



# Tinker's Creek Watershed Partners





# THANK YOU!

Tinker's Creek Watershed Partners would like to thank the following partners for their support throughout 2016! These relationships are essential to help protect and restore the Tinker's Creek watershed.

## Because of You...

*Our most important partnership.*

This annual report is all about the partnerships that help us meet our mission.

### 2016 Board of Directors

Justin Czekaj, P.E., CPESC - President  
Ana Burns - Vice President  
Michael Liptak, Ph.D. - Treasurer  
Maureen Wise - Secretary

Sandy Barbic  
Petar Bojovic  
Kendrick Chittock  
Joshua Herchl  
Katherine Holmok  
Hope Jones  
Dr. Chris Miller, Ph.D., P.E.  
Chad Reel  
Jim Rodstrom, P.E., CPESC  
Daniel Svoboda  
Jennifer Syx  
Charlie Uray, Jr., P.E., P.S.

### Staff

Harry Stark, Jr., RS, MPA, CPMSM - Executive Director  
Babette Gowda - Watershed Coordinator  
Jennie Brancho - Assistant Watershed Coordinator

### Community Members

Aurora	Reminderville
Beachwood	Streetsboro
Bedford	Twinsburg
Bedford Heights	Twinsburg Township
Glenwillow	Valley View
Hudson	Walton Hills
Macedonia	Warrensville Heights
Northfield	

### Grant Providers

Northeast Ohio Regional Sewer District (NEORSDD)  
Ohio Environmental Protection Agency (EPA)  
Western Reserve Land Conservancy (WRLC) and Dominion

### Community Partnerships

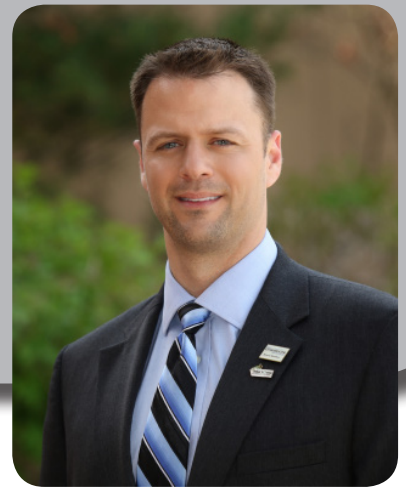
Central Lake Erie Basin Collaborative  
Chagrin River Watershed Partners  
Chagrin Valley Engineering, Ltd.  
Cleveland Metroparks  
Cleveland Museum of Natural History  
Cuyahoga County Board of Health  
Cuyahoga Land Bank  
Cuyahoga River Restoration  
Cuyahoga Soil and Water Conservation District  
Geauga Soil and Water Conservation District  
NEO PIPE Council  
Ohio Chapter of the Sierra Club  
Ohio Prairie Nursery  
Ohio Stormwater Association  
Portage Soil and Water Conservation District  
Summit Metro Parks  
Summit Soil and Water Conservation District  
The Nature Conservancy  
West Creek Conservancy  
Western Reserve Land Conservancy

### Business Members

Advanced Drainage Systems, Inc.  
Davey Resource Group  
inSITE Advisory Group  
Good Nature Organic Lawn Care

# Letter From Our President

Justin A. Czekaj, P.E.



As President of Tinker's Creek Watershed Partners (TCWP), it is an honor to report on our accomplishments over the past year. These accomplishments are directly associated to efforts of the individuals that form the core of the organization. Our volunteer Board of Directors is populated by dedicated professionals from a variety of industries. Ana Burns, Michael Liptak, and Maureen Wise serve as officers and have brought structure and leadership to the organization. Each board member contributes their own professional excellence to sustain and drive the organization.

The Board of Directors is anchored by the efforts of our staff. TCWP continues to contract with Harry Stark as our Executive Director. Mr. Stark's responsibilities include long-term planning, grant management, fiscal accountability, and organizing the Ohio Stormwater Conference. Babette Gowda has continued in her role as Watershed Coordinator. Mrs. Gowda provides on-the-ground assistance to our community members as well as grant writing, event coordination, program management, and educational outreach. The organization also welcomed the addition of Assistant Watershed Coordinator, Jennie Brancho. The support services and program management she has provided the organization have been invaluable.

