



Tinker's Creek Watershed Partners



2017 Annual Report

THANK YOU!

Tinker's Creek Watershed Partners would like to thank the following partners for their support throughout 2017! These relationships are essential to help protect and restore the Tinker's Creek watershed.

2017 Board of Directors

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

Sandy Barbic
Kendrick Chittock
Joshua Herchl
Katherine Holmok
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Charlie Uray, Jr., P.E., P.S.

Staff

Harry Stark, Jr., RS, MPA, CPMSM - Executive Director
Kate Chapel- Watershed Coordinator
Kristin Aldridge - Assistant Watershed Coordinator

Business Members

Advanced Drainage Systems, Inc.
Davey Resource Group
Environmental Design Group
EnviroScience
ERM
Good Nature Organic Lawn Care
Hop Tree Brewing
HULL
inSITE Advisory Group
Mark Haynes Construction
Partners Environmental Consulting, Inc
Robinson Lawn & Garden Center
Stephen Hovancsek and Associates, Inc
The Shelly Company
Western Reserve Land Conservancy

Because of You...

Our most important partnership.

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

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
Gauga 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

Community Members

Aurora
Beachwood
Bedford
Glenwillow
Hudson
Macedonia
Northfield
Reminderville

Streetsboro
Twinsburg
Twinsburg Township
Valley View
Walton Hills
Warrensville Heights

Grant Providers

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

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 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

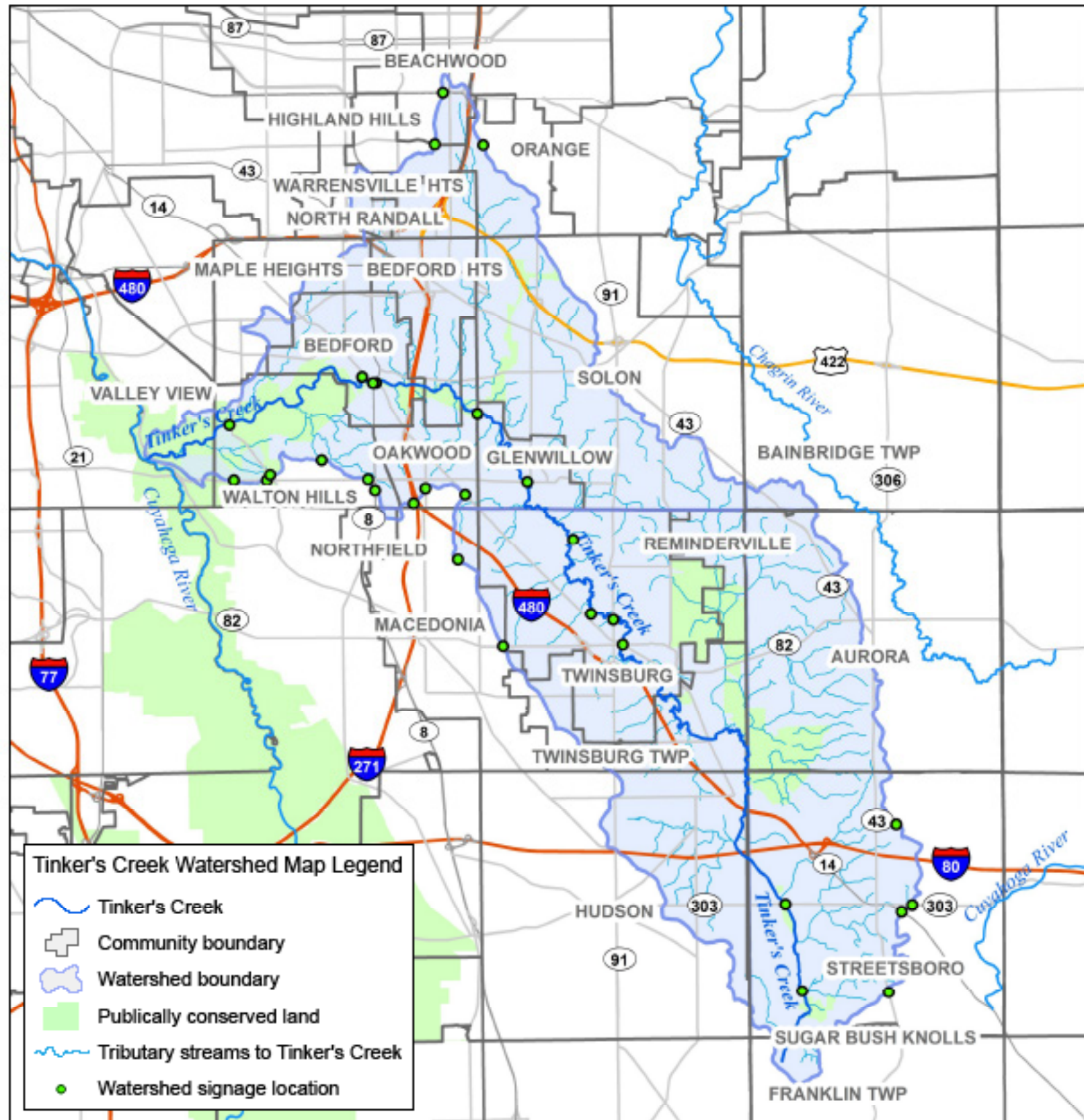
Tinker's Creek Watershed (TCW) Spans 4 Counties and 24 Communities!

