Ohio Department of Natural Resources

Division of Soil and Water Resources

Limestone Open Channel

Mayfield Heights High School Stormwater Retrofit Wetland

Students monitoring water quality at Little Beaver Creek

OHIO WATERSHED COORDINATOR GRANT PROGRAM

July 2011 to June 2012

Annual Report

Letter from the Chief

Bounded by Lake Erie to the North, and the Ohio River to the South, Ohio enjoys the benefits of a wealth of water resources. Manufacturing, agriculture, energy production, and urban development, all of which depend on plentiful water, continue to define Ohio as a great state! Over the past 40 years Ohio has been at the forefront with improving water quality. However, the need to continue these efforts is ongoing, especially to address "nonpoint" sources. A broad-based watershed approach is necessary to prevent runoff of nutrients, sediment and other pollutants from residential, agricultural, and urban environments. The Ohio Department of Natural Resources, Ohio EPA and other state partners, have invested in a nationally respected watershed management program to support local communities' efforts to develop and implement science-based watershed action plans.

An important component of this watershed initiative is the Ohio Watershed Coordinator Grant Program administered by ODNR Division of Soil and Water Resources, with funding from state and federal sources including the Ohio EPA administered 319 Grant Program. Watershed coordinators are trained professionals who work with a myriad of stakeholders to determine the best opportunities to solve water resource challenges and assemble the technical and financial resources to launch focused projects in their watersheds. They access and align federal, state, and local grants and funding programs to help landowners adopt practices that are helping improve water quality across the state. They are bringing streams back to life by working with ODNR Division of Mineral Resources Management and others to eliminate acidic runoff. Streams are being returned to free flowing condition, and reconnected to floodplain forests that nourish healthy fish populations. Watershed coordinators also work with local governments to reduce the impacts of stormwater runoff and reclaim our cities' rivers as economic and recreational assets.

These and other accomplishments of the Ohio Watershed Coordinator Grant program are detailed in the following pages for the recent state fiscal year, July 1, 2011 through June 30, 2012. However, this is still merely the data we can assemble. As you read through this report, I hope you share with me the pride of knowing that this report represents thousands of people, agencies, and organizations working together, without regulation or mandate, to improve and protect Ohio's treasured water resources.

Karl R. Gebhardt
Chief, Division of Soil and Water Resources

Watershed Coordinator Grants

Watershed Coordinator Grant Program Financial History 2001-2011

	2001	2002	2003	2004	2005	2006	2007
Ohio EPA	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000
Soil and Water Resources	$233,772	$300,000	$260,628	$278,350	$258,500	$265,000	$265,000
Mineral Resources Management	$100,000	$100,000	$105,000	$105,000	$105,000	$118,000	$118,000
Office of Coastal Management			$90,000	$74,200	$66,790	$59,200	$53,290
Wildlife							$35,000
Revenue Subtotal	$735,773	$802,002	$857,631	$859,554	$832,295	$844,206	$873,297
Local Match (cash & in-kind)	$61,169	$285,943	$148,092	$723,455	$713,486	$948,184	$909,594
TOTAL	**$796,942**	**$1,087,945**	**$1,005,723**	**$1,583,009**	**$1,545,781**	**$1,792,390**	**$1,782,891**

* Cash match only

Watershed Coordinator Grant Program Financial History 2001-2011 (continued)

	2008	2009	2010	2011	TOTAL
Ohio EPA	$400,000	$400,000	$400,000	$400,000	**$4,400,000**
Soil and Water Resources	$275,000	$211,938	$213,675	$213,675	**$2,775,538**
Mineral Resources Management	$118,000	$118,000	$118,000	$118,000	**$1,223,000**
Office of Coastal Management	$82,752	$35,000	$105,000	$105,000	**$671,232**
Wildlife	$35,000	$70,000	$98,000	$98,000	**$336,000**
Revenue Subtotal	$912,760	$836,947	$936,685	$936,686	**$9,427,836**
Local Match (cash & in-kind)	$926,293	$1,470,524	$716,398*	$472,785*	**$6,186,740**
TOTAL	**$1,839,053**	**$2,307,471**	**$936,685**	**$936,686**	**$15,614,576**

* Cash match only

Index of Biotic Integrity (IBI)

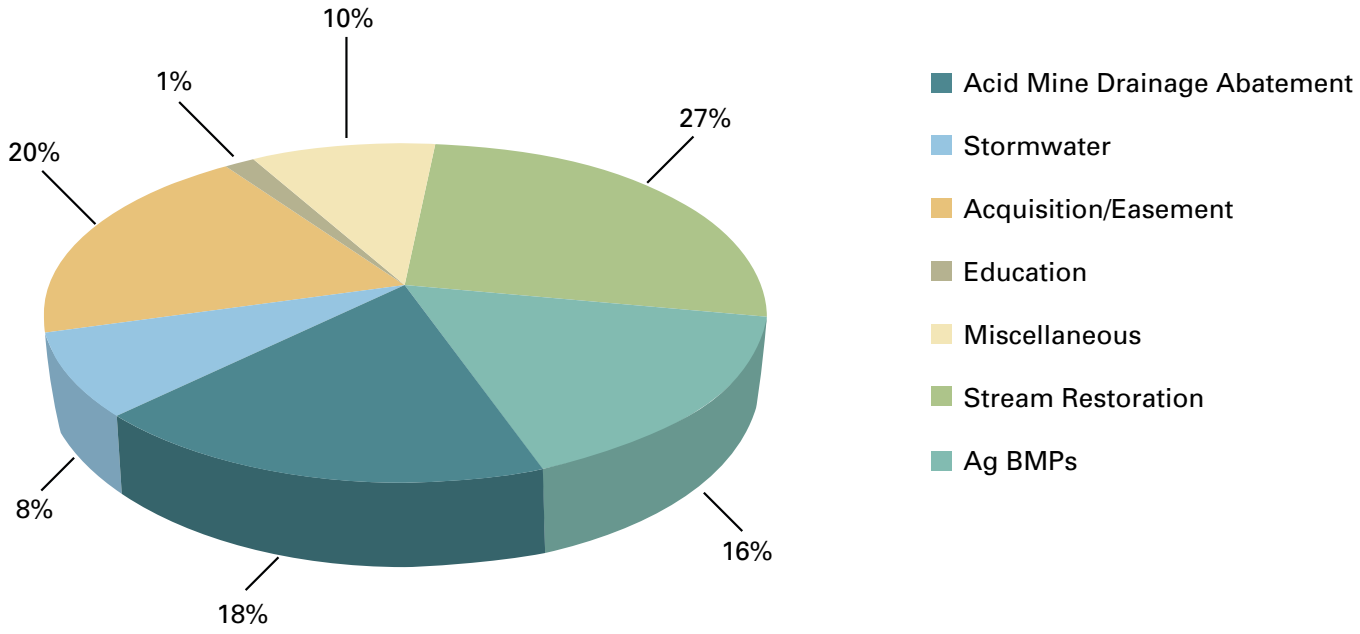
The principal biological evaluation tools used by Ohio EPA are the Index of Biotic integrity (IBI), the Modified Index of Well-Being (MIWB) and the Invertebrate Community Index (ICI). These three indices are based on species richness, trophic composition, diversity, presence of pollution-tolerant individuals or species, abundance of biomass, and the presence of diseased or abnormal organisms. The IBI and the MIWB apply to fish; the ICI applies to macroinvertebrates. Ohio EPA uses the results of sampling reference sites to set minimum criteria index scores for use designations in water quality standards. Ohio EPA http://www.epa.state.oh.us/dsw/wqs/index.aspx

