

2022 ANNUAL



REPORT



Upper Susquehanna Coalition

We are committed to protecting and improving water quality and natural resources in the Upper Susquehanna River Basin in New York and Pennsylvania.

2022 USC Board of Directors



Chair
Jeff Parker



Vice-Chair
Jennifer Kelly



Member at Large
Steve Lorraine



Member at Large
Amanda Barber



Member at Large
Wendy Walsh

A Note from USC's Coordinator

This year finally allowed us to begin meeting in person once again, for our team and regular meetings! It was great to get back to face to face discussions and debate on programs, projects, and opportunities. We were also very successful in grant applications this year that we plan to use to build capacity, support practice planning, design and implementation in all of our focus areas. Take a look through this year's annual report and look at the progress we have made to date. With the network of staff, SWCD members and partners we have developed throughout our 30 years of being a coalition, it seems that no obstacle is too big!

USC Staff

Watershed
Coordinator:
Wendy Walsh
Lydia Brinkley
Chris Brogdale
Emily Dekar
Thomas Flynn
Ranier Lucas
Jeremy Waddell
Melissa Yearick

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UPPER SUSQUEHANNA COALITION 30 Years in Conservation

This summary highlights activities across the Upper Susquehanna River Watershed through our 30 years in conservation. This is total units accounting for practices that are active in 2022 with implementation that has occurred from 1992-2022.

ACTIVITY



Over 1,660,000
acres of on farm best management practices



118k +
dairy cows meeting nitrogen requirements for precision feed management



Over \$45m
in funding for USC projects and watershed activities



253
manure storage facility systems installed

PROGRESS



5.4 m
pounds of Nitrogen removed from the Chesapeake bay edge of tide



671,000
pounds of Phosphorus removed from the Chesapeake bay edge of tide



104.9 m
pounds of Sediment removed from the Chesapeake bay edge of tide



Over 3,100

dump trucks of NPS removed from Chesapeake Bay Waters



just a few 2022 USC Highlights

Wheat
Onondaga Cour

Cortland Stream
Training

Eldridge Park
Volunteer Planting



Park Station Vernal
Pool Construction



Emergency Stream
Intervention Training
for 30 attendees from
SWCDs, Municipalities,
NGOs and DEC

WO Program Project -
Tioga County, PA



Wetland and buffer
restoration site

2022 USC Activity Snapshot

Ag



264 Farms with Whole
Farm Verification



13,526 acres of
Cover Crops Installed

Buffer

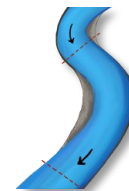


43,203 plants planted in the
watershed



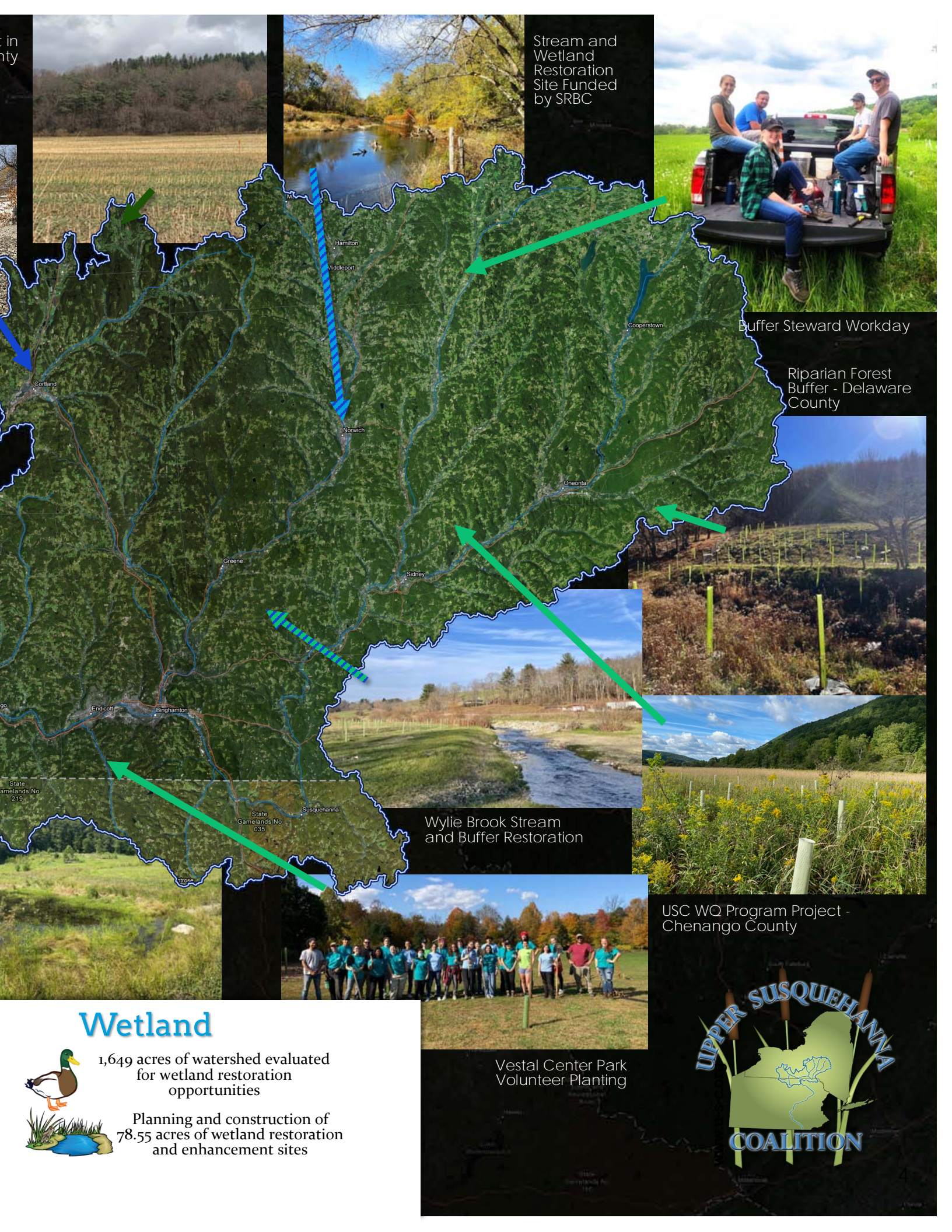
200.5 acres of Riparian Area
Planted and 813 acres of Buffer
Monitored