Tinker's Creek Watershed Partners continues to host the enormously successful Ohio Stormwater Conference. Over the past nine years, the Ohio Stormwater Conference has grown from a small local forum to an internationally recognized event. The 2016 conference was held at Sharonville Convention Center in Cincinnati and included 820 attendees, 95 exhibitors, and 90 speakers. The 10th Anniversary of the Ohio Stormwater Conference will be held at Kalahari Convention Center in Sandusky on May 10 – 12, 2017.

I would like to extend our gratitude to the Northeast Ohio Regional Sewer District, Ohio Environmental Protection Agency, Western Reserve Land Conservancy, and Dominion. The grant dollars provided by these organizations enabled TCWP to provide key services to our member communities and complete projects within the watershed.

TCWP continues to provide community assistance and outreach to our member communities in the form of the annual Mayors' Breakfast, workshops, and training opportunities. These outreach activities can be used to fulfill the requirements of the Ohio EPA NPDES permit. Most recently, TCWP has created a Stormwater Good Housekeeping Program that will have substantial benefits for participating communities. We strive to provide quality services to our member communities and look forward to their continued expansion in the years ahead.

TCWP continues to be one of the premier watershed organizations in the state. The ultimate success of TCWP is built on partnerships throughout the watershed and the surrounding region. We appreciate the community, business, and organizational partnerships that we have built over the past eleven years. We remain dedicated to growing these relationships to protect and restore the Tinker's Creek watershed.



# What We Offer Our Communities

**Tinker's Creek Watershed Partners** is working hard to improve water quality and habitats by strengthening our relationships with all of the communities within the watershed. Providing services to our community members is valuable for both the local residents and the watershed as a whole. Community memberships are available with Tinker's Creek Watershed Partners and allow us to provide communities with watershed protection and educational services. Please visit us at [www.tinkerscreek.org](http://www.tinkerscreek.org) for more information.

**Tinker's Creek Watershed Partners provides the following member services:**

- Assistance with stormwater program permit requirements and stormwater control measure (SCM) practices, including a comprehensive good housekeeping program.
- Assistance to local governments and councils to understand and implement new MS4 permit requirements and updating regulations where appropriate.
- Training opportunities on watershed management practices for landowners, community professional, and municipal workers. These trainings will help communities meet MS4 permit requirements. Training topics include but are not limited to:
  - Bioretention and Rain Garden Implementation and Maintenance
  - Detention/Retention Basin Maintenance
  - Permeable Pavement Maintenance
  - Green Roof Implementation and Maintenance
  - Rainwater Harvesting Practices and Maintenance
  - Trees as SCM: Proper Selection, Planting, and Maintenance
  - Pollution Prevention/Good Housekeeping Overview
- Resource assistance for local governments on economic incentives of watershed management, conservation, pollution prevention, and other practices.
- Assistance in implementation of SCM practices that support on-site management practices, erosion and sediment control, riparian and wetland setbacks, and other improved local practices on new and redevelopment projects to address water quantity and quality issues.
- Assistance in the preservation and protection of open spaces that aid the community in watershed management, conservation, pollution prevention, and other practices.