Twin Creek Preserve

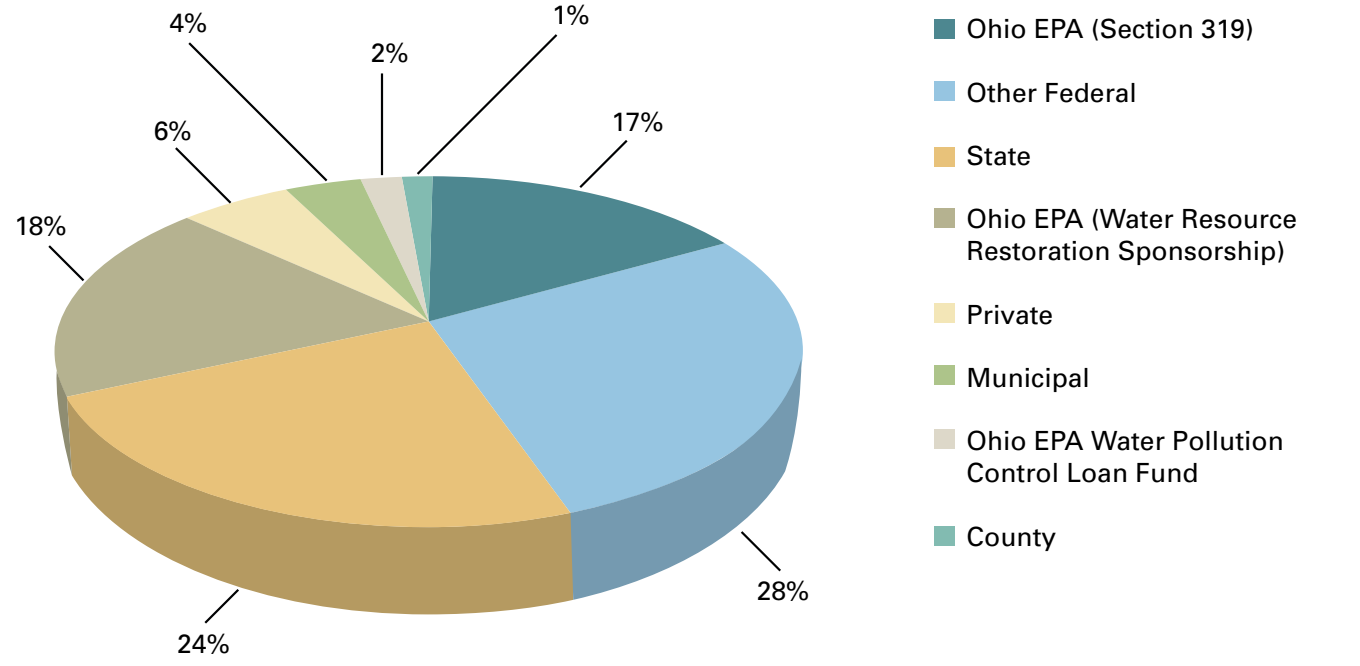
Leveraged Funding 2001-2012

An important premise of the Ohio Watershed Coordinator Grant Program is that investment in trained professionals dedicated to their watersheds will generate multiple returns in focused technical and financial resources for those watersheds. Since the program began in 2001, watershed coordinators have been able to acquire over $100 million through grant writing and partnering with various local, state, and federal stakeholders. Funding programs available to all who qualify, such as USDA "Farm Bill" conservation programs, are not included. Rather, only those for which a watershed coordinator had a "significant role" in acquiring are included. The two pie charts illustrate the distribution of funding by project type, and funding source.

Funding Leverage by Project Type



Funding Leverage by Source



Nonpoint Source Implementation Summary - July 1, 2011 through June 30, 2012

Reported by Watershed Coordinators on behalf of all partners; and Soil and Water Conservation District data queried from Soil and Water Information Management System (SWIMS)

Objectives	Practices	Units	TOTAL	
Streambank & Riparian Restoration	Restore Streambank Using Bio-Engineering	Linear Feet	2,950	0.53 miles
	Restore Streambank By Recontouring or Regrading	Linear Feet	4,033	0.76 miles
	Plant Grasses in Riparian Areas	Acres	60.2	
	Plant Prairie Grasses in Riparian Areas	Acres	25	
	Remove/treat Invasive Species	Acres	2,318.05	3.6 sq. miles
	Plant Trees or Shrubs in Riparian Areas	Trees	29,456	
	Plant Trees or Shrubs in Riparian Areas	Acres	278.8	
Stream Restoration	Restore Flood Plain	Linear Feet	6600	1.25 miles
	Restore Stream Channel	Linear Feet	10,666	2.02 miles
	Install In-Stream Habitat Structures	Structures	36	
	Install Grade Structures	Structures	96	
	Restore Natural Flow	Linear Feet	4700	0.89 miles
Wetland Restoration	Reconnect wetland to stream	Acres	10	
	Reconstruct & Restore Wetlands	Acres	158.124	
	Plant Wetland Species	Acres	47.624	
Dam Modification or Removal	Remove Dams	Dams	2	
	Modify Dams	Dams	1	
	Restore Natural Flow	Linear Feet	1,000	0.18 miles
Acid Mine Drainage & AML Reclamation	Construct Lime Dosers	Dosers	1	
	Install Slag Leach Beds	Beds	8	
	Install Limestone Leach Beds	Beds	4	
	Install Limestone Channels	Linear Feet	5,845	0.6 miles
	Repair Subsidence Sites	Acres	28	
	Reclaim Abandoned Mine Land	Acres	77	
	Install Successive Alkalinity Producing Systems	SAPS	1	
	Restore Positive Drainage	Acres	39	
	Cover Toxic Mine Spoils	Acres	34	
	Construct Acid Mind Drainage Wetland	Acres	11.85	
Conservation Easements	Acquire Riparian Conservation Easements	Acres	413.9	
	Acquire Wetland Conservation Easements	Acres	152.71	
Home Sewage Treatment Systems	Inspect HSTS	Inspections	3,838	
	Repair or Replace Traditional HSTS	HSTS	464	
	Repair or Replace Alternative HSTS	HSTS	23	
Agricultural Best Management Practices	Plant Cover Crops	Acres	1,880.31	7.72 sq. miles
	Install Nitrogen Reduction Practices	Acres	0	
	Install Control Drainage System	Acres	25	
	Develop Nutrient Management Plans	Plans	148	
	Develop Whole Farm Management Plans	Acres	0	
	Implement Conservation Tillage Practices	Acres	965.8	5.8 sq. miles
	Implement Prescribed & Conservation Grazing Practices	Acres	189.4	1.6 sq. miles
	Install Alternative Water Supplies	Supplies	55	
	Install Erosion & Sediment Control Structures	Structures	0	
	Install Grassed Waterways	Linear Feet	204,568.1	38.7 miles
	Install Vegetated Buffer Strips	Acres	76.9	

