Chagrin River Watershed Partners, Inc.

2015 Annual Report

Preserving and enhancing the scenic and environmental quality of the Chagrin River watershed to assure a sustainable future for people, plants and animals.

President's Message

Twenty years ago, a group of concerned community leaders in the Chagrin River Valley gathered to form a new organization called the Chagrin River Watershed Partners. Communities in the Chagrin River watershed joined the organization so that they could work together to protect the scenic and natural resources of the watershed. They were motivated by a recognition that the quality of life in the Chagrin Valley depends substantially upon the quality of the natural environment in which we live. They saw that continued development needed to be planned and directed so as to preserve and enhance the basic values that make the Chagrin a special place. They also recognized that as part of a watershed that flows into Lake Erie, our communities were linked together by the impact that upstream development has on the lower reaches of the river, and on the lake. Twenty years later, the values that motivated them to come together in order to preserve and enhance the scenic and environmental quality of the Chagrin River watershed have not changed.

Although our core values have not changed, we have gone through significant changes in the external conditions that affect our watershed. First, our communities are under increased pressure to more effectively manage stormwater runoff and erosion, while at the same time the cost of municipal operations has increased significantly. Second, environmental conditions that determine the amount and flow of water within our watershed have become much more uncertain. We have recently been facing more extreme weather events. There are times when the weather seems considerably warmer and drier than in the past, which places great stress on the natural environment. At the same time we have many periods where the weather is considerably colder and wetter. Major storm events seem to occur with increasing frequency, and, in the face of a long-term warming trend, the last two winters have been brutally cold.

Chagrin River Watershed Partners, Inc. is dedicated to offering services that can help us maintain the core values of our beautiful Chagrin Valley in the face of a changing and uncertain future. We help communities to pool resources and share the knowledge and expertise that can provide lower-cost, long-term solutions to resource management problems. Looking ahead, we research and evaluate emerging trends in environmental conditions, and have developed expertise in the latest cost-effective solutions to our members' problems. As you read this report, you will see many examples of the wide range of services that we provide. Please feel free to talk to our staff about present and future resource management problems in your community, and how our services may provide ideas and funding for innovative solutions. We look forward to working with you, so that together we can continue to preserve our cherished scenic landscape and environmental values in the face of a changing world.

Greg Studen, President,
Chagrin River Watershed Partners, Inc.

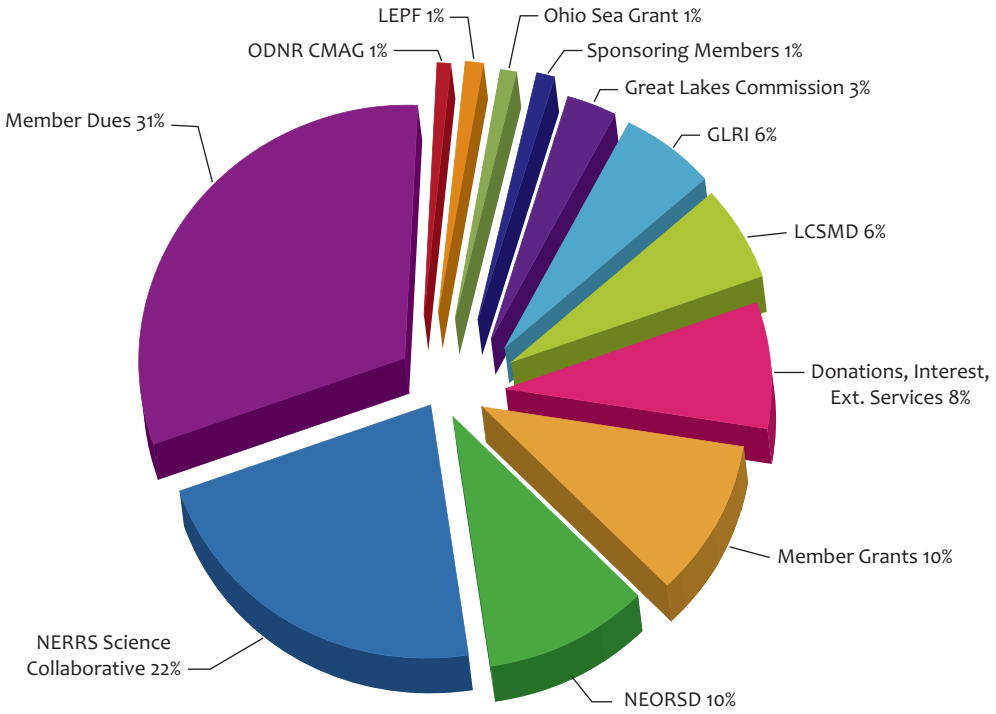
Cover photo: Chagrin River at Whitesburg Park, Chagrin Falls

CRWP Leverages Member Dues to Protect and Restore the Chagrin River

In 2015

- For every $1 in member dues CRWP secured $14 in additional grant funds for watershed management.
- CRWP assisted Members with 33 funded and 11 pending grant projects totaling $13,192,335.