Stream



8,155 feet of stream
restoration projects designed

Hosting of 4 Stream trainings,
reaching 101 participants



Stream and Wetland Restoration Site Funded by SRBC

Buffer Steward Workday

Riparian Forest Buffer - Delaware County

Wylie Brook Stream and Buffer Restoration

USC WO Program Project - Chenango County

Vestal Center Park Volunteer Planting

Wetland



1,649 acres of watershed evaluated for wetland restoration opportunities

Planning and construction of 78.55 acres of wetland restoration and enhancement sites

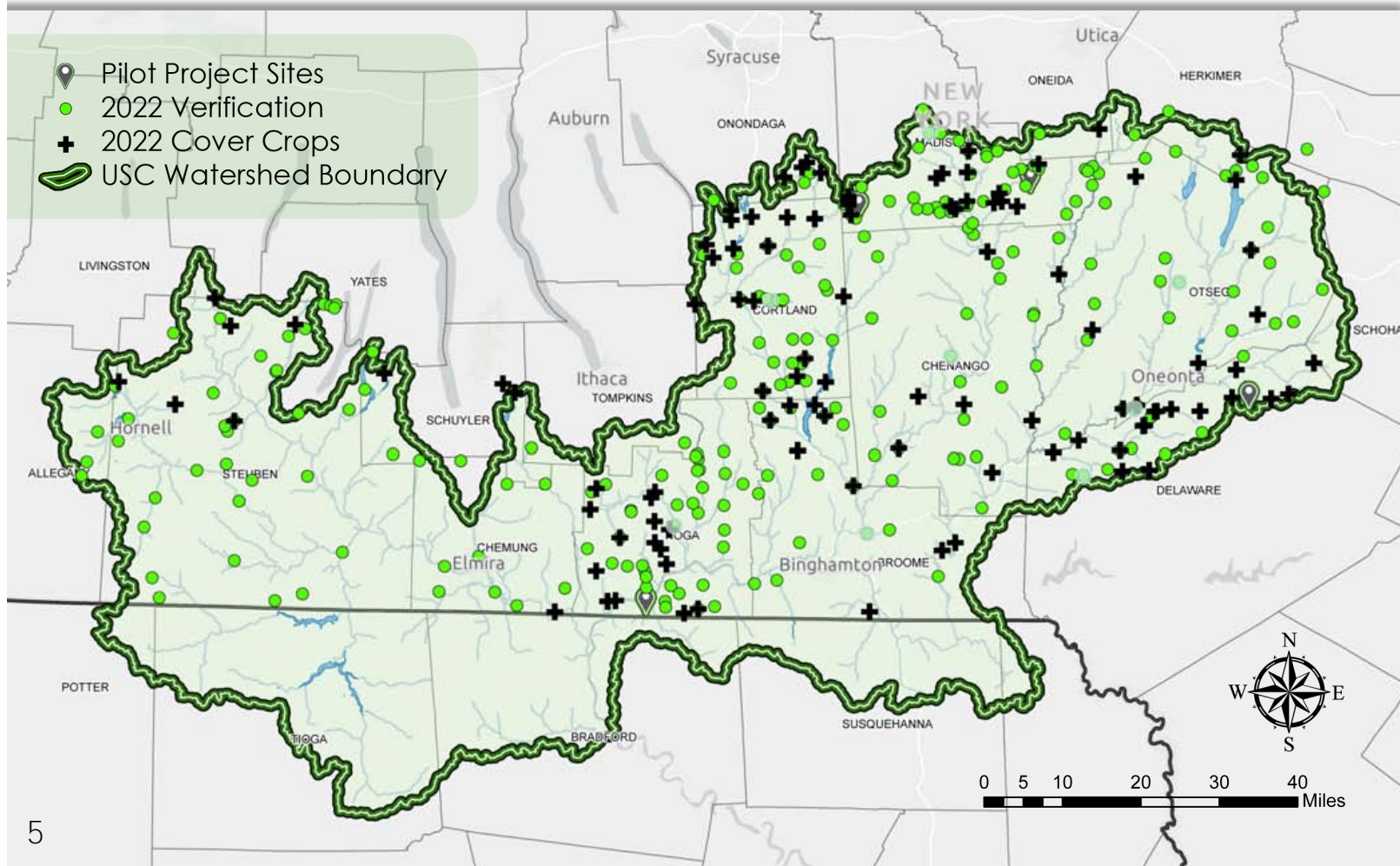


2022 Ag Team Update

The USC Ag Team consists of SWCD technical staff from multiple counties and our USC Ag Coordinator working together to support and assist agricultural operations within the Upper Susquehanna Watershed. Together we work to improve water quality both locally and ultimately in the Chesapeake Bay. The USC Ag Team is also responsible for verifying, tracking and reporting all of the nutrient and sediment reducing projects implemented across the watershed in NY, demonstrating our efforts to meet load reduction goals for the Chesapeake Bay.

2022 BMP Verification Reimbursement Program

In 2022, reimbursement funding totaling \$168,800 was contracted to counties to assist with the costs and time associated with the USC's BMP Verification Program. Through this program, BMP Whole Farm verification was completed on 115 farms that were identified through a random sampling process, 54 additional farms that were selected by counties for whole farm verification, 10 stream project sites, 10 resource improvement practices, 5 practices that had been previously verified and marked as re-inspections, as well as whole farm verification on 38 CAFO farms. In addition to the contracted farms and practices, there was whole farm verification completed on an additional 57 farms that were not required as part of this program.



Landowner Pilot Program