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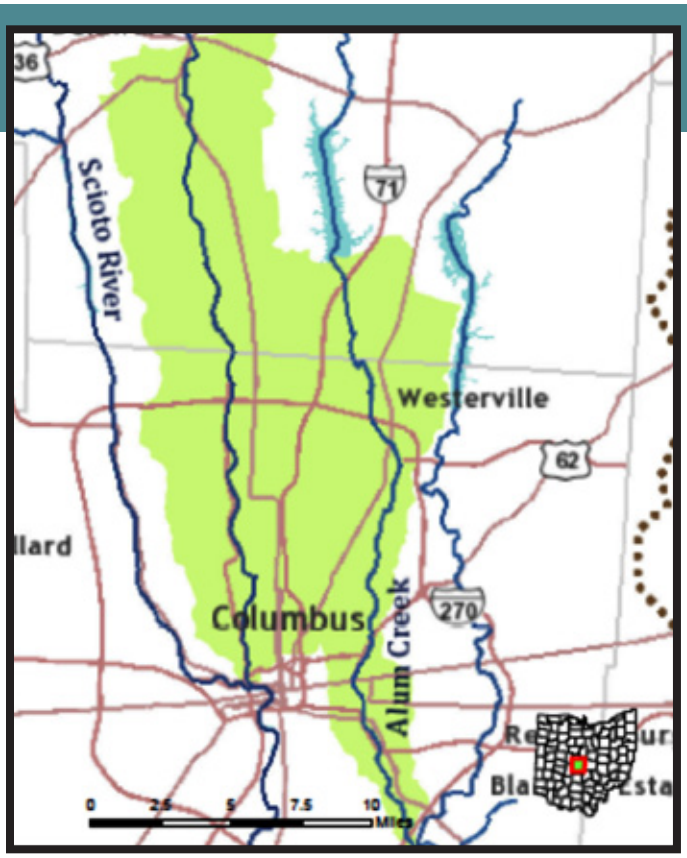
Nonpoint Source Implementation Summary - July 1, 2011 through June 30, 2012

Objectives	Practices	Units	TOTAL	
Agricultural Best Management Practices (continued)	Install Livestock Crossings	Crossings	9	
	Install Heavy Use Feeding Pads	Pads	10	
	Install Livestock Exclusion Fencing	Linear Feet	60,063	11.73 miles
	Install Chemical Mixing Pads	Pads	4	
	Construct Animal Waste Storage Structures	Structures	23	
	Implement Manure Management Practices	Acres	190	
	Conduct Soil Testing	Tests	11	
	Implement Grass/Legume Rotations	Acres	2,514.4	3.9 sq. miles
	Install Grass Manure Spreading Strips	Acres	5.1	
	Implement Manure Transfer Practices	Acres	3	
	Install Roof Water Management Practices	Practices	32	
	Execute Landowner Cost-Share Contracts	Cost-share Agreements	96	
Education & Outreach	Develop Brochures/Fact Sheets	Brochures/Fact Sheets	48	
	Conduct Watershed Festivals	Festivals	19	
	Conduct Public Meeting	Public Meetings	113	
	Develop Press Releases	Press Releases	88	
	Create/Maintain Websites	Website	73	
	Install Signs	Signs	23	
	Develop Displays	Displays	26	
	Conduct Tours	Tours	54	
	Conduct Tours via Canoe	Canoe Trips	4	
	Conduct Stream Clean-Ups	Clean-Ups	54	
	Conduct Field Days - land owner / manager	Days	11	
	Stencil Storm Drains	Drains	12	
	Conduct Workshops	Workshops	78	
	Conduct Training	Training Sessions	25	
	Develop Manual(s)	Manuals	1	
	Provide Technical Assistance to Group(s)	Groups	34	
	Deliver On-Site Technical Assistance	Site Visits	16,907	8 man years - est. 1 hr/visit
	Develop Newsletters	Newsletters	48	
Local Policy	Develop or Customize Model Local Conservation Statutes	Statutes	16	
	Adoption of Local Conservation Statutes	Jurisdictions	24	
Monitoring	Conduct Chemical Sampling	Sites	632	
	Conduct Macroinvertebrate (ICI) Sampling	Sites	89	
	Conduct Fish (IBI) Sampling	Sites	35	
	Conduct Habitat (QHEI or HHEI) Sampling	Sites	50	
	Conduct Nitrate Sampling (WATER)	Sites	24	
	Prepare and Submit Final Monitoring Report and Data	Report	3	
Estimated Loading Reductions	Reduce Phosphorus Loadings	Pounds/Year	34,826.6	2.17 dump trucks [1]
	Reduce Sediment Loadings	Tons/Year	28,207.49	Would fill 3,525 dump trucks [1] or one bulk freighter
	Reduce Untreated Home Sewage	Gallons Per Day	163,820	0.24 Olympic swimming pool [2]
	Treat Acid Water	Pounds/Year	2,515,580	3 Olympic swimming pools [2]
	Reduce Nitrogen Loadings	Pounds/Year	57,031.4	3.5 dump trucks [1]

Estimated loading reductions are only those reported by watershed coordinators, and are not calculated from all reported activity. No load reduction estimates are associated with those reported from SWIMS. [1] A Class 7 single axle dump truck can typically haul eight to ten cubic yards, or up to eight tons of payload. [2] Volume of Olympic size swimming pool: 660,000 US Gallons (http://en.wikipedia.org/wiki/Olympic-size_swimming_pool)