Sources of 2015 Operating Income



Member Dues	$110,567	31%
NERRS Science Collaborative	$ 79,383	22%
NEORSD (Northeast Ohio Regional Sewer Dist)	$ 35,000	10%
*Member Grants	$ 33,841	10%
Donations, Interest, Ext. Services	$ 27,759	8%
LCSMD (Lake County Stormwater Mgmt Dept.)	$ 22,500	6%
GLRI (Great Lakes Restoration Initiative)	$ 19,407	6%
Great Lakes Commission - Great Lakes Basin	$ 9,173	3%
Ohio Sea Grant/NOAA Coastal Storms	$ 5,034	1%
LEPF (Ohio Lake Erie Commission Lake Erie Protection Fund)	$ 4,740	1%
Sponsoring Members	$ 4,250	1%
ODNR CMAG (Coastal Management Assistance Grant)	$ 2,529	1%
Operating Income:	$354,183	100.0%

*Includes 14 grants from Ohio EPA Section 319 and Surface Water Improvement Fund, Water Resource Restoration Sponsor Program and U.S. Forest Service

Photo courtesy of Chagrin River Outfitters

Working Together for a Healthy Chagrin River and Livable Communities

2015 ACTIVITIES

Installed 15,690 square feet of permeable pavement or bioretention to better manage runoff

Applied for **25** grants for CRWP and member projects

Conducted 136 site visits to help landowners address flooding, erosion or stormwater issues

Restored 10,909 linear feet of streambank

Presented at **13** workshops to train residents and professionals to better manage stormwater

Planted 12,637 trees along stream corridors

Reviewed 17 project plans and provided implementation assistance on 22 community codes

DIRECT IMPACTS

Prevents 274,907,855 gallons of untreated stormwater from reaching our streams

Keeps 9,504 tons of sediment out of streams

Reduces phosphorus loads to streams and Lake Erie by **7,349** pounds and nitrogen loads by **8,041** pounds

Paid $1,680,688 to 35 local contractors and suppliers for projects

Increases awareness and informs decisions to reduce runoff and pollution

Improves aesthetics and recreation opportunities

LONG TERM BENEFITS

Fewer flooding and erosion impacts on homes, businesses and infrastructure

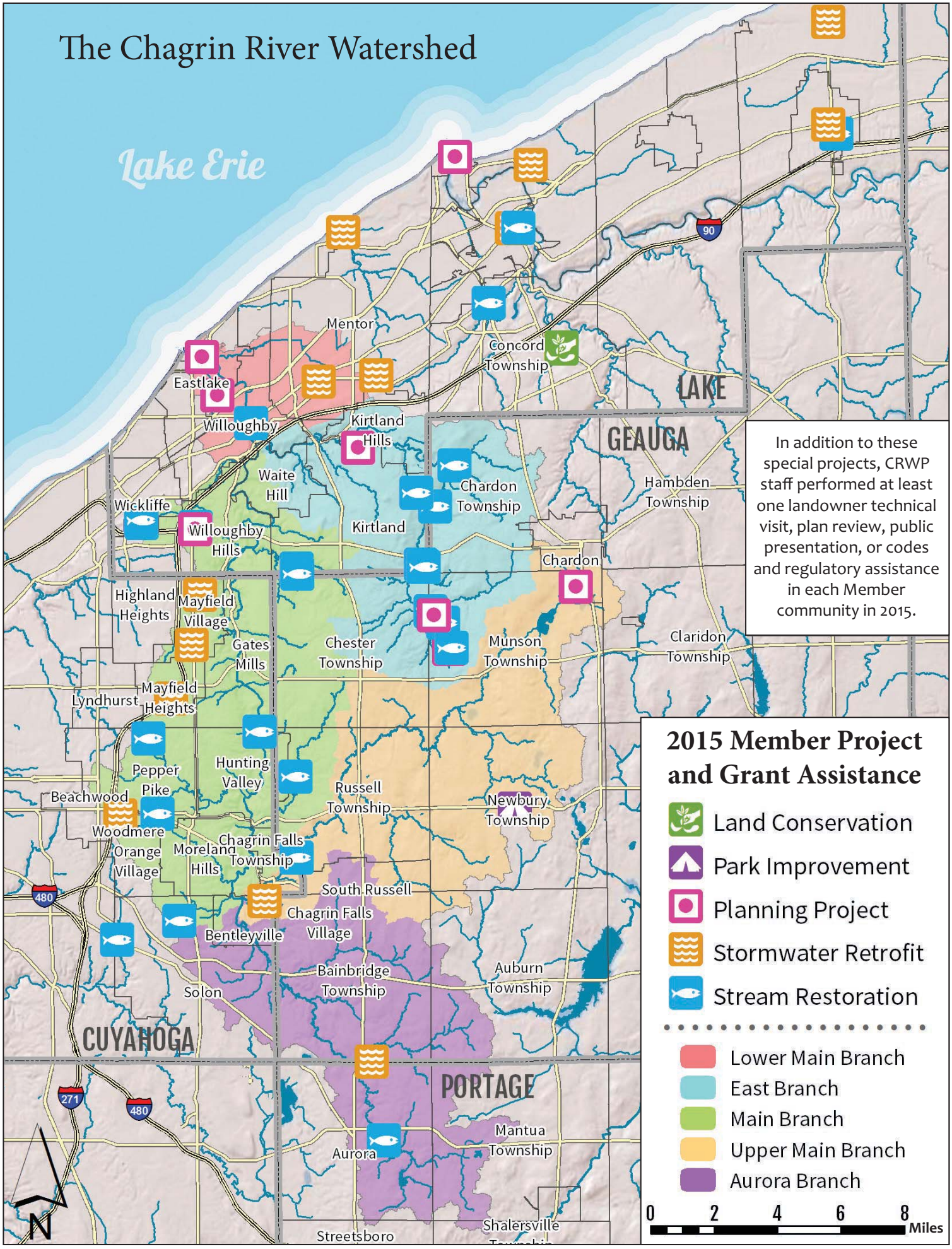
Cleaner streams provide healthy fish habitat and lower drinking water treatment costs