# Tinker's Creek Watershed Map

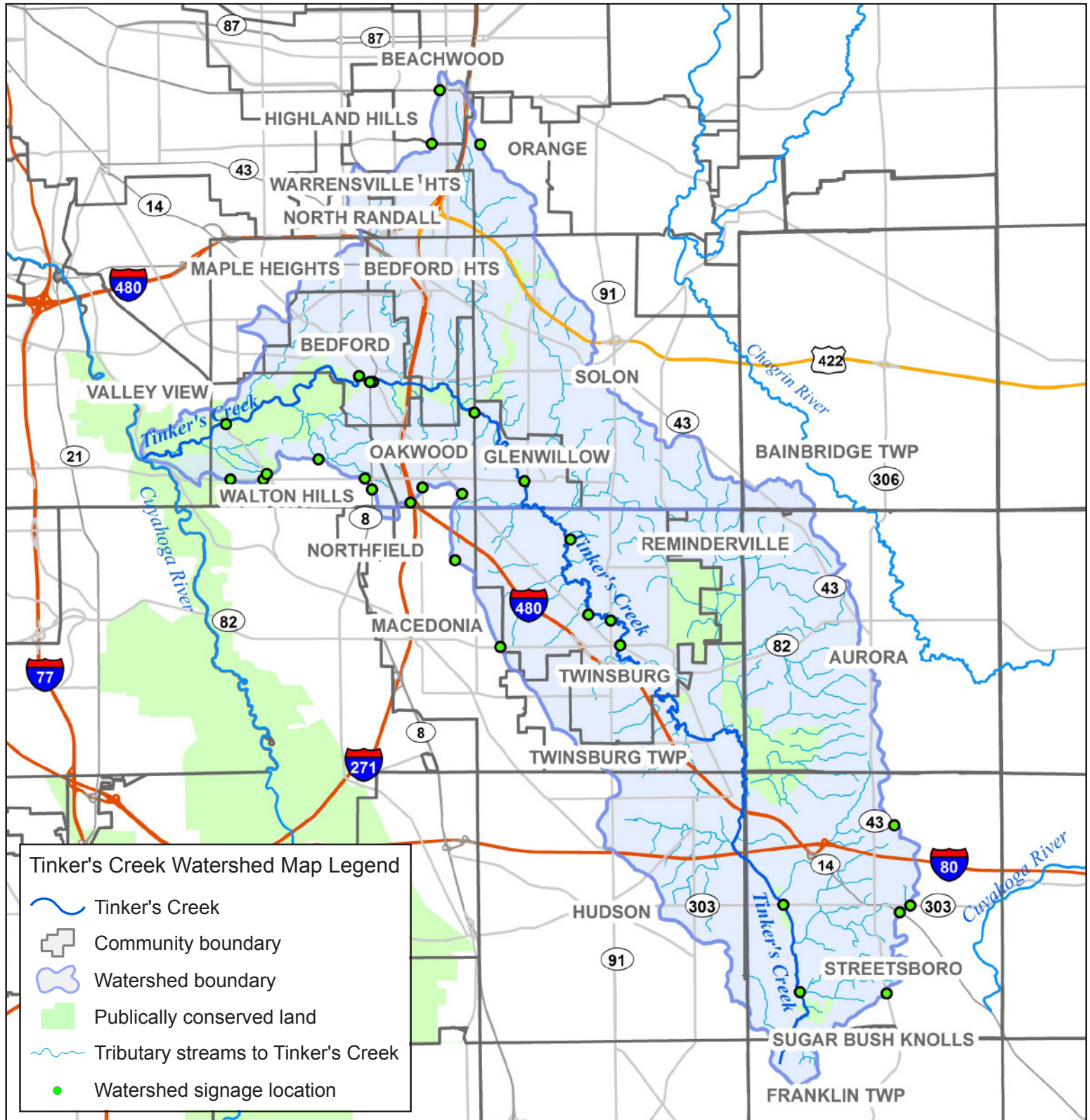
**Tinker's Creek Watershed (TCW) Spans 4 Counties and 24 Communities!**

**13 Cuyahoga County communities = 41.7% of TCW is in this county**

**6 Summit County communities = 30.6% of TCW is in this county**

**4 Portage County communities = 27.2% of TCW is in this county**

**1 Geauga County community = 0.6% of TCW is in this county**



# Grants Awarded in 2016

## Ohio EPA Section 319 Grant



Tinker's Creek Watershed Partners, Big Creek Connects, Mill Creek Watershed Partnership, and West Creek Conservancy collaboratively received a Section 319 grant totaling \$25,000. The award will be split between the four organizations to fund updates to the Non-Point Source Pollution Implementation Strategies (NPS-IS) Plan as the watersheds transition from a Watershed Action Plan to the NPS-IS.