Lower Alum Creek and Lower Olentangy River Watersheds



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http://www.franklinswcd.org/

Watershed Coordinator Priorities

- Improve stream quality and function by removing dams and restoring natural, stable structure
- Reduce stream structure instability by promoting stormwater retention and infiltration practices, i.e. rain gardens, rain barrels, and stormwater infrastructure upgrades
- Improve stream habitat and reduce stormwater runoff by increasing forest cover
- Reduce pollution from private sewage runoff
- Provide local units of government water resource policy advice and assistance

IMPLEMENTATION

Reporting Partners

City of Columbus
Franklin County Department of Health
Franklin Soil and Water Conservation District
Friends of Lower Olentangy River Watershed
Sierra Club
Liberty Township

Informational Signage

Practices	Value	Units
Remove / Treat Invasive Species	65	Acres
Plant Trees or Shrubs in Riparian Areas	8,000	Trees
Plant Trees or Shrubs in Riparian Areas	35	Acres
Develop Brochures / Fact Sheets	6	Brochures / Fact Sheets
Conduct Watershed Festivals	5	Festivals
Conduct Public Meeting	8	Public Meetings
Develop Press Releases	4	Press Releases
Create / Maintain Websites	3	Websites
Install Signs	6	Signs
Conduct Tours	7	Tours
Conduct Stream Clean-Ups	18	Clean-Ups
Conduct Field Days - Land Owner / Manager	2	Days
Provide Technical Assistance to Group(s)	7	Groups
Deliver On-Site Technical Assistance	38	Site Visits
Develop Newsletters	6	Newsletters
Develop or Customize Model Local Conservation Statutes	3	Statutes
Adoption of Local Conservation Statutes	2	Jurisdictions

Lower Alum Creek and Lower Olentangy River Watersheds (continued)

Highlights

- Participated in the installation of a rain garden demonstration in the Ohio Department of Natural Resources Park on the Ohio State Fairgrounds.
- Provided technical support and review of the Ohio State University stormwater master plan, including planning for retrofit and river restoration.
- Provided advisory assistance to the Mid-Ohio Regional Planning Commission during developement of the Olentangy River Watershed Balanced Growth Plan.
- Provided technical support to the City of Columbus regarding removal of the Fifth Avenue Dam on the Olentangy River.
- Assisted local golf courses in becoming certified by National Audubon Society
- Installed a demonstration/science lab rain garden system on Dominion Middle School property.
- Provided technical assistance to City of Upper Arlington to develop concept design for right-of-way rain gardens.
- Clean stream setback standards implemented within Franklin County townships along Alum Creek.
- Stormwater manuals completed for Franklin County and City of Columbus.

SWIF Grant (Ohio EPA) Wildcat Run Restoration Site

Liberty Park 319 Grant (Ohio EPA), Stormwater Demonstration Site, first installation of project completed – Rain Garden

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Columbus	$40,500	GreenSpot Backyard Conservation / Stormwater BMPs
Columbus	$83,000	Invasive species removal program
Municipal Grant	$27,500	GreenSpot Backyard Conservation / Stormwater BMPs
Ohio Environmental Education Fund	$106,192	Installation of 16 rain gardens / residential education/ and monitoring
Ohio Environmental Education Fund	$53,803	Facilitate education of nurseries on native and rain garden plants
Ohio Water Development Authority	$51,808	Urban Subwatershed Initaitive. Delineation of urban watersheds based on subsurface drainage / updates and amendments to the Watershed Action Plan.
TOTAL	**$362,803**	

Chagrin River Watershed

SPONSORED BY CHAGRIN RIVER WATERSHED PARTNERS, INC.
http://crwp.org/

Watershed Coordinator Priorities

- Improve stream quality and function by removing/modifying dams and restoring natural, stable structure
- Restore upland and floodplain wetlands
- Reduce stream structure instability by promoting stormwater retention and improve stormwater infrastructure
- Provide local units of government water resource policy advice and assistance

Water Quality Improvements

- Dr. Krebs of Cleveland State University completed a mussel survey of the dewatered lake bed at the IVEX Lower Dam site and found 13 live mussels, which were relocated upstream of the project area.
- Data from CRWP's Low Impact Development demonstration sites in South Russell and Orange Village has been compiled and released in USGS Scientific Investigations Report 2011-5165, Hydraulic Characteristics of Low-Impact Development Practices in Northeastern Ohio, 2008-2010. (http://pubs.usgs.gov/sir/2011/5165/pdf/Chagrin_2011_5165.pdf).
- Cleveland Metroparks is monitoring locations in the Sulphur Springs tributary as part of the Sulphur Springs Restoration and Assessment Project. Data will be evaluated to determine impacts of thermal loading and other stormwater-related flow modifications to coldwater habitat streams, and to assess the feasibility of Sulphur Springs as a reintroduction site for native Ohio brook trout.
- Ohio EPA sampling after installation of the Shadybrook restoration indicated that the restored section is in full attainment of the Coldwater Habitat aquatic life use standards. Rainbow trout, a cold-water species, and 10 species of cold-water macroinvertebrates were sampled.

IMPLEMENTATION

Reporting Partners

Chagrin River Watershed Partners, Inc.
City of Aurora
Cleveland Metroparks
Cuyahoga County Board of Health
Cuyahoga Soil and Water Conservation District
Gates Mills Land Conservancy
Geauga County Health District
Geauga County Park District
Geauga Soil and Water Conservation District
Holden Arboretum
Lake County General Health District
Lake County Metroparks
Lake Soil and Water Conservation District
Western Reserve Land Conservancy

Practices	Value	Units
Restore Streambank By Recontouring or Regrading	883	Linear Feet
Plant Prairie Grasses in Riparian Areas	14	Acres
Remove / Treat Invasive Species	2181.45	Acres
Plant Trees or Shrubs in Riparian Areas	2046	Trees
Plant Trees or Shrubs in Riparian Areas	5	Acres
Restore Stream Channel	1635	Linear Feet
Restore Natural Flow	200	Linear Feet
Reconstruct & Restore Wetlands	0.524	Acres
Plant Wetland Species	0.724	Acres
Modify Dams	1	Dams
Acquire Riparian Conservation Easements	188.8	Acres

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Chagrin River Watershed (continued)