Fewer algal blooms and dead zones in streams, inland lakes and Lake Erie

Livable and **Resilient** communities

Higher Property Values

More Vibrant Economy



In addition to these special projects, CRWP staff performed at least one landowner technical visit, plan review, public presentation, or codes and regulatory assistance in each Member community in 2015.

Restoring Streams, Floodplains and Riparian Corridors

Healthy watersheds can significantly lower costs associated with flooding, reduce erosion and are less impacted by extreme weather. Clean water encourages people to swim, fish and boat.

Over their lifetime, these projects will keep an estimated 3,332 tons of sediment, 2,170 pounds of phosphorus and 5,458 pounds of nitrogen out of the Chagrin River.

Aurora Restores Chagrin River's Aurora Branch~

The City of Aurora restored over 1.3 miles of the Chagrin River's Aurora Branch on the city park formerly known as the Aurora Country Club. A design/build team raised the streambed and reconnected it to its floodplain so the river can spread out during storms. This action decreases the erosive power of the stream and reduces downstream flooding risk. The team resized the stream channel so it is no longer wider than it should be and also restored a headwater stream. Before this project, this section of the Aurora Branch did not meet Ohio EPA water quality standards. Post-project monitoring by Ohio EPA will reveal whether this project allows the Aurora Branch to meet the water quality standards. CRWP assisted Aurora with project reporting, agency coordination, plan review, construction oversight, and project outreach.

Restored riffles on Chagrin River's Aurora Branch at the former Aurora Country Club

Willoughby Stabilizes Eroding Bank of the Chagrin River*

The City of Willoughby stabilized over 200 feet of eroding streambank along the Chagrin River at Todd Field. A design/build team installed three bendway weirs, rock structures that direct flow into the center of the channel, to stop severe erosion that had been occurring since 2006. The team also graded the bank to a gentler, more stable slope and planted native vegetation along the river. CRWP assisted Willoughby with project reporting, agency coordination, plan review, construction oversight, and project outreach.

Bendway weirs on Chagrin River's Main Branch at Todd Field in Willoughby

"CRWP was a huge help to the City of Willoughby during the Todd Field Bendway Weirs project. The knowledge that they brought to the table along with Keely's expertise made the project run effortlessly from the beginning. The Bendway Weirs have improved the area at Todd Field by preserving the river embankment and protecting the ball diamond."

– Judean Banker, City of Willoughby Director of Parks & Recreation

Watch for these 2016 stream restoration projects:

- Lake County: Morley Road Dam*
- Cleveland Metroparks: Sulphur Springs*
- Gully Brook/Deer Creek in Willoughby Hills (Cleveland Metroparks) and Wickliffe^

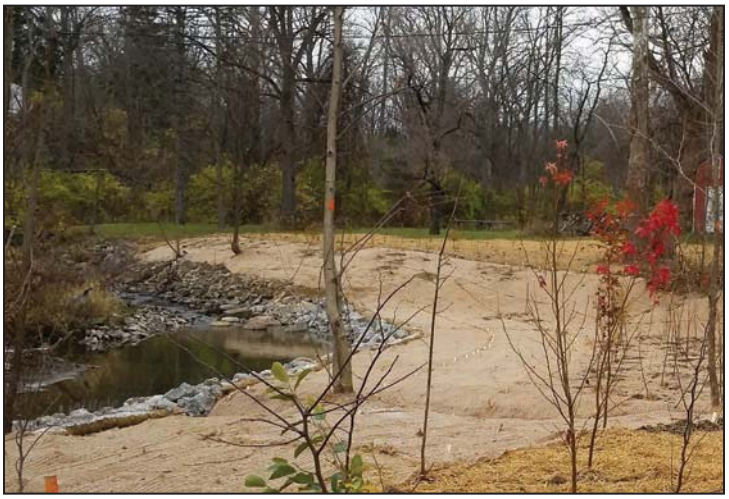
Pepper Pike Improves Morgan Park to Benefit Pepper Creek*

The City of Pepper Pike restored a section of a small tributary to Pepper Creek at Morgan Park. Workers removed invasive species like Japanese knotweed from the streambank and replaced them with native Ohio plants. The City also retrofitted a parking lot at the park with permeable pavers and a rain garden to reduce and treat polluted stormwater runoff before it enters the stream. The project demonstrates that streamside stewardship and stormwater control are important to maintaining and restoring healthy waterways in urban areas. CRWP assisted Pepper Pike with project outreach.