The USC secured funding through NYS DEC to assist with match associated with NYS funded project through programs such as Agricultural NonPoint Source and Climate Resilient Farming Programs. Eligibility requirements for this funding was that the project must be within the boundaries of the Upper Susquehanna Watershed in NYS, project must have a current

NYS program funding contract through NYS Ag & Markets, Permits must have been already obtained at the time of application, and all projects or portions of the project that would be covered by this funding must be completed by September 30, 2022.

There were 4 project applications received from 3 counties in 2022, totaling a funding request of \$199,109.81, contracts were developed with those counties outlining expectations for project implementation. Implementation through this funding includes practices such as: Access Roads, Silage leachate Collection, Fencing, Riparian Buffer, Watering System, Covered Barnyard, Covered Manure Stacking Area, Concrete Waste Storage Facilities (Liquid), and Streambank Stabilization with Riparian Forest Buffer Establishment. The USC plans to continue this program for future years.

Cover Crops

2022 was our best year yet for the USC Cover Crop Implementation Program, funded through the NYS Department of Environmental Conservation. This funding is part of the Chesapeake Bay Implementation Grant (CBIG) that the USC received from the NYSDEC. This program focuses on increasing Cover Crop implementation acres in the NY portion of the Upper Susquehanna Watershed. Cover Crops are considered "Annual Practices," meaning that they only receive credit in the Chesapeake Bay Model the year they are implemented. 2022 was the 6th year of this funding program with just over \$500k to support the program. There was 113 farms across 12 counties that devoted time and money into implementing cover crops across the watershed. In total approximately 3,153 new acres, and 10,383 continued acres were implemented in the fall of 2022 through this program.