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 2017

Lake Erie Nonpoint Source GLRI Project

Tinker's Creek Watershed Partners, Davey Resource Group, and the City of Hudson have been awarded this grant to help repair and restore a 3,100 linear feet stretch of Tinker's Creek that has been channelized, impacting the potential habitat and functions of this stream. Work on the stream will begin in the spring of 2018 and is proposed to be completed in September of 2019. This project will increase water quality and habitat function of the impacted areas.



Northeast Ohio Regional Sewer District (NEORS) Service Agreement

NEORS 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.



Tinker's Creek 9- Element NPS-IS plans

NPS-IS plans are a strategic plan that provides assurance to non-point source grant programs and institutions that, as described, a proposed water quality project meets the 9 Essential Elements per U.S. EPA § 319 Program Guidance. The NPS-IS is a living strategic planning document that summarizes causes and sources of impairment, established critical areas, identifies quantifiable objects to address causes and sources of impairment, and describes projects to meet those objectives. Tinker's Creek has gained EPA approval on its three NPS-IS plans.

- 1) Town of Twinsburg: watershed drainage area of 55.53 square miles, drains areas in Cuyahoga and Summit counties, includes Tinker's Creek Gorge.
- 2) Headwaters Tinker's Creek: watershed drainage area of 25.25 square miles, drains areas within Portage and Summit counties, includes Tinker's Creek State Park.
- 3) Pond Brook: watershed drainage area of 16.62 square miles, the smallest of the 3 HUC-12 watershed, falls in Portage, Geauga, Summit and Cuyahoga counties.

Western Reserve Land Conservancy and Dominion 2017 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 \$1,500 to purchase an interactive educational tool that will be used at community events to capture individuals' attention to raise awareness about water quality in the Tinker's Creek watershed.



Engaging Communities

Mayor's Breakfast March 9, 2017

Tinker's Creek Watershed Partners held its annual Mayor's Breakfast to meet with community leaders within the watershed. At this event, we updated our mayors on the work of TCWP, identified watershed issues to focus on for the future, and learned what challenges our communities face in keeping our waters healthy.



Glenwillow, Solon, and Warrensville Heights stream cleanups 2017

TCWP participated in many stream clean-up events. Stream clean-ups let communities see first-hand what pollution and litter do to our waterways, and TCWP were able to teach about different ways to recycle, what a storm-drain is, and give many examples on how volunteers can continue to assist their environment in staying healthy.



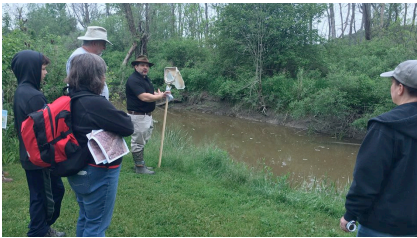
Tenth Annual Ohio Stormwater Conference May 10-12, 2017 Kalahari Resort and Conference Center, Sandusky, Ohio

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 2017 Conference was held in Sandusky, Ohio on May 10-12. The conference had a record-setting 871 attendees, 101 exhibitors, and 76 speakers. The 2018 conference will be held at the Kalahari Resort and Conference Center in Sandusky, Ohio.