## Northeast Ohio Regional Sewer District (NEORSD) Service Agreement

NEORSD entered into contract with TCWP for \$35,000 to support stormwater and water quality efforts in the watershed communities. A portion of this service agreement provided funding for the watershed coordinator and other contracted positions that helped TCWP serve our communities. This service agreement also helped fund educational outreach to public officials and collaboration efforts to conserve important natural areas.



## Western Reserve Land Conservancy and Dominion 2016 Watershed Mini Grant Program

Western Reserve Land Conservancy (WRLC), in partnership with Dominion, launched a Watershed Mini Grant program to serve working watershed groups throughout the state. TCWP received a very generous award totaling \$1,100 to host the Streetsboro Tree Steward Program: Right Tree, Right Place to educate residents about the benefits of trees for stormwater pollution control and to plant a tree at the Streetsboro Police Station as a stormwater control measure.



Western Reserve Land Conservancy

land • people • community



Dominion®



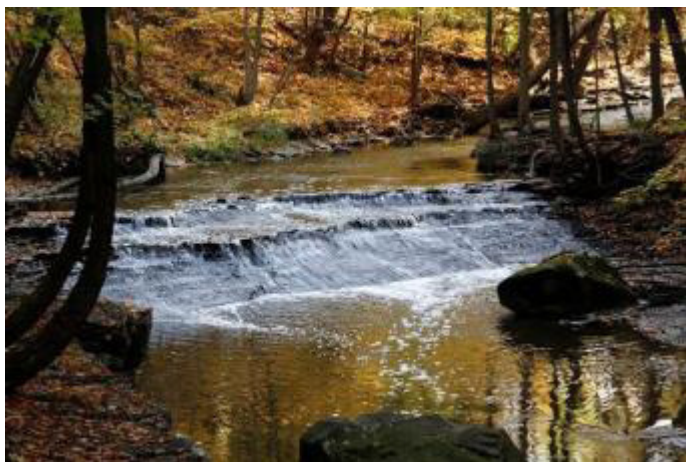


# Engaging Communities

## **Streetsboro Tree Steward Program: Right Tree, Right Place November 10, 2016**



Led by arborist Colby Sattler from Western Reserve Land Conservancy and Chad Clink from Holden Arboretum, the Tree Steward Program was designed to educate attendees about urban and community forestry practices. TCWP discussed how trees help protect the watershed and reduce stormwater runoff. The event included a demonstration tree planting to help educate attendees on the proper method of planting for longevity and best functioning of the tree. Streetsboro residents were also entered into a raffle to win one of three trees. This program was held at no charge to residents due to a generous grant from the Dominion Mini Watershed Grant.



## **Crooked River CWMA Invasive Plant Removal Tour September 26, 2016**



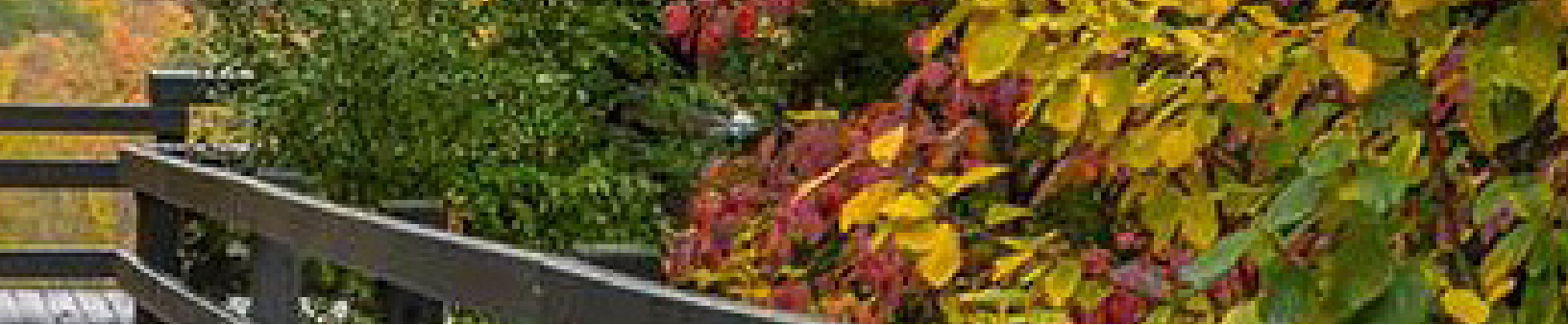
The Cooperative Weed Management Area (CWMA) coordinated a tour of three sites undergoing invasive plant removal treatment: Kelsey Creek in Cuyahoga Falls, Hudson Run at Hudson High School in Hudson, and Herrick Fen in Streetsboro. This treatment is designed to slow the spread of invasive plants and increase ecological function in the Cuyahoga River Watershed Area of Concern. Tailored to municipal staff involved in landscape and natural areas management decisions, the tour demonstrated proper invasive removal practices and how the CWMA could help communities in the watershed.