264

Farms with whole Farm Verification

\$168k

Reimbursed for BMP Verification

113

Farms with Cover Crops

\$199k

Landowner Cost Share Pilot Program Funds Allocated

4

AgNPS Pilot Projects

\$500k+

Spent on Cover Crop Implementation

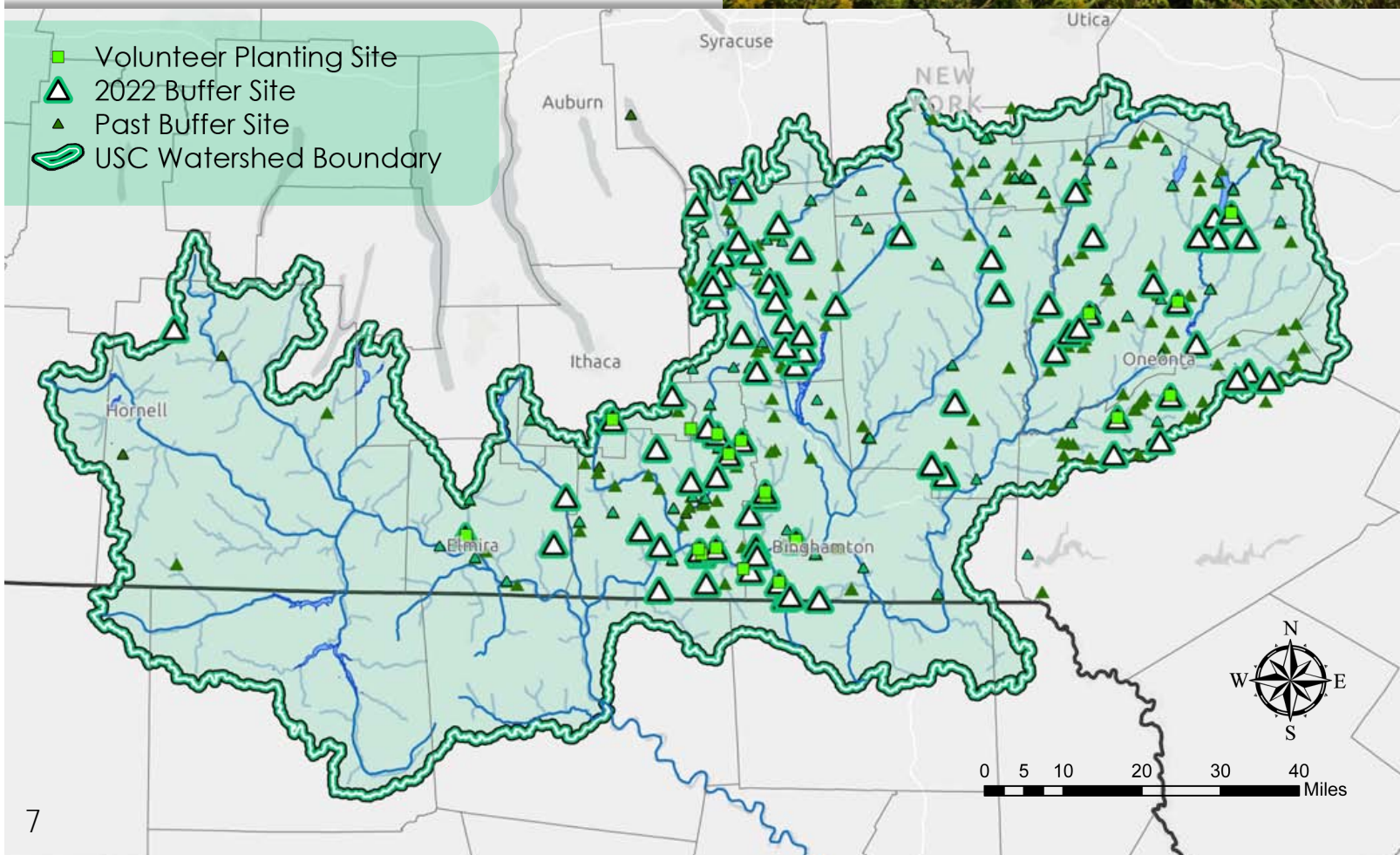
2022 Buffer Team Update

The goal of the USC Buffer Team is to promote the restoration and long-term functionality of riparian areas for water and habitat quality. These goals are achieved through innovative programming. The team is dedicated to ensuring practice functionality through education, outreach, and technical assistance. Data collection to better understand buffer functionality is also a priority as is providing technical support for buffer issues to USC members. We strive to engage partners and utilize partnerships to leverage additional work to promote the mission of the USC.

Summary of Buffer Team Programs

2022 was another bustling year with busy planting and stewarding seasons. Coordination of funding has set our buffer programs and staff up with secured funds for the next few years allowing us to focus on getting projects in the ground!

This year our Trees for Tributaries Program was offered for both spring and fall planting seasons, growing the number of plants we get in the ground, as well as the number of volunteers



participating in the program with us. To sustain the Trees for Tributaries Program for years to come, we've entered into a multi-year agreement with a growing contractor, securing containerized stock for spring 2023 and 2024.