Tour of Pond Brook May 20th, 2017

Tinker's Creek Watershed Partners, Summit Metro Parks and Davey Tree Resource Group sponsored a tour of a Phase II restoration site on Pond Brook. Aquatic biologists and restoration ecologists gave a guided tour of various riparian corridors and wetland areas, and even parts of the Pond Brook Conservation Area generally not open to the public. This gave attendees a first hand look at the efforts made and work accomplished by all of our members.



Eaton Health and Wellness Expo June 8, 2017

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.



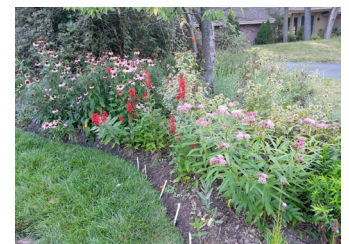
Macedonia and Streetsboro Rain Barrel Workshop 2017



Tinker's Creek Watershed Partners and the City of Macedonia partnered together to host a workshop for citizens in the community to learn how rain barrels work and to gain knowledge on stormwater and how they as individuals impact the environment. Each attendee was provided with a rain barrel, downspout diverter, and spigot, and were shown how easy it is to assemble it. Each rain barrel is expected to collect just over half a gallon of roof runoff for every one inch of rain that falls, and this water can be used for watering gardens, and will filter through the ground water and into the nearest water source. This helps lessen the impact of pollution on our watershed and also lets beautiful plants grow! Rachel Webb from Northeast Ohio Sewer District (NEORS) was in attendance to present about residential stormwater fee and credit

Warrensville Heights summer festival August 18-19, 2017

TCWP participated in the summer festival in Warrensville Heights by having a booth set up for the public. Participants were able to learn about the watershed, what rain gardens and barrels are and how they are useful, and how to landscape with beautiful native plants.





Ale Drinkers for Tinker's October 17, 2017

This year we held our first annual Drinkers for Tinker's fundraiser at Hop Tree Bar in Hudson, Ohio. Every attendee became a member of Tinker's Creek Watershed Partners, and all were able to enjoy Hop Tree brewed beer and amazing food. TCWP raffled off sponsor baskets, had many games with prizes, and everyone was able to go on a tour of the brewery and learned a lot from co-owners Cory Ross and Greg McClymont. All profits went towards restoring Tinker's Creek habitat and water quality, with many plans next year for volunteers to come out and explore more of Tinker's Creek while working to continue its natural beauty.

Monday Meet Up: Brandywine September 11, 2017

This event was held in collaboration with Cleveland Metroparks through their Watershed Volunteer Program. Tinker's Creek Watershed Partners presented at the Brandywine Creek and Mud Brook Monday Meet Up to discuss what services we provide and how we can both work towards a healthier creek. There was also an opportunity to learn about the Central Lake Erie Basin Collaborative and their work in protecting and restoring northeast Ohio watersheds, including two tributaries.



TCWP Watershed Festival 2017 October 7, 2017



TCWP and the City of Twinsburg hosted the Clean-Up Day & Watershed Festival where residents were able to clean-up parts of their community and learn more about how stormwater affects the environment and how they can lessen pollution. Attendees received a free tree, went on tours of the waste water treatment facility, and enjoyed a hike with a city naturalist.