## **Monday Meet Up: What's up with Tinker's Creek Watershed Partners? September 12, 2016**



This event was held in collaboration with Cleveland Metroparks through their Watershed Volunteer Program. The partnership between the Metroparks and TCWP enabled a land acquisition and stream restoration along Tinker's Creek in the Bedford Reservation. Now, TCWP relies on volunteer support to monitor water quality and stream bank stability. The event included an information session and a tour of the restoration sites.





### **Hudson Green on the Green Day** **September 17, 2016**



implement and conducted a rain garden workshop.

TCWP was an exhibitor at the Hudson Green on the Green event with other environmental organizations. At this event, TCWP provided educational materials on a variety of green infrastructure BMPs that homeowners could

### **Streetsboro Rain Barrel Workshop** **July 27, 2016**

TCWP hosted a rain barrel workshop in Streetsboro City Hall to teach attendees how to harvest rainwater for gardening needs and to combat stormwater pollution within the community by constructing and installing a rain barrel. Attendees received all of the items needed to construct a rain barrel at the workshop, including a 55-gallon white barrel, downspout diverter, and spigot. TCWP provided step-by-step instructions and guidance on assembling the rain barrel.

### **Glenwillow Community Day** **August 20, 2016**

At the Village of Glenwillow's Community Day, TCWP provided information on various green infrastructure BMPs for homeowners. TCWP also demonstrated how to construct a rain barrel from recycled 50-gallon containers using a downspout diverter and spigot.

### **Eaton Health and Wellness Expo** **June 15, 2016**

Tinker's Creek Watershed Partners was an exhibitor at the Eaton Health and Wellness Expo at the company's branch in Beachwood. TCWP helped attendees discover the watershed in which they live and provided educational materials on a variety of BMPs including native lawns, sustainable lawns, rain gardens, rain barrels, trees for stormwater, and more.

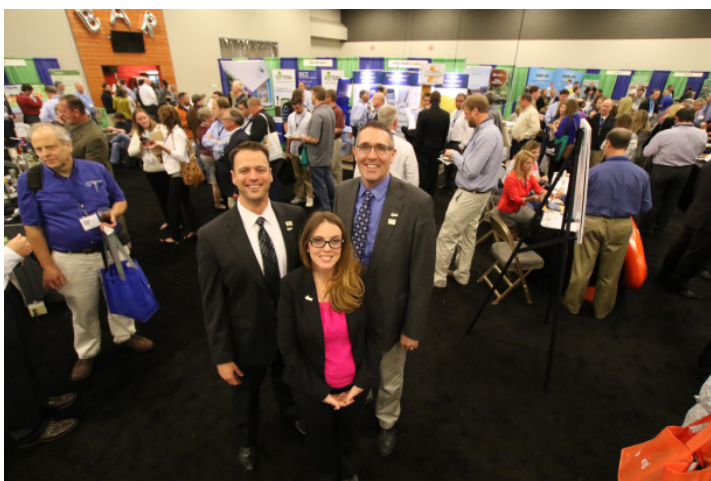


# Engaging Communities

## **Ninth Annual Ohio Stormwater Conference May 4-6, 2016 Sharonville Convention Center, Sharonville**

The Ohio Stormwater Conference is hosted by TCWP to provide a forum for sharing technical and policy information on the management of stormwater. TCWP has been the host of the conference since 2008 and has received support from the Ohio Stormwater Association to help bring the event to a larger audience. The conference is held in different cities around the state and has grown each year and is now ranked as one of the largest regional stormwater conferences in the nation.

