implementation and education for Ag, Buffer, Stream, & Wetland Work) - expanding what works in the USC program.
- Road Ditch Assessments & Piloting Implementation - targeting road ditches, a tremendous sources of nutrients and sediments in the watershed, this project will target improved road maintenance, and BMP tracking.
- Innovative Buffer Project in Upper Susquehanna Watershed addressing Emerald Ash Borer Beetle and other buffer implementation issues.

## Other 2018 Project Priorities

- Assist New York State Department of Environmental Conservation with Phase III Watershed Implementation Plan Development
- New York Rising Community Program funded watershed assessments in Broome & Tioga County.

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