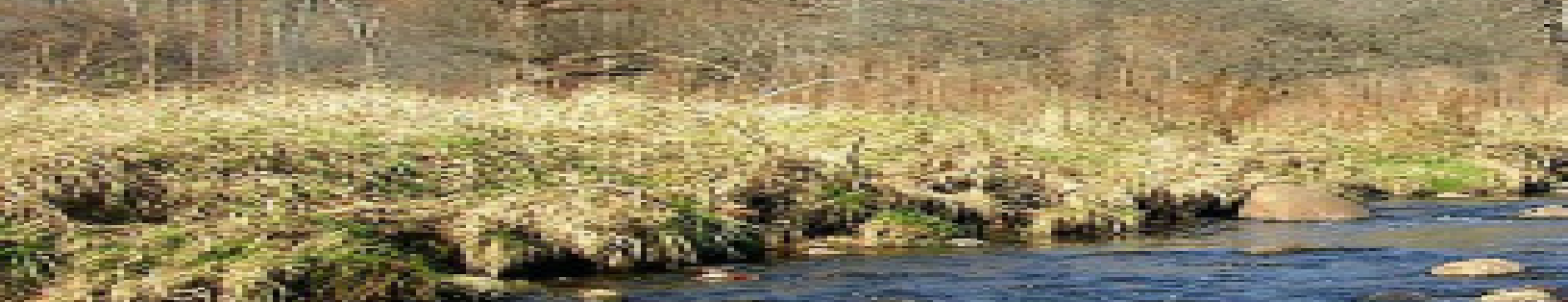
Minimum Control Measure (MCM) 6, Pollution Prevention/Good Housekeeping Training

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 600 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 2017 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, Twitter, and Instagram, updating our followers about events and information occurring throughout the watershed and beyond.





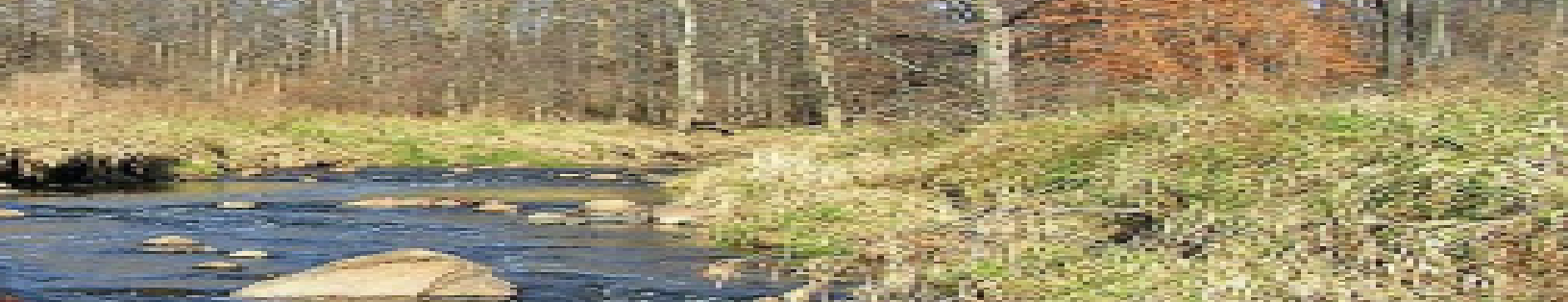
Warrensville Heights Country Lane Project

In 2014, Tinker's Creek Watershed Partners and West Creek Conservancy partnered together to obtain the last 3% of still-natural 16 acres in Warrensville Heights that has 240 linear feet of Hawthorne Creek and 215 linear intermittent headwater stream channel. We applied for a Clean Ohio grant to get funding to purchase the land, and now with ownership in the hands of the Conservancy, this public natural habitat has been preserved and adjoins 30 acres of additional conservation land in the Village of Orange. Hawthorne Creek is a 6-mile long tributary of Tinker's Creek, extending south from Eastern campus of Cuyahoga Community College in Highland Hills to the Shadow Lake area of Cleveland Metroparks before reaching Tinker's Creek. The 16-acre property is an attractive natural habitat, containing vernal pools, four acres of wetlands, and a woodland tract dominated by red oak, red maple, beech, black cherry and shabark hickory. The area reduces surging stormwater runoff into the Tinker's Creek floodplain and provides a peaceful public setting.

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.

Through a grant provided by the Ohio Environmental Education Fund, Tinker's Creek was able to place a sign at the Tree Steward Planting site this year showing the environmental impacts trees have and the benefits of keeping them around. There are also tree planting tips and "how-to's" on the sign.



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.