Permeable pavers drain to a rain garden at Morgan Park in Pepper Pike to treat runoff to a Pepper Creek tributary

Solon Restores Eroding Streambank*

The City of Solon restored 430 linear feet of stream and 1 acre of riparian corridor on Hawthorne Creek, a tributary of Tinker's Creek, near the St. Mary's Ukrainian Church. Before this project, the severely eroded streambank polluted the water with sediment and nutrients and threatened a nearby city sewer line. Workers installed toe rock material, erosion control matting and vegetative plantings to stabilize the stream channel and restored floodplain access to help mitigate downstream flooding and erosion. CRWP assisted Solon with project reporting, plan review, construction oversight, and project outreach.



Solon stabilized Hawthorne Creek's stream channel and restored floodplain access

Chagrin Falls Improves Floodplain Habitat at Whitesburg Park Preserve#

The Village of Chagrin Falls wrapped up a two-year project at Whitesburg Park Preserve. Volunteers planted a total of 2,050 native Ohio trees and shrubs to restore 7 acres of floodplain habitat along the main stem of the Chagrin. CRWP assisted Chagrin Falls with project reporting, agency coordination, a planting plan, and project oversight and outreach. Western Reserve Land Conservancy helped coordinate student and adult volunteers.

Volunteers planted trees to restore floodplain habitat at Whitesburg Park Preserve in Chagrin Falls

* Funded in part by Ohio EPA's Section 319 Grant
~ Funded in part by Water Resource Restoration Sponsor Program (WRRSP) sponsored by NEORSD
^ Funded in part by U.S. EPA through the Great Lakes Restoration Initiative
# Funded in part by the US Forest Service through the Great Lakes Restoration Initiative

Landowners Tackle Erosion

Excessive sediment in streams impairs aquatic life and transports phosphorus and other pollutants to Lake Erie. CRWP implemented two projects funded by the Great Lakes Basin Program for Soil Erosion and Sediment Control to help private and public landowners stabilize eroding streambanks and install agricultural best management practices on their properties on Chagrin River's east and lower main branches, Griswold Creek and Caves Creek.

Over their lifetime, these projects will keep an estimated 4,924 tons of sediment and 933 pounds of phosphorus out of our streams.

Chagrin River's East and Lower Main Branches

Sedimentation is a main impairment of the Chagrin River's east branch and lower main branch subwatersheds. We partnered with Lake and Geauga Soil & Water Conservation Districts to work with landowners to reduce sedimentation in these streams. CRWP hired a design/build team to prepare plans for stabilizing 10 eroding streambanks on residential properties in Munson Township and the Cities of Eastlake and Kirtland. Through the Great Lakes Basin grant, CRWP provided residents with $38,000 for design and engineering services. CRWP also provided $107,015 in grant funds to help five residents of Munson and Kirtland stabilize 1,505 linear feet of streambank and install a 1,740 square foot filter strip. The residents' cost share for this work was $38,000.

With assistance from the Natural Resources Conservation Service, we also completed three designs for heavy use pads and fencing for three agricultural properties in the Village of Waite Hill, City of Kirtland, and Munson Township. A Munson landowner used their design to build a 3,600 square foot heavy use paddock in place of a muddy paddock. The landowner provided a $3,756 cost share for paddock installation and CRWP provided an additional $3,756 in Great Lakes Basin grant funds.

Stabilized streambanks on residential property in Kirtland

Stabilized streambank on residential property in Munson Township

"We were very fortunate to work with CRWP in the remediation of increased stream erosion and water runoff on our Kirtland property. Not only did CRWP recommend and implement a strategy to address the erosion issues, they worked with us to coordinate a separate but related project addressing severe erosion around the culvert supporting our driveway. Kristen Buccier was instrumental in managing the projects, communicating with us and the contractors, and working with city managers. She, and CRWP, were wonderful to deal with and we are very pleased with the results."

– Kirtland Resident

Caves Creek and Griswold Creek

Griswold Creek and Caves Creek are coldwater habitat streams that harbor sensitive fish species that thrive in cool, clear water. Great Lakes Basin grant funds provided $13,700 to landowners to reduce sedimentation in these coldwater streams.

In the Caves Creek subwatershed we provided 615 native trees and shrubs to Geauga Park District. Park district staff and volunteers planted the trees and shrubs along 2,000 linear feet of three headwater streams in Orchard Hills Park.

CRWP also provided 901 trees and shrubs to two landowners in Russell Township that were planted along 489 linear feet of eroding streambanks on Griswold Creek. Planting woody vegetation along eroding streambanks is the most cost-effective method of streambank stabilization.