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Practices	Value	Units
Acquire Wetland Conservation Easements	146.01	Acres
Inspect HSTS	1117	Inspections
Repair or Replace Traditional HSTS	154	HSTS
Repair or Replace Alternative HSTS	13	HSTS
Develop Brochures / Fact Sheets	4	Brochures / Fact Sheets
Conduct Watershed Festivals	1	Festivals
Develop Press Releases	5	Press Releases
Create / Maintain Websites	52	Websites
Install Signs	5	Signs
Develop Displays	6	Displays
Conduct Tours	3	Tours
Conduct Workshops	14	Workshops
Conduct Training	10	Training Sessions
Provide Technical Assistance to Group(s)	11	Groups
Deliver On-Site Technical Assistance	4,298	Site Visits
Develop Newsletters	11	Newsletters
Develop or Customize Model Local Conservation Statutes	10	Statutes
Adoption of Local Conservation Statutes	17	Jurisdictions
Conduct Chemical Sampling	6	Sites
Conduct Macroinvertebrate (ICI) Sampling	14	Sites
Conduct Fish (IBI) Sampling	6	Sites
Conduct Habitat (QHEI or HHEI) Sampling	23	Sites

Highlights

- Kenston Lake Dam Modification has resulted in 1635 ft of stream and 0.36 acres of wetland restoration.
- CRWP hosted a Dam Safety workshop on October 26, 2011 in cooperation with ODNR's Dam Safety Program and the Geauga, Lake, Cuyahoga, and Portage SWCDs. Presentations were made on pond maintenance by Geauga and Lake SWCD, and agents from ODNR's Dam Safety Program presented on dam classification, liability, maintenance, and developing an Emergency Action Plan. Eighty-six people were in attendance, representing 27 communities across 9 counties.
- CRWP was awarded a National Estuarine Research Reserve (NERR) System Science Collaborative Grant for a 3-year project beginning in November 2011. Collaborating with Old Woman Creek NERR, ODNR, and Erie SWCD to implement more effective stormwater management in Ohio's Lake Erie basin.
- CRWP provided technical assistance to Cuyahoga County in updating both their countywide Natural Hazard Mitigation Plan and Greenprint Plan; Lake County Planning Commission in drafting the Eastern Lake County Coastal Tributaries Balanced Growth Plan; and Lorain County in the review and submittal of the Black River Watershed Action Plan for state endorsement.
- CRWP has been assisting the Trust for Public Land and the City of Aurora on developing a stream restoration management plan for the Aurora Golf Club.

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Ohio EPA – 319 Grant	$164,000	East Branch Chagrin River Stream Restoration Project - Riverwood
The Gund Foundation	$25,000	CRWP Member Community Needs Assessment and Strategic Plan
National Estuarine Research Reserve System Science Collaborative	$821,000	Implementing Credits & Incentives for Innovative Stormwater Management
Chagrin River Watershed Partners, Inc. Member Dues & Supporting & Sponsoring Members	$117,158	Support for CRWP services to Member communities
TOTAL	**$1,127,158**	

Euclid Creek Watershed

SPONSORED BY CUYAHOGA SOIL AND WATER CONSERVATION DISTRICT

http://www.cuyahogaswcd.org/

Watershed Coordinator Priorities

- Improve stream quality and function by removing/modifying dams and restoring natural, stable structure
- Restore upland and floodplain wetlands
- Reduce stream structure instability by promoting stormwater retention and improve stormwater infrastructure

IMPLEMENTATION

Reporting Partners

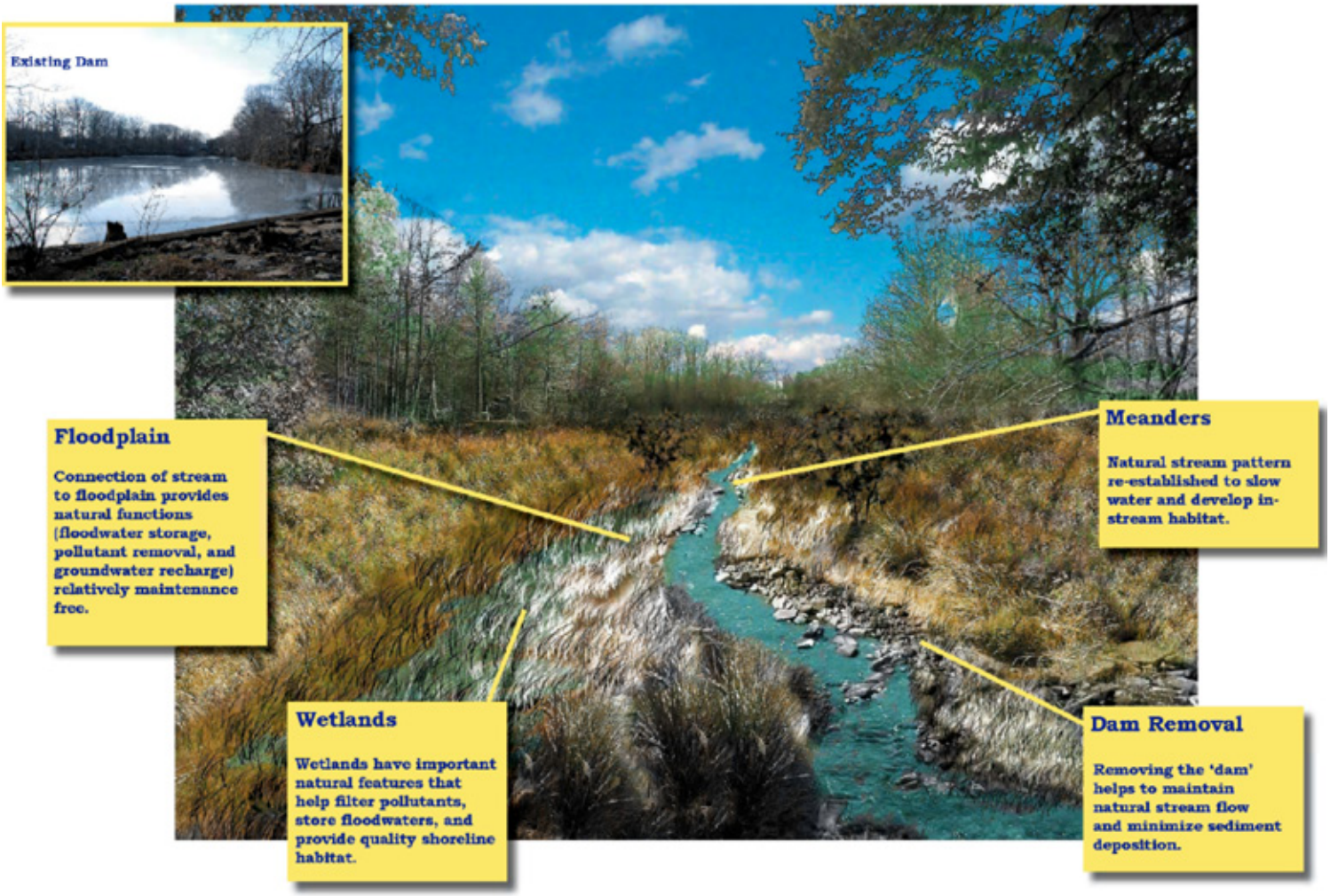
City of Lyndhurst
Cleveland Metroparks
Cuyahoga County Airport
Cuyahoga County Board of Health
Cuyahoga Soil and Water Conservation District
Girl Scout Troop
Lake County General Health District
Mayfield School Board
North East Ohio Regional Sewer District
ODNR – Cleveland Lakefront State Park
Watershed Communities