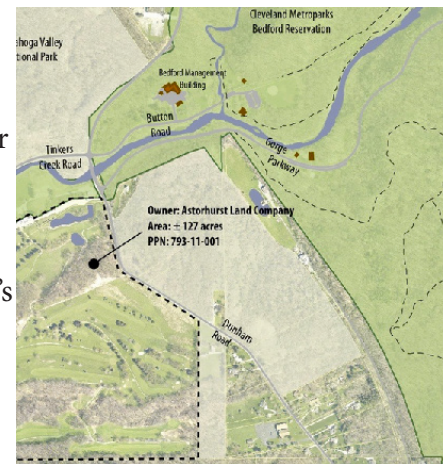
In 2017, we were able to accomplish a tree planting with sycamore trees along the banks of the stream. This will provide shade for the stream, soil stabilization with tree root mats, and expanded habitat for all organisms living in the stream.





Astorhurst Golf Course

The Cleveland Metroparks' has been approved to purchase the 127-acre Astorhurst Country Club in Walton Hills for \$3.1 million. Park planners want to return it to its natural state, as they are currently doing with the former Acacia Country Club golf course. This course abuts the Cuyahoga Valley National Park and would become part of the Bedford Reservation. The Metroparks have already acquired a 13-acre parcel of land to connect the property to the Bedford Reservation. This purchase would help protect Tinker's Creek watershed because Tinker's Creek flows past it on its way to the Cuyahoga River.



Saving an Expanse of Headwaters in Aurora

Tinker's Creek is the largest tributary of the Cuyahoga River, draining nearly 100 square miles. The headwaters are expansive but steadily being fragmented and consumed by development, degrading not only the local habitat but the land, lives, and livelihoods of people downstream. West Creek Conservancy began by working with a housing developer in the City of Aurora, a conservation easement was acquired on over 75 acres of greenspace in the upper reaches of Tinker's Creek. The easement protects a mature stand of forest, over 37 acres of high-quality wetlands and 3,000 feet of pristine headwater streams. Wetlands play a far-reaching role in supporting life. Acting as nature's kidneys, they purify our surface waters, recharge our aquifers, control flooding, and serve as home and nursery to countless species. The property will also buffer the adjoining 400-acre Aurora Wetlands Park from the approaching suburban sprawl of new homes and commercial activity.



Future Projects

Hudson Tenbroeck (TC-2) Restoration Project



Tinker's Creek Watershed Partners (TCWP) has been awarded a \$191,500 Great Lakes Restoration grant from the Ohio Environmental Protection Agency and the United States Environmental Protection Agency. Funds will be used to restore instream habitat to a historically channelized portion of Tinker's Creek, plant native species along its banks, removal invasive species, and restore natural flow.



Tinker's Creek Watershed is comprised of 24 communities, drains 96.4 square miles of land, and is approximately 30 miles long. It is the largest tributary to the Cuyahoga River. The creek is impaired by sedimentation, organic enhancement, low in-stream dissolved oxygen, nutrient enrichment, toxicity, habitat alteration, as well as yet to be determined impairments. Habitat impairments reflect a historically dredged stream in various stages of recovery.

“This funding will increase our progress towards restoring habitats and water quality in the watershed. This site is close to meeting water quality standards, and with a little help we believe it will reach those standards. We are excited about the opportunity to put this project on the ground with great partners in the Ohio EPA and Summit Metro Parks.”

Water Quality Monitoring of Tinker's Creek

Beginning March 2018 there will be a new volunteer program on how to conduct stream quality monitoring. There will be a volunteer training March 26, 2018, please check the event calendar for more details closer to this date! Sites are projected to need data collection monthly during the growing season and volunteers can choose which days they would like to sign up for. Water quality monitoring is very important due to the ever changing fluxuations in the environment and water, which includes anything from temperature, sun-light and shade, to run-off, organisms in the water, and human impact. This data will help us identify trends and potential sources of pollution for more investigation. The samples collected from the watershed will be brought to the Twinsburg Wastewater Treatment plant for testing. All raw data and `results will be compiled and published on our website.

Continuing Projects

We will continue to include yearly events such as the Mayor's Breakfast in March, the Ohio Stormwater Conference in May, the Watershed Festival in October, and our annual fundraiser Drinker's for Tinker's. TCWP has over a dozen member communities, and hosts many events throughout the watershed, so keep an eye on our calander (and your email if you are a member!) for workshops, seminars, and trainings you can attend. We also include volunteer opportunities as well, and hope that you can help keep Tinker's Creek an amazing place!

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
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.