The Ohio Conference has become the largest regional stormwater event in the United States. The 2016 Conference was held in Sharonville, Ohio, on May 4-6. The conference had a record-setting 820 attendees, 95 exhibitors, and 90 speakers. The 2017 conference will be May 10-12 at Kalahari Conference Center in Sandusky, Ohio.



## **Macedonia Rain Barrel Workshop May 10, 2016**

TCWP hosted a rain barrel workshop to teach attendees how to harvest rainwater for gardening needs and to combat stormwater pollution within the community by constructing and installing a rain barrel. Attendees received all of the items needed to construct a rain barrel at the workshop, including a 55-gallon white barrel, downspout diverter, and spigot. TCWP provided step-by-step instructions and guidance on assembling the rain barrel.



## **Lake and River Conference May 18, 2016**

The TCWP Watershed Coordinator was a presenter during a panel discussion on the Communication, Outreach, Partnership, and Advocacy at the event. The Coordinator discussed how the right partnerships can help a watershed organization be successful. NEORS and the City of Akron held this event to share best practices and information in the wet-weather fields.





## **Minimum Control Measure (MCM) 6, Pollution Prevention/Good Housekeeping Training**

TCWP provides training sessions to municipal workers on MCM 6, Pollution Prevention/Good Housekeeping as required by the Ohio EPA's Stormwater Permits for municipalities. This training focuses on best management practices (BMPs) that are important to municipal operations such as good housekeeping, spill response, materials storage and handling, landscape maintenance, and street maintenance. Employees working in fleet maintenance, garages, parks, recreation facilities, street maintenance, and other departments all benefited from this training. All Member Communities have the opportunity to take advantage of these training sessions. The communities of Beachwood and Hudson participated in these events.

## **Newsletters, Articles, and Social Media**

The TCWP newsletter is produced quarterly and distributed to over 450 individuals. Articles on specific topics in watershed protection were shared with communities for publication and distribution to their residents. Some of the topics covered in 2016 included planting trees for stormwater, general stormwater information, sensible salting practices for homes and communities, the importance of protecting riparian areas, rain gardens, rain barrels and cisterns, the importance of protecting green space, and the importance of planting native plants. The TCWP website contains technical reports, maps, educational materials, and links to watershed partners. TCWP also communicated with the public through Facebook and Twitter, updating our followers about events and information occurring throughout the watershed and beyond.

## **Regional and Collaborative Events**

- Northeast Ohio Regional Sewer District Open House
- Cuyahoga Area of Concern (AOC) Symposium

# Projects In the Watershed

## Warrensville Heights Country Lane Project

This project is a land acquisition project off of Emery Road in Warrensville Heights. The property has 3 acres of emergent and forested wetlands with numerous vernal pools scattered throughout. In addition, the parcels contain 240 linear feet of Hawthorne Creek and 215 linear feet of intermittent headwater stream channel for a total of 455 linear feet of waterways. The remaining acreage contains second growth beech-maple forest and mature red oak-hickory forest. Permanent preservation of these properties and the associated streams and uplands protect downstream waters by capturing sediment, treating runoff, and protecting important habitat for aquatic and terrestrial organisms. Protection of these parcels ensured that the ecological functions provided by the habitats will stay intact and continue to provide beneficial physical, biological, and chemical functions for this watershed. TCWP submitted a Clean Ohio Green Space Conservation Fund application for the purchase of this parcel.