Our Buffer Steward Program has become easier to manage in terms of data, since stewards are now reporting their observations via Survey 1-2-3. Stewards were able to participate in a virtual training and then 6 in-field work days to build camaraderie. The Buffer Steward Program has become a great steppingstone for future conservation district employees, with summer stewards becoming full time staff. This continues to be a program where we can "try" employees out and one steward has been kept on as district staff!

This was the first year that USC was awarded an Arbor Day Foundation Grant to plant 30,000 plants. The funding helped to provide match for several projects, especially on non-agricultural land where it can be a challenge to obtain match for projects since we don't have access to the usual state agricultural funds. We've been awarded another grant to plant 30,000 plants in 2023!

Our agreement with NYS DEC ended in October 2022 with a lot of accomplishments. This agreement, that we refer to as the "State Buffer Program" supported Conservation Reserve Enhancement Program (CREP)

incentives and re-enrollment support, our stewardship program, planning, and implementation. Through this program we assessed 1,271 acres of riparian forest buffer for plant survival, planted 92.8 acres of buffer, planned 397 acres for buffer installation, and paid the CREP State Practice Incentive Payment on over 128 acres through 7 counties and 15 projects.

Building staff capacity in riparian buffer planning has also been a priority in 2022 as it will continue to be in 2023. Through United States Forest Service and National Fish and Wildlife Foundation funds we are supporting new and existing staff throughout the watershed to continue building the buffer team.



1,153
Volunteer
Hours

160
Sites
Assessed for
Survival

43,203
Plants
Planted

813.7
Acres
Monitored

68
Trees for
Tributaries
Sites Planted

200.5
Acres
planted

2022 Stream Team Update

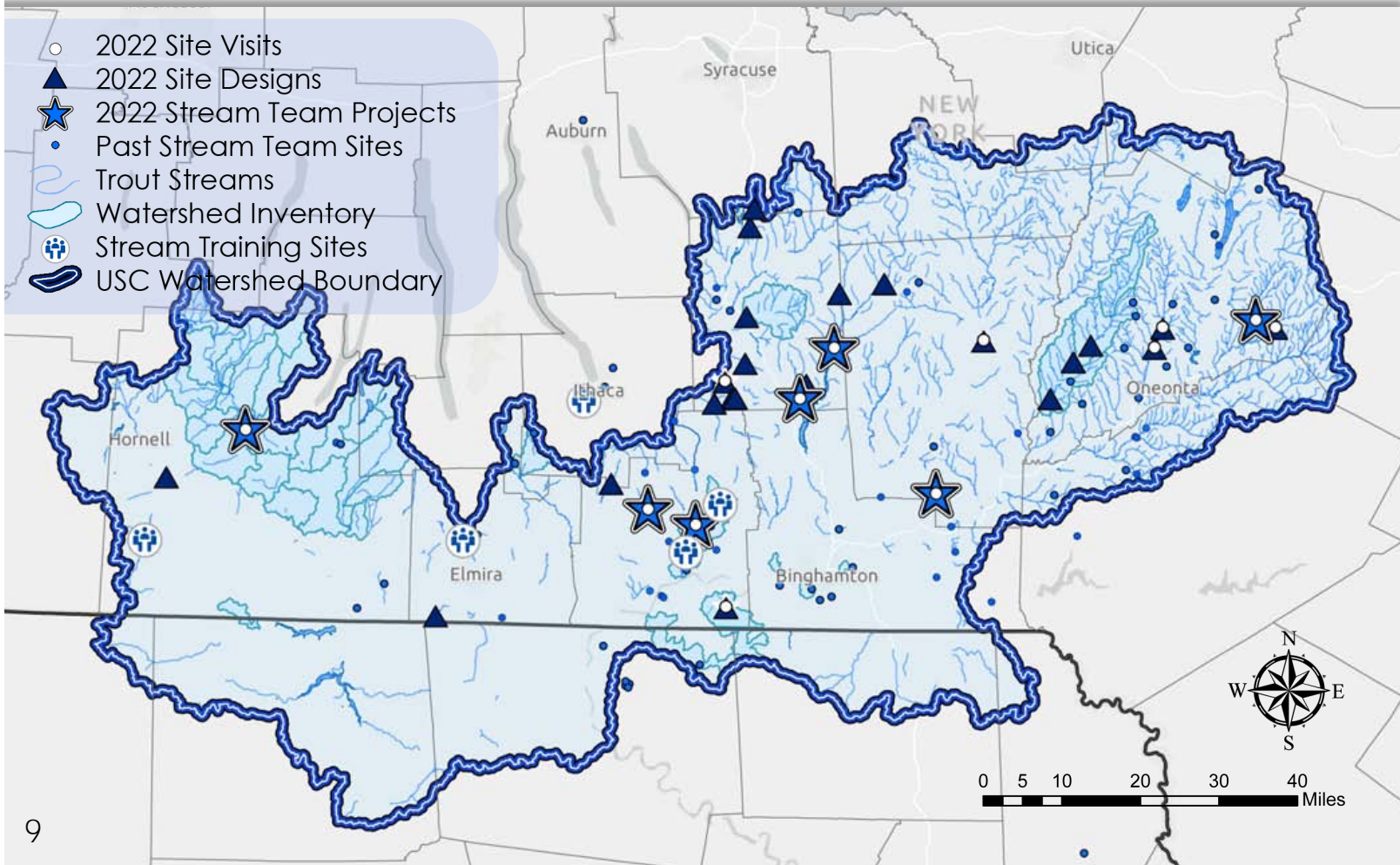
The Upper Susquehanna Coalition's Stream Team is a representative characteristic of the membership of the USC. Each member SWCD identifies, plans and implements stream corridor related projects individually or with the educational, technical, planning or financial support from the collective USC. The map below identifies the 7 projects implemented, 19 projects designed, and 37 projects evaluated throughout the USC portion of the basin this year, along with past restoration sites and recent and ongoing watershed assessments.