Mayfair Lake Stream Restoration / Dam Removal

Practices	Value	Units
Remove / Treat Invasive Species	26.4	Acres
Inspect HSTS	20	Inspections
Repair or Replace Traditional HSTS	24	HSTS
Develop Brochures / Fact Sheets	9	Brochures / Fact Sheets
Conduct Public Meeting	4	Public Meetings
Develop Press Releases	4	Press Releases
Create / Maintain Websites	1	Websites
Install Signs	3	Signs
Conduct Tours	4	Tours
Conduct Field Days - Land Owner / Manager	1	Days
Stencil Storm Drains	12	Drains
Conduct Workshops	7	Workshops
Develop Newsletters	3	Newsletters
Adoption of Local Conservation Statutes	1	Jurisdictions
Conduct Chemical Sampling	7	Sites
Conduct Macroinvertebrate (ICI) Sampling	2	Sites
Conduct Fish (IBI) Sampling	2	Sites
Conduct Habitat (QHEI or HHEI) Sampling	1	Sites

Euclid Creek Watershed (continued)

East Branch Dam After Removal Plans



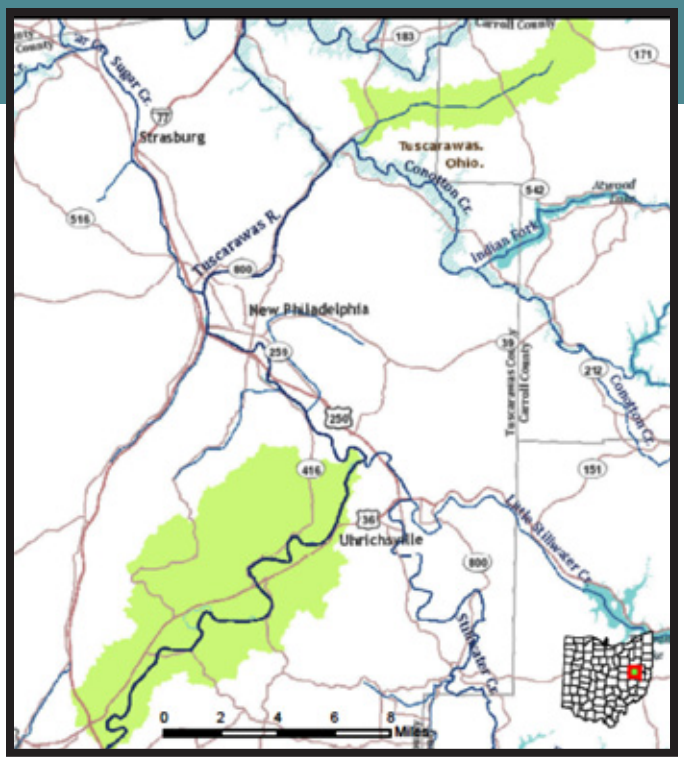
Highlights

- Conducted stakeholder meetings for the Lacustrine Refuge Project
- Provided assistance to watershed community resulting in adoption of ordinance allowing installation of rain barrels
- Held 5 rain barrel workshops for watershed communities
- Developed the planting plan and signage for an 800 square foot bioretention cell at Mayfield Village Wiley Park. Thirteen students assisted with installation

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Northeast Ohio Regional Sewer District (NEORSD) - 2011 Watershed Grant	$35,000	To assist watershed groups with operations and staff funding to help develop projects
TOTAL	**$35,000**	

Huff Run and Mud Run Watersheds



SPONSORED BY RURAL ACTION

http://ruralaction.org/

Watershed Coordinator Priorities

- Reduce acid mine drainage with various passive and active treatment practices:
  - Gob Pile Reclamations
  - Wetland Treatment Systems
  - Settling Ponds
  - Treatment Channels

Water Quality Improvements

Huff Run data may demonstrate justification for attainment of water quality standards. See watersheddata.com.

The Lyons Phase II project was completed in 2011 by Diamond Construction for a total of $160,220. A new settling pond was constructed as well as the installation of CSA steel slag aggregate to reduce alkalinity. A new piping system was put in place to reduce change of water quality. Construction took place from May 31, 2011 through September 26, 2011. It was funded through an Office of Surface Mining grant and in kind cash match through ODNR Division of Mineral Resources Management. The first post-construction sample result shows substantial improvement in alkalinity.

Biological (fish, macroinvertebrates and bacteria) sampling was conducted this period. Macroinvertebrate data takes time to be calculated so will be reported on next period. Little change was seen in the bacteria sampling which is positive. Fish data also has yet to be crunched but number of species and specific species show improvement. Northern pike were found further upstream than in 2010 and can now be found at river mile 0.30 (the lowest downstream sampling point) and 1.30 (the next point upstream within Mineral City). Mottled sculpin and central mudminnows were seen at the same river miles for the first time in 2011. These are all pollution intolerant fish living within previously extremely polluted waters.

IMPLEMENTATION

Reporting Partners

Rural Action
ODNR Division of Mineral Resources Management
AmeriCorps

Practices	Value	Units
Install Slag Leach Beds	1	Beds
Install Limestone Channels	185	Linear Feet
Construct Acid Mind Drainage Wetland	0.25	Acres
Develop Brochures / Fact Sheets	10	Brochures / Fact Sheets
Conduct Watershed Festivals	1	Festivals
Conduct Public Meeting	20	Public Meetings
Develop Press Releases	15	Press Releases
Create / Maintain Websites	2	Websites
Develop Displays	4	Displays
Conduct Tours	2	Tours
Conduct Workshops	15	Workshops
Deliver On-Site Technical Assistance	6	Site Visits
Develop Newsletters	1	Newsletters
Conduct Chemical Sampling	76	Sites
Conduct Macroinvertebrate (ICI) Sampling	8	Sites

Huff Run and Mud Run Watersheds (continued)

Highlights

- Long-time Huff Run Watershed Coordinator, Maurine Wise, resigned from the position March 30, 2012. Marissa Geib started in role on June 21, 2012.
- With many successes within the Huff Run Watershed, the watershed coordinator has turned focus to the Mud Run Watershed to organize a similar community effort. The current watershed coordinator grant enables implementation in both Mud Run and Huff Run watersheds.
- Organized a Technical Advisory Committee (TAC) consisting of representatives of ODNR Division of Mineral Resources (MRM), Ohio EPA, US Department of Interior – Office of Surface Mining, and the Huff Run Watershed Restoration Partnership.
- Participated in site selection, mapping, and project planning with MRM for the Simmons Property, Scott Property, and Holmes Wetland priority projects.
- Participated in numerous community outreach meetings.
- Conducted a fall tour for 22 participants. The tour included stops at three completed projects.
- ODNR-MRM and the Huff Run Watershed Restoration Partnership jointly received a prestigious national 2011 Abandoned Mine Lands Reclamation award from the Office of Surface Mining for the Thomas Project.