## **Solon St. Mary's Stream Restoration Project**

In 2014, the City of Solon was awarded \$105,600 from a Section 319(h) Nonpoint Source Project Grant to implement restoration of a stream on the property of St. Mary's Ukrainian Catholic Church. This section of stream on the property was impacted by severe streambank erosion that increased sedimentation to Hawthorne Creek, over-widened the channel, and also threatened a utility pole and wastewater infrastructure. The aptly named St. Mary's Stream Restoration restored 430 linear feet of stream through natural streambank stabilization and 1 acre of riparian corridor and vegetated floodplain on Hawthorne Creek, a tributary of Tinker's Creek. In 2015, toe rock material and erosion control matting were installed along with trees and shrubs to stabilize the stream and restore access to the floodplain. This helped reduce flooding and erosion downstream.

Throughout the project, Chagrin River Watershed Partners assisted the city with project reporting, plan review, construction oversight, and project outreach. TCWP provided watershed related information and outreach by providing updates about the project via their social media outlets, e-newsletter and when applicable at meetings and events.

## **Streetsboro Tree Steward Planting**

Trees intercept rainfall, increase soil infiltration and storage, and minimize runoff through processes like evapotranspiration while returning better quantity and quality water to groundwater. This helps property owners meet stormwater regulations naturally. For residential homes, savings are approximately \$10.80 per gallon of stormwater prevented from entering the sewer system, while commercial properties savings increase to \$23.36 per gallon of stormwater. There are methods to increase the effectiveness of trees as a stormwater control measure (SCM), including correct selection for location and proper planting and pruning practices. Participants learned these methods in the Tree Steward Program held on November 10, 2016, at the Streetsboro Police Station. Colby Sattler from Western Reserve Land Conservancy and Chad Clink from Holden Arboretum demonstrated proper tree planting to the attendees by planting three trees at the site. Accompanying the trees planted will be an educational sign displaying the benefits of planting trees for as a stormwater measure and the correct way to plant a tree for longevity and health of the tree.

# Projects In the Watershed

## Crooked River Cooperative Weed Management Area (CR CWMA) Projects

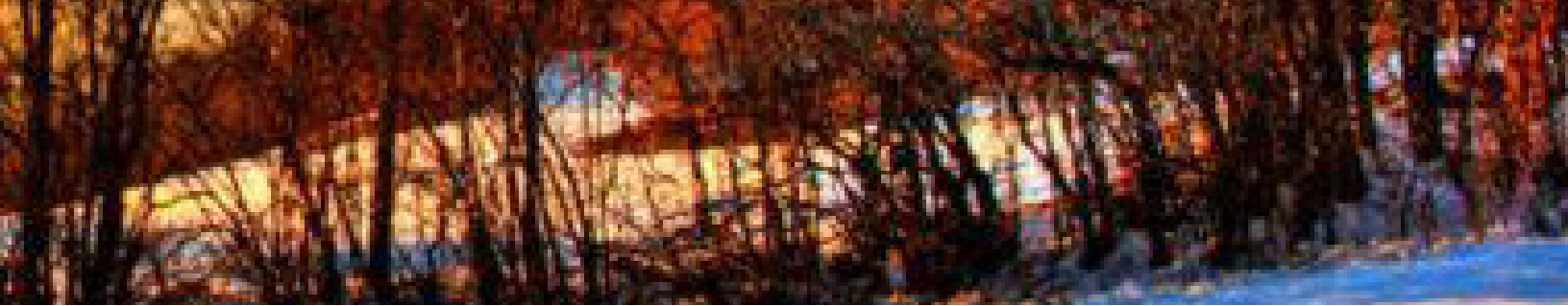
The Crooked River Cooperative Weed Management Area (CR CWMA) is a collaboration of major land stewards and other landowners in the Cuyahoga River watershed of the Lake Erie basin, all motivated by conservation of land and biological diversity in Northeast Ohio. The purpose of CWMA is to share knowledge, staff, equipment, and material across jurisdictional boundaries for invasive vegetation species detection and management. Each CWMA is based on a Memorandum of Understanding (MOU) among partners. In the Cuyahoga Watershed, several agencies have hosted seasonal crews working with land managers across the watershed. The CWMA share some large and small equipment, and the group has a mobile tool cache of equipment and supplies for crews or volunteer projects. Participation in the Crooked River CWMA takes many forms. There are two types of signatories to a Memorandum of Understanding, depending on how deeply involved in land management a participating agency or landowner is. The CWMA also have a Steering Committee to assist with work plans, community projects, and outreach.