ESI Training

With the development of the virtual Emergency Stream Intervention Training in 2021, our Stream Team can now provide ESI trainings three ways. We can provide completely virtual trainings as was hosted in the February USC training for 23 participants, we can provide ESI sessions in person using our training videos as was done at the Tioga SWCD hosted session for 34 Highway Department Staff, and we can provide the standard interactive in-person training as was done at the June training hosted by Steuben SWCD. We used all three methods to train 87 participants in 2022.



34 attendees representing almost every town in Tioga County



Stream Design Training

The Upper Susquehanna Coalition Stream Team identified a need to build capacity of local stream project designers in the watershed. As such, we developed a training process utilizing funding from NFWF. The intent of this training is to train individuals or small groups (2-3 people at a time), to be able to provide basic rip rap designs in a consistent format using NRCS standards, and in a format that our lead engineering, Brian Reaser, Tioga County SWCD P.E. is comfortable with reviewing and stamping.

The first block of the training is underway with the initial group from Cortland County SWCD. To date, the two attendees have been trained in initial site evaluation,

determining survey needs for a site, the actual survey of sites where both attendees have participated, and conducted multiple site surveys with Stream Team supervision and assistance. These attendees have been instructed through a classroom session on the design phases of taking the survey information and beginning to manipulate the cross-section data for design, checking design flows and velocities and in general the principles of design for bank stabilization. During construction of two stream project sites, the attendees were present to observe construction oversight, on-site decision making, and following design drawings and specifications. Throughout this portion of the field training, discussions centered on design principles and decisions for each site, and stream sites in general. There are two other groups (Tompkins County and Broome County) who are ready to begin their training and this will commence shortly into the New Year.

A step by step design package and guide was also created by the USC Stream Design team for design purposes where member counties who are building design capacity can utilize for consistency throughout the basin. This will also allow for more efficiency in design and engineering review needs,