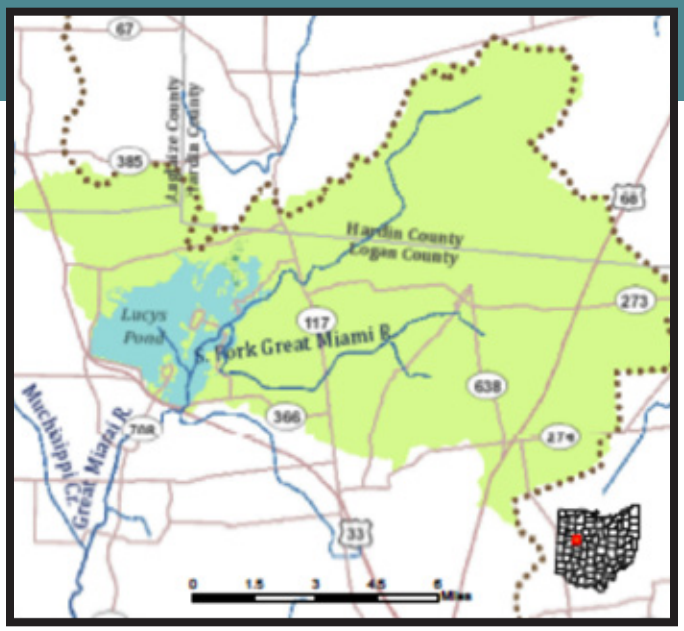
Funding Acquired

Funding Source	Amount	Project Description / Purpose
Muskingum Watershed Conservancy District - Partners in Watershed Management Grant	$18,746	Funding for environmental education in both watersheds, including community outreach and small amount of administrative costs
TOTAL	**$18,746**	

Lyons Phase II Construction 2011

Northern Pike found in Huff Run in 2011

Indian Lake Watershed



SPONSORED BY INDIAN LAKE WATERSHED PROJECT

http://www.co.logan.oh.us/ILWP/index.htm

Watershed Coordinator Priorities

- Reduce nutrient and pesticide loading to Indian Lake by promoting source reduction practices including:
  - Nutrient management planning for agricultural operations
  - Waterfront private and commercial lawn care education
  - Rain garden development
- Intercept nonpoint source pollution runoff with wetland restoration and establishment

Water Quality Improvements

Ohio EPA Watershed Assessment Summary documents that the 2 largest sub-watersheds (North Fork and South Fork) of Indian Lake Watershed are now attaining water quality standards for aquatic life use This achievement is a direct result of best management practice adoption by agricultural producers incentivized by Indian Lake Watershed Project and partner agencies. Unfortunately, habitat alteration in the Van Horn/ Blackhawk sub-watershed is a barrier to achieving attainment of water quality standards in this small portion of the Indian Lake Watershed.

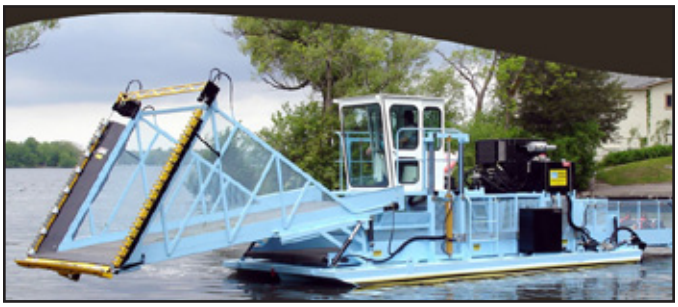
IMPLEMENTATION

Reporting Partners

Indian Lake Watershed Project
Logan Soil and Water Conservation District
Hardin Soil and Water Conservation District
Auglaize Soil and Water Conservation District
ODNR Indian Lake State Park

Practices	Value	Units
Install Controll Drainage System	1	Acres
Install Grassed Waterways	5,505	Linear Feet
Install Vegetated Buffer Strips	2.7	Acres
Create / Maintain Websites	1	Websites
Develop Displays	2	Displays
Conduct Stream Clean-Ups	1	Clean-Ups
Conduct Workshops	1	Workshops
Develop Manual(s)	1	Manuals
Develop Newsletters	3	Newsletters
Conduct Macroinvertebrate (ICI) Sampling	8	Sites

Nuisance Weed Harvester

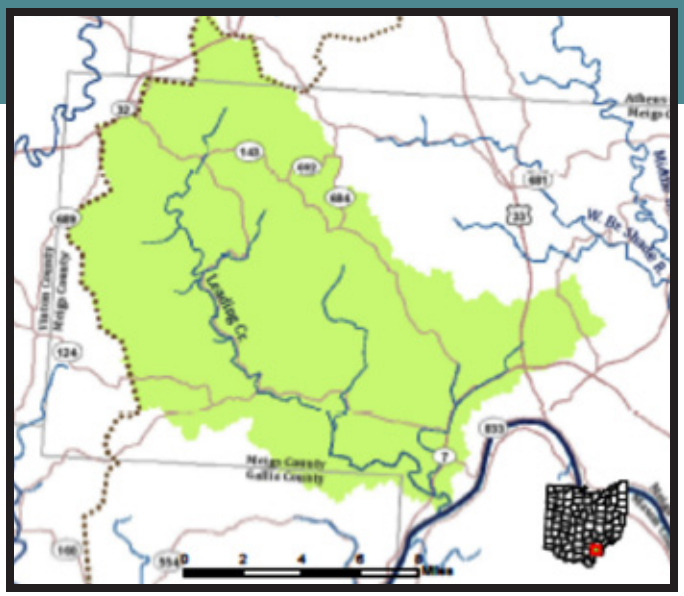


Indian Lake

Funding Acquired

Funding Source	Amount	Project Description / Purpose
ODNR-Division of Wildlife	$16,000	120 linear feet of seawall
ODNR-Division of Wildlife	$17,000	60 linear feet of seawall and 5 docks replaced
Clean Ohio Green Space Grant	$500,000	Village of Russels Point land protection and wetland restoration
TOTAL	**$533,000**	