### Kelsey Creek:

In 2013, the City of Cuyahoga Falls hired Biohabitats to restore 1,000 linear feet of Kelsey Creek. Raising the channel invert re-established floodplain connection. Minor adjustments were made to protect the sewer lines and adjacent ball fields. Floodplain benches were excavated, and eroding banks were graded to a stable angle. Both sides of the channel were planted with native riparian vegetation. Mowing limits were established to protect the benefits created by the natural forest buffer including slowing overland flow, processing nutrients and sediment from the channel, and providing shading and woody debris to the channel. This project was funded using an Ohio EPA Surface Water Improvement Fund Section 319 Grant. Future plans for the site include adding an arboretum into the park and using the stream as an education piece for the arboretum and adjacent school.







### **Hudson High School:**

The Cuyahoga County Board of Health contracted Biohabitats to restore 2,000 linear feet of this tributary. The restoration project was designed to improve water quality and riparian habitat while also dissipating stream energy, minimizing erosion and sedimentation, and protecting existing infrastructure. This restoration also provided an additional 2,000,000 gallons of storage to reduce storm flows at the site. The site was divided into three reaches for the restoration. Each reach represents an ecosystem indicative of Ohio's riparian systems, including a wildflower meadow, forested wetland, and scrub/shrub emergent wetland. Now, the site is a part of Hudson High School's Land Lab, a living outdoor classroom, and inspires and facilitates ongoing stewardship and education.



### **Herrick Fen:**

Herrick Fen is jointly owned by The Nature Conservancy (TNC) and Kent State University, and TNC manages it as a dedicated state nature preserve. This 140-acre preserve remains threatened by urban encroachment, siltation, and invasive plant species like buckthorn, cattail, and reed canary grass. Efforts have been underway over the last decade to remove an old dam and restore the preserve's hydrology. The ecological goal for this preserve is to restore and maintain the biodiversity of the fens through aggressive invasive species control and hydrologic restoration.



# About Tinker's Creek Watershed Partners

Tinker's Creek Watershed Partners is a non-profit 501(c)(3) watershed organization officially established in 2006. Our mission is to protect and restore water quality and habitat of the Tinker's Creek watershed through community partnerships. The Tinker's Creek watershed drains 96.4 square miles and is the largest tributary to the Cuyahoga River. The watershed area spans 24 communities in Cuyahoga, Summit, Portage, and Geauga counties.

TCWP is governed by 16 dedicated volunteer Board Members who bring a variety of expertise in the fields of stormwater management, environmental education, engineering, natural resources conservation, planning, and economic development. The daily activities of TCWP are carried out by the Watershed Coordinator, Assistant Watershed Manager, and Executive Director with the support of the Board of Directors. The state-endorsed Tinker's Creek Watershed Action Plan (WAP) guides TCWP in their efforts to protect and restore the watershed and educate the public. The WAP along with the group's mission shapes the goals of TCWP.



[www.tinkerscreek.org](http://www.tinkerscreek.org)  
[info@tinkerscreekwatershed.org](mailto:info@tinkerscreekwatershed.org)

## Tinker's Creek Watershed Partners Goals

- Increase community officials' and the public's understanding about the natural, economic, and social value of protecting water resources.
- Promote low-impact and conservation development practices that balance environmental integrity with human development.
- Educate watershed communities about their daily activities and habits that negatively impact environmental surroundings and provide alternative approaches to those practices.
- Encourage a no-net-loss wetland mitigation policy where mitigation remains localized within the watershed rather than outsourced to other watersheds.
- Lead a watershed-based approach to decision making that advances the concept of connectivity between the different political jurisdictions within the watershed.
- Increase recreational opportunities in the watershed by connecting greenways, corridors, and bike paths between the different jurisdictions.