101

Participants
in 2022
Stream
Team
Trainings

2.1

miles of
stream sites
evaluated

35

Projects
Visited

8,155

Linear feet
of stream
restoration
designed

4

Stream
Trainings
hosted

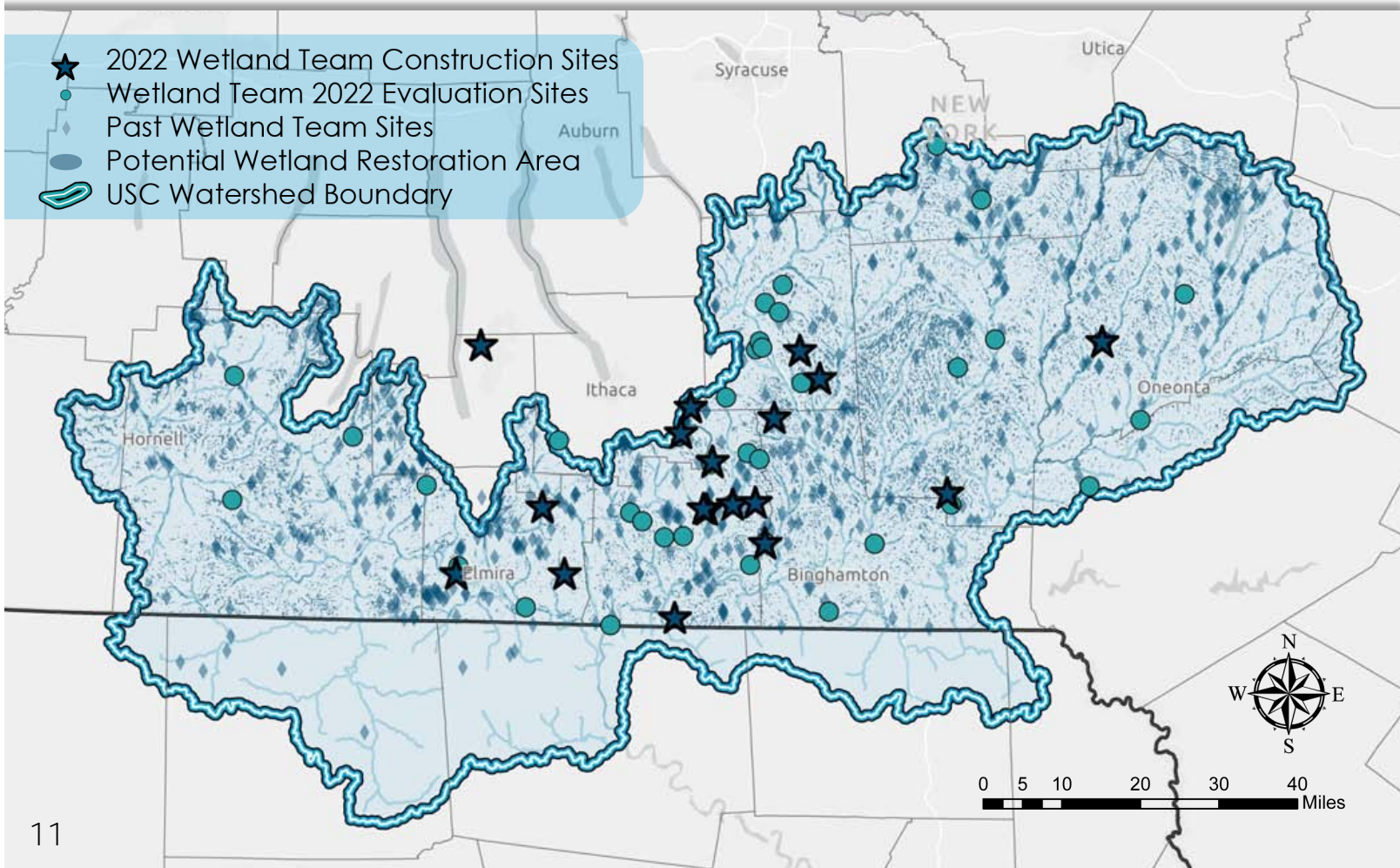
2022 Wetland Team Update

The USC Wetland Team is an example of an effective programmatic approach to delivering wetland conservation at a watershed scale. While wetlands are understood to provide nutrient and runoff retention as well as habitat to many unique species, their benefits are often overlooked across the watershed. We are dedicated to increasing wetland restoration and expanding wetland education and understanding across our region. We support a wide variety of wetland-related programs, providing site review, monitoring, design, construction and maintenance assistance to partners, members and our other USC teams alike.

Expanding Wetland Restoration Funding

In 2022, we invested wetland team time in the identification and acquisition of funding for wetland restoration projects and in project and proposal development. We collaborated on the submission of four proposals, each of which included wetland restoration in addition to other important restoration targets. With the acquisition of three of these proposals in 2022, our wetland team is funded to restore 163 acres of wetlands over the next four years, a significant bump in available funds over recent years.

While project goals vary, much of the funding received will prioritize wetland restoration on cropland and other Agricultural land uses, ensuring the highest possible nutrient reductions received through the implementation of these sites. Partners and districts are encouraged to contact our wetland team with potential sites at wetlandteam@u-s-c.org to begin the review process.



Prioritizing Planning in 2023

With the Chesapeake Bay Program placing additional emphasis on those BMP categories that are seen as falling far short of bay targets, USC redoubled efforts to address these disparities in the achievement of New York's wetland restoration goals. Moving forward, we plan to develop a New York State Chesapeake Bay Watershed Wetlands Restoration Action Plan to address barriers currently decreasing wetland restoration activities.



Wetland Outreach

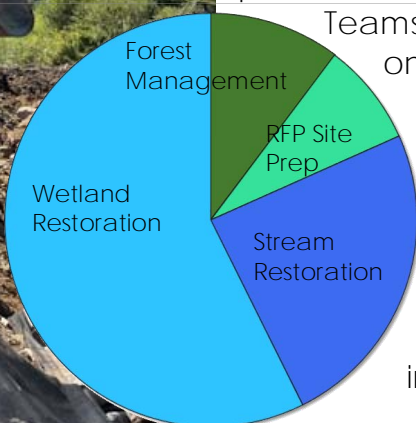
Our wetland team is committed to providing wetland education to watershed residents. Annually, at the request of our partners, the various members of our team share content related to wetland biology, functions and values, restoration, and how to identify wetlands with demonstrations and terminology that meets the needs of our audience. In recent years, our partners in outreach have included County SWCDs, Universities, primary school classrooms, and non profits, sometimes at specific events, such as Cortland County's annual Environmental Field Days, and sometimes at the request of the organization.