"The native trees and shrubs received via this grant, for use towards the restoration project at Orchard Hills Park, will make a huge impact and difference."

– John Oros, Executive Director, Geauga Park District

Lake Catholic students planted shrubs along a headwater stream at Orchard Hills Park

Griswold Creek in Russell Township

Cleaning, Cooling & Reducing Runoff with Low Impact Development

Low Impact Development (LID) or green stormwater infrastructure helps developed areas behave more like natural landscapes, mimicking natural processes to infiltrate water into the ground where it's absorbed and filtered by soil, gravel and plant roots. LID keeps rainwater out of storm sewers, prevents sewer backups and flooding, and reduces pollution that would otherwise flow to unprotected waterways like the Chagrin River and Lake Erie. LID provides economic and aesthetic benefits. Research has shown consumers are willing to spend more for products, visit more frequently, and travel farther to shop in areas with attractive landscaping, good tree cover, or green streets.

Mentor - Great Lakes Mall Green Infrastructure Retrofit^

The 114-acre Great Lakes Mall is the largest commercial retail site in the City of Mentor and contains 7% of impervious land area in the Newell/Ward Creek subwatershed. We installed permeable pavers, infiltration chambers, rain gardens, stormwater tree pits and an infiltrating catch basin to allow runoff from 5.2 acres of the mall's roof and parking lot to soak into the ground. The retrofit was part of a U.S. EPA GLRI funded project that will keep an estimated 2,345 tons of sediment, 1,475 pounds of phosphorus, 3,968 pounds of nitrogen, and 65,832,935 gallons of untreated runoff out of Newell Creek over 25 years.

"The Great Lakes Mall parking lot represents the largest lot in the City and perhaps the County. The 'before' and 'after' of this project demonstrates how problems can be solved with thoughtful planning and implementation."
– Ron Traub, City of Mentor Economic Development Director

Bainbridge Centerville Mills Park Permeable Pavement*

Permeable paver plans were drafted for Centerville Mills Park. The new pavement will infiltrate stormwater and protect Smith Creek, a coldwater habitat stream and Superior High Quality Water with an exceptional macroinvertebrate community and redside dace, a colorful minnow found in very high quality headwater streams. Infiltrative practices are important in areas that drain to coldwater streams because they recharge groundwater, minimize pulses of warm water from hard surfaces, and reduce scouring flows.

Stormwater flows into spaces between the pavers and is filtered through layers of rock. Rain gardens and trees soak up and clean runoff, add beauty and provide shade.

Large chambers under the pavers hold the filtered water and slowly release it into the ground or Newell Creek.

Watch for these 2016 LID projects:

- Woodmere Service Facility+
- Lake Stormwater Management Department communities+
- Mentor - Wildwood Park+ and Marina^

* Funded in part by Ohio EPA's Section 319 Grant
\+ Funded in part by Ohio EPA's Surface Water Improvement Fund
^ Funded in part by U.S. EPA through the Great Lakes Restoration Initiative

Researching LID to Support More Effective Stormwater Design and Policy

CRWP completed a research project funded by the National Estuarine Research Reserve (NERR) System Science Collaborative program through the University of New Hampshire intended to improve state and local stormwater policies. We investigated the effectiveness of bioretention and permeable pavement on poorly draining soils, which are common in Ohio. Our project team, consisting of CRWP, Old Woman Creek NERR, Ohio Department of Natural Resources, North Carolina State University, Erie Soil and Water Conservation District, and Consensus Building Institute, worked together to complete the research and translate the results into policy and design tools. The project team received iterative guidance and feedback from a collaborative learning group of local and state stormwater regulators and consulting engineers.

The team chose 3 bioretention cells, 4 permeable pavement applications, and a permeable pavement-cistern treatment train built on poorly draining soils to determine how much runoff was reduced by these systems. After collecting and analyzing hydrologic data from each practice, the team concluded that bioretention cells and permeable pavement reduce runoff on poorly draining soils. Finally, the team assessed the impact of design choices on performance using SWMM and DRAINMOD models.

Bioretention cell

Permeable pavement

What We Learned

Bioretention Cells:

- The cell at Ursuline College in Pepper Pike reduced outflow by 60%.
- Holden Arboretum installed two cells. One reduced outflow by 36% and the other by 42%.

Permeable Pavement:

- Willoughby Hills installed two paver bays at the Community Center. One reduced outflow by 16% and the other by 32%. In the bay with 16% outflow reduction, run-on from an impervious area was much larger than what Ohio's stormwater manual recommends.
- Pavers at Orange Village's annex building reduced outflow by 98%. This site had no run-on from impervious surfaces, well-draining fill in the subgrade soil, and a subdrain designed to dewater the groundwater table under the permeable pavement.
- Pavers at Perkins Township in Erie County reduced outflow by 53%.