USC Construction Team

The USC wetland team has long supported implementation projects in the watershed. With two excavators, a bulldozer, a skid steer, two tracked dump trucks, and experienced operators on hand, our team provides critical assistance to other USC

Teams and partners in getting projects on the ground. In 2022 we implemented 18 restoration projects in 7 counties for a total of 487.9 construction hours. This time was divided between wetland restoration, stream restoration, forest management and riparian forest buffer implementation and site prep.



1,649
Acres of potential work area reviewed

Funding on hand for
163
acres of wetland restoration

487.9
Equipment hours in 2022

23.05
Acres of restoration and enhancement work in 2022

18
Projects with Equipment Time in 2022

2022 Outreach Committee Update

26+

Hours of content on our YouTube Page

168

2022 Facebook Posts

1,764

YouTube views

378

Restoration Volunteers

24,000

People reached through outreach activities

28,491

Facebook users reached

In 2022, we continued to expand our educational outreach opportunities with the development of virtual stream and buffer steward trainings that allowed more viewers to participate, as well as 35 in person events spread amongst our teams. We again partnered in hosting our 3rd year of Watershed Wednesdays with 153 participants tuning in over 8 sessions and topics such as No-Till Gardening, Forestry BMP's, Streambank Erosion, and Climate Change. These sessions were all recorded and posted to our website for later viewing accounting for 182 additional views.

We partnered with the Tioga County Agricultural Resource Group to assist with their "Sundaes at the Farm" event with over 800 attendees. We

produced 4 quarterly newsletters which were sent out to our member SWCDs and partners as well as posted on our website, and published 168 Facebook posts



Fall 2022



Summer 2022



Spring 2022



Winter 2022

throughout the year. Through our outreach efforts, our outreach distribution list grew to 206 people in 2022, increasing the audience of our regular outreach updates.

In 2023 we plan to continue with most of our outreach priorities, expanding where possible to reach more watershed residents and be a more effective tool for our members and partners. One program that will be put on hold in 2023 is our Watershed Wednesdays series. We plan to host an in person Watershed Forum for the first time in three years next year. Coming Fall 2023:

[2023 Upper Susquehanna Watershed Forum](#)

2023 Committee Representation/ Participation

- Chesapeake Bay Program (CBP) Agricultural Workgroup
- CBP Citizen's Advisory Committee
- CBP Forestry Workgroup
- CBP Riparian Forest Buffer Action Team
- CBP Stream Health Workgroup
- CBP Water Quality Goal Implementation Team
- CBP Watershed Technical Workgroup
- CBP Wetland Workgroup
- CBP Ag Modeling Team
- New York State Ag & Markets Municipal Sub-Committee
- USDA-EPA Task Force on Crediting CB Conservation Investments
- CBP Habitat Goal Implementation Team

2023 Priorities

USC Ag Team

- Increase Nutrient Management Planning Efforts through NFWF Funding
- Develop a Baseline Nutrient Management Plan for NY
- Increase BMP Implementation to improve water quality
- Continue to improve verification and reporting programs
- Develop and Pilot an Online Record Keeping Application for landowners to utilize
- Coordinate 1st round of RCPP Renewal Funding

USC Buffer Team

Our goals are to sustain and bolster the buffer steward program with the intent of getting more maintenance done on newer projects. We'd like to obtain larger stock for projects so we can get some visible shade on streams faster. Since there are some new faces, we're hoping to collaborate with partners on trainings for new and existing buffer team staff. Look out for Water Quality Symposium forestry track courses, a Plant Materials Center training in May, and the Pennsylvania Buffer Summit in June. Lastly, we are going to continue building staff capacity throughout the watershed.

USC Stream Team

- Accelerate implementation of stream restoration projects in partnership with a diversity of landowners.
- Secure funding to support stream restoration efforts in the watershed
- Host virtual ESI Training Session and continue to expand our online training resources
- Build capacity of stream team with a stream design training

USC Wetland Team

- Accelerate wetland restoration and enhancement implementation projects in partnership with a diverse group of landowners.
- Refocus restoration efforts on publicly owned lands and reengage with state agency staff across the regions.
- Work with partners to develop NY Chesapeake Bay Wetlands Action Plan.

USC Outreach Committee

- Watershed Forum 2023
- Develop additional educational videos for social media sources
- Continue to develop project spotlight videos for social media and events
- Provide education and outreach support to the SWCDs
- Participate in tabling events to promote district and USC programs.

USC Overall Goals for 2023

- Apply for and secure funds to support capacity and funding gaps for project implementation
- Continue to meet local needs and strive toward 2025 TMDL goal

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