Outcomes Support Stormwater Solutions

The project team put results into practice by:

- Updating bioretention design specification in Ohio's stormwater manual, *Rainwater and Land Development.*
- Laying the technical foundation for a runoff reduction crediting mechanism to be added to *Rainwater and Land Development*. The runoff reduction guidance will provide a pathway to meet the state's NPDES water quality volume requirement through runoff reduction, as well as a mechanism for crediting the runoff reduction benefits of LID stormwater control measures toward meeting local peak discharge requirements.
- Updating CRWP's model comprehensive stormwater management code.
- Sharing project results with Ohio Environmental Protection Agency (Ohio EPA) stormwater staff.
- Providing technical assistance and training to 119 engineers, local government staff and stormwater professionals to increase understanding of bioretention and permeable pavement performance, build capacity to implement LID, and introduce policy recommendations to enhance stormwater management.

"This project provided the hard science which many stormwater professionals have been demanding over the years. The research, as well as the forum for interaction with the different members, helped create a new 'stepping stone' within the field. This work and ongoing research will continue to shape the way we think about and manage stormwater."

– Justin Czekaj,
City of Aurora Engineer

What's New with Phase II?

New MS4 Permit Requirements

CRWP worked with Ohio EPA and the Northeast Ohio Areawide Coordinating Agency through the Northeast Ohio Stormwater Training Council to develop pollutant factsheets, an up-to-date regional map of urbanized areas, and a spreadsheet of the Total Daily Maximum Loads (TMDL) that apply to Northeast Ohio communities. We helped plan and deliver a training on these materials to help Phase II communities understand the TMDL process and how it applies to their Stormwater Management Program (SWMP) updates that must be completed by the end of 2016. CRWP is developing a SWMP template and can assist members with necessary updates to their SWMPs.

Community SWMPs help keep streams clean

Stormwater Management Code Update

CRWP updated its model comprehensive stormwater code to allow volume reductions attained through LID to count toward peak discharge requirements. The model code also recommends that developed communities consider requiring stormwater treatment for all commercial and industrial site development or disturbed areas of less than one acre, requiring redevelopment projects to manage greater than 20% of the water quality volume, and using stormwater control measures to reduce the temperature of runoff for coldwater habitat streams. Adopting these recommendations will improve stormwater management on private developments, lessen the burden of aging and undersized stormwater infrastructure on public entities, improve water quality, and help communities meet permit requirements. The updated model codes are available to Phase II communities throughout Ohio. Funding to update CRWP's model stormwater codes was provided by the National Estuarine Research Reserve System Science Collaborative and the Lake Erie Protection Fund. The monies for the LEPF are supported by citizens of Ohio through their purchase of the Lake Erie License Plate.

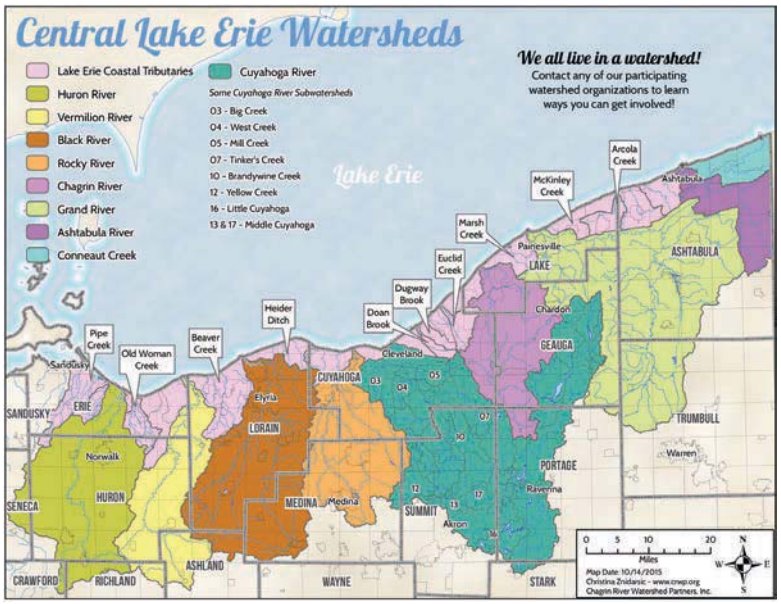
Stormwater Program Services

We help our members meet their SWMP's minimum control measures. In addition to updated model stormwater codes, CRWP provided public involvement/public education as described on page 13 of this report, conducted pollution prevention/good housekeeping walkthroughs of public facilities, and offered recommendations to stay compliant with Phase II regulations.

Regional Collaboration to Support Action for Healthy Watersheds

The Central Lake Erie Basin Collaborative (CLEB) is a group of 17 Northern Ohio watershed organizations that assist one another in our common missions to improve watersheds, educate the public, implement projects to improve water quality and habitat, and grow organizational capacity to serve these missions.

In 2015 CLEB wrote grants, reviewed zoning codes to protect water quality, implemented stormwater retrofit, stream restoration and land protection projects, and conducted outreach and educational marketing to build watershed awareness. CLEB plans to continue building capacity to serve our region's clean water needs. This regional partnership promises to benefit CRWP members by leveraging funds and enhancing our expertise.



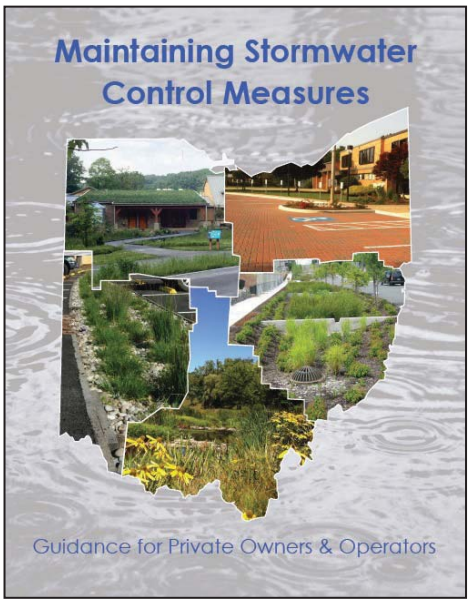
Education and Training for Watershed Stewardship

Northeast Ohio Stormwater Training Council (NEOSWTC)

CRWP participates in the NEOSWTC, a consortium of 28 agencies and organizations that coordinate stormwater training for Phase II communities. We helped NEOSWTC organize three workshops in 2015: April 7 - *How to Update Your Stormwater, Management Program to Incorporate TMDL Recommendations*, June 10 - *Low Impact Development Performance & Policy Implications*, and June 24 - *Utilizing Planning, Zoning, and Building Codes to Improve Stormwater Management.*

We partnered with NEOSWTC to develop an Ohio-focused guide, *Maintaining Stormwater Control Measures*, to assist Homeowner's Associations and other private owners and operators to identify stormwater control measures and associated maintenance needs. Training materials and the guide are available at www.neohiostormwater.com.

We are working with NEOSWTC and the City of Cleveland with funding from the Ohio Environmental Education Fund to train service departments in spring 2016 on how to maintain bioretention, permeable pavement, green roofs and other LID stormwater controls.



Northeast Ohio Public Involvement Public Education (NEOPIPE)

CRWP is a member of the NEOPIPE workgroup, which develops and provides resources to increase public awareness of stormwater issues and assists communities with meeting NPDES permit requirements. CRWP worked with NEOPIPE to plan and host *New Year, New Yard* on March 31, 2015. 100 attendees learned about the benefits of using less lawn fertilizers and pesticides, planting native species, installing rain barrels and rain gardens. CRWP members can promote NEOPIPE workshops to their residents as part of their Phase II education and outreach program.

CRWP helped train Northeast Ohio residents and professionals to better manage stormwater

2015 Ohio Stormwater Conference

CRWP served on the planning committee for the 2015 Ohio Stormwater Conference, which drew over 700 stormwater professionals from Ohio and neighboring states. Several sessions at the conference focused on results of CRWP's research on the performance of permeable pavement and bioretention on sites with poorly draining soils.

Community-specific Trainings and Presentations

In addition to region-wide workshops, CRWP presented on a variety of watershed-related topics for our members:

- Economics of green infrastructure at Cleveland State University
- Rain gardens and native plants at Holden Arboretum's Friday in the Garden
- General watershed education at Hamlet Hills in Chagrin Falls Village
- Permeable pavement 101 at Notre Dame Elementary in Munson Township
- CRWP member services at Claridon Township's Township Hall
- Rain gardens and watershed stewardship in Chagrin Falls Village

CRWP offers tailored presentations and trainings for members.

Thank You

CRWP's 2015 accomplishments were made possible through partnerships with our members; Cuyahoga, Geauga, Lake and Portage County Soil & Water Conservation Districts; County Planning Commissions and Health Departments; Lake County Engineer; Lake County Stormwater Management Department; Lake County Port Authority; Port Authority of Eastlake; Grant Funders; Sponsoring Members; Donors; In Kind Services Providers and Volunteers.

CRWP Executive Committee

Greg Studen, *President, At Large Trustee*

Mary Samide, *Vice President, At Large Trustee*

Christopher Horn, *Secretary, Trustee Bainbridge*

William Tomko, *Treasurer, At Large Trustee*

Christina LeGros, *At Large Trustee*

Irene McMullen, *Trustee, Munson*

Cindy Quinn-Hopkins, *Trustee, Eastlake*

CRWP Members

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Aurora
Bainbridge Township
Bentleyville
City of Chardon
Chardon Township
Chagrin Falls
Chagrin Falls Township
Claridon Township
Cleveland Metroparks
Eastlake
Gates Mills
Geauga Park District
Hunting Valley
Kirtland
Kirtland Hills
Lake County
Lake Metroparks
Mantua Township
Mayfield Heights
Mayfield Village
Mentor
Moreland Hills
Munson Township
Newbury Township
Orange Village
Pepper Pike
Russell Township
Solon
South Russell
Waite Hill
Wickliffe
Willoughby
Willoughby Hills
Woodmere

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Irene McMullen, Munson Township
Glen Quigley, Newbury Township
Kathy Mulcahy, Orange Village
Richard Bain, Pepper Pike
Justin Madden, Russell Township
Dan Driscoll, Solon
Matthew Brett, South Russell
Brian Sherwin, Waite Hill
Joe D'Ambrosio, Wickliffe
Robert Fiala, Willoughby
David Fiebig, Willoughby Hills
Charles E. Smith, Woodmere
Alison Ball, At Large
Mark Cain, At Large
Roger Gettig, At Large
Frank Greenland, At Large
James R. Gills, At Large
George "Chip" Hess, At Large
Donna Klements, At Large
Christina LeGros, At Large
Keith McClintock, At Large
Timothy A. Miller, At Large
Mary Samide, At Large
Greg Studen, At Large
William Tomko, At Large
Peter J. Whiting, At Large
Tom Zarfoss, At Large

CRWP Sponsoring Members

Chagrin Valley Engineering, Ltd.
CT Consultants, Inc.
Davey Resource Group
Environmental Design Group
EnviroScience, Inc.
GPD Group
HzW Environmental Consultants, LLC
Mark Haynes Construction
NTH Consultants, Ltd.
Ohio Land Stewardship
Ohio Stream Preservation, Inc.
Partners Environmental Consulting, Inc.
Polaris Engineering and Surveying, Inc.
Stephen Hovancsek & Associates, Inc.
Terracon Consultants, Inc.
The Holden Arboretum
Western Reserve Land Conservancy

Grant Funders

Great Lakes Commission, Great Lakes Basin Program
NERRS Science Collaborative through NOAA and the University of New Hampshire
NOAA Coastal Storms Program administered by Ohio Sea Grant through Ohio State University Research Foundation
Northeast Ohio Regional Sewer District Watershed Grants Program
Ohio Department of Natural Resources Division of Wildlife, Old Woman Creek NERR
Ohio Department of Natural Resources Office of Coastal Management
Ohio Environmental Protection Agency, Section 319 Grant Program
Ohio Environmental Protection Agency, Surface Water Improvement Fund
Ohio Environmental Protection Agency, Ohio Environmental Education Fund
Ohio Lake Erie Commission, Lake Erie Protection Fund
US Environmental Protection Agency – Great Lakes Restoration Initiative (GLRI)
US Forest Service - Northeastern Area State & Private Forestry GLRI through Chagrin Falls Village
Water Resource Restoration Sponsor Program through the City of Aurora

Donors, In Kind Services Providers and Volunteers

Amy Holtshouse Brennan
Chagrin Arts
Chagrin Falls High School students and faculty
Dr. Jeanette Grasselli Brown
Friends of Old Woman Creek
Friends of Robert George Rolan, PhD.
Gates Mills Historical Society
Gates Mills Improvement Society
Gates Mills Land Conservancy
Holden Arboretum
Lake Catholic High School students
Lake County Stormwater Management Dept.
Northeast Ohio Regional Sewer District
Northcoast Fly Fishers
Ohio Central Basin Steelheaders
Old Woman Creek National Estuarine Research Reserve
Mrs. Ella Quintrell
Solon Middle School Girl Scout Troop 70780
The Nature Conservancy - Ohio
Village of Gates Mills
Western Reserve Land Conservancy
WP Glimcher

Honoring Thomas A. Quintrell

Thomas A. Quintrell's family attended a tree dedication ceremony held in his honor. Left to right: Lute Quintrell, Josie Quintrell, Ella Quintrell, Margie Madding, Edie Quintrell

At CRWP's 2015 Annual Meeting, the Board of Trustees adopted a resolution of remembrance and appreciation for Thomas A. Quintrell, who passed away in March. Mr. Quintrell was a founder of CRWP who drafted our Articles of Incorporation and Code of Regulations. He served on our Executive Committee for 20 years, providing critical legal and organizational guidance to ensure our success.

CRWP organized the planting of an oak tree in appreciation of Mr. Quintrell's visionary leadership and steadfast dedication to conserving our natural environment. The tree was planted on the grounds of the Gates Mills Historical Society in partnership with the Village of Gates Mills, Gates Mills Land Conservancy, Gates Mills Historical Society, Gates Mills Improvement Society and Western Reserve Land Conservancy. Mr. Quintrell was an active leader and supporter of these organizations from 1986 until 2015.

CRWP is a non-profit organization that provides technical assistance and develops cost effective, prevention-focused solutions to address natural resource management problems as communities grow. The Chagrin River watershed is a high quality natural resource that is impacted by development activities which increase flooding, erosion, and water quality problems. Faced with rising infrastructure costs as a result of these impacts, the cities, villages, townships, counties, and park districts of the watershed formed CRWP in 1996. In 2015 CRWP served 35 members, representing 91% of the watershed.

2015 Board of Trustees Meeting Dates

February 18, 2016
May 19, 2016 (Annual Meeting)
September 13, 2016
December 8, 2016

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Pollutant load and stormwater volume reductions in this report were estimated using U.S. EPA's Spreadsheet Tool for Estimating Pollutant Load (STEPL) and U.S. EPA's National Stormwater Calculator.

Photo by Russ Gibson, Ohio EPA