Leading Creek Watershed



SPONSORED BY MEIGS SOIL AND WATER CONSERVATION DISTRICT

http://www.meigsswcd.com/

Watershed Coordinator Priorities

- Reduce acid mine drainage with various passive and active treatment practices:
  - Lime Doser Installation
  - Wetland Treatment Systems
  - Settling Ponds
  - Treatment Channels
- Home Sewage Treatment System repair and replacement

Water Quality Improvements

The Thomas Fork Doser has been in operation since January 2012 along an unnamed tributary to Thomas Fork, the largest source of acidity and metal loads within the Leading Creek Watershed. Sampling has documented reduction of acidity from a pH of 3.07 to 7.2. Metal loads sampled in March 2012 were 362 lbs/day less than sampled a year earlier. Likewise pH sampled one year apart revealed a change from 5.26 to 7.2.

IMPLEMENTATION

Reporting Partners

Meigs Soil and Water Conservation District
ODNR Division of Mineral Resources Management
US Fish and Wildlife Service
USDA Natural Resources Conservation Service

Rain Garden Demonstration

Practices	Value	Units
Construct Lime Dosers	1	Dosers
Acquire Riparian Conservation Easements	38	Acres
Plant Cover Crops	16.5	Acres
Implement Conservation Tillage Practices	227.9	Acres
Install Alternative Water Supplies	3	Supplies
Install Heavy Use Feeding Pads	1	Pads
Install Livestock Exclusion Fencing	4,661	Linear Feet
Implement Grass / Legume Rotations	16.5	Acres
Develop Brochures / Fact Sheets	2	Brochures / Fact Sheets
Develop Press Releases	6	Press Releases
Create / Maintain Websites	1	Websites
Develop Displays	2	Displays
Conduct Tours	1	Tours
Conduct Stream Clean-Ups	6	Clean-ups
Conduct Workshops	2	Workshops
Conduct Training	1	Training Sessions
Deliver On-Site Technical Assistance	5	Site Visits
Develop Newsletters	4	Newsletters
Conduct Chemical Sampling	86	Sites
Conduct Macroinvertebrate (ICI) Sampling	6	Sites
Conduct Fish (IBI) Sampling	3	Sites
Prepare and Submit Final Monitoring Report and Data	1	Reports

Leading Creek Watershed (continued)

Highlights

- Thomas Fork Region Pre-Remediation Water Quality Sampling
- Thomas Fork Doser began operation January 2012
- Riparian Forest Buffer Demonstration SWIF Project for Little Leading Creek
- Volunteer Monitoring in Leading Creek OEEF Project
- A rain garden demonstration constructed at Meigs SWCD Conservation Area along Leading Creek
- 2011 Natural Resource-Based Public Awareness Project
- Partnering with Columbus Zoo & Aquarium and Ohio State University to reintroduce Brindled Madtoms (Noturus miurus), and freshwater mussels.

Funding Acquired

Funding Source	Amount	Project Description / Purpose
LCIC Project funded by U.S. Fish & Wildlife Service- United Plant Savers Project	$83,524.75	Environmental covenant project protecting 62.67 acres along tributaries of Little Leading Creek and a riparian tree planting
Surface Water Improvement Program – Ohio EPA	$1,273	Riparian Forest Demonstration Area planting-3 buffer zone
Ohio Environmental Education Fund – Ohio EPA	$4,931	Grant for volunteer monitoring program
Ohio Humanities Council Grant	$1,500	Stories of Leading Creek book project
LCIC Project funded by U.S. Fish & Wildlife Service- 2011 & 2012 Natural Resource Based Public Awareness Project	$39,513.85	Public outreach and education funding for watershed program for 2011 & 2012
LCIC Project funded by U.S. Fish & Wildlife Service- Viny Project	$36,282	Environmental covenant project protecting 28.5 acres along tributaries of Little Leading Creek
TOTAL	**$167,024**	

Mussel Reintroduction

Thomas Fork Doser

Little Beaver Creek Watershed

SPONSORED BY LITTLE BEAVER CREEK LAND FOUNDATION
http://littlebeavercreek.com/

Watershed Coordinator Priorities

- Protection of critical habitats through acquisition of conservation easements
- Reforestation
- Prevent failing home sewage treatment systems
- Promote stormwater infiltration, e.g. rain garden demonstration
- Dam removal to restore free flowing stream function and habitat
- Stream restoration

Water Quality Improvements

- Researchers from Ohio State University are sampling sites in the Hellbender Bluff reforestation area to analyze tree survivability, soil infiltration, soil erosion and surface runoff. They are comparing reforested lands with mined and compacted land, ripped, and undisturbed land.
- Fecal coliform measurements are collected by the Lake Tomahawk Property Owners Association to assess improvements from HSTS repair or replacement.

IMPLEMENTATION

Reporting Partners

Alliance for Watershed and Riparian Education
Appalachian Coal Country Watershed Team
Appalachian Regional Reforestation Initiative
Beaver County Conservation District
Columbiana County Conservation Partners
Columbiana County Health Department
Columbiana County Park District
Columbiana Soil and Water Conservation District
East Liverpool Lions Club
Kent State University Salem and East Liverpool Campuses
Little Beaver Creek Land Foundation
Little Beaver Creek Wild and Scenic Rivers Advisory Council
ODNR Division of Mineral Resources Management
ODNR Division of Natural Areas and Preserves
ODNR Division of Watercraft - Scenic Rivers
ODNR Scenic Rivers
Ohio EPA – Division of Surface Water
Ohio EPA - Ohio Environmental Education Fund
US Department of Interior - Office of Surface Mining
USDA - NRCS

Practices	Value	Units
Restore Streambank by Recontouring or Regrading	150	Linear Feet
Remove / Treat Invasive Species	20	Acres
Plant Trees or Shrubs in Riparian Areas	5,600	Trees
Plant Trees or Shrubs in Riparian Areas	205	Acres
Restore Stream Channel	200	Linear Feet
Acquire Riparian Conservation Easements	156.3	Acres
Inspect HSTS	506	Inspections
Repair or Replace Traditional HSTS	137	HSTS
Develop Nutrient Management Plans	2	Plans
Implement Conservation Tillage Practices	2,500	Acres
Implement Prescribed & Conservation Grazing Practices	700	Acres
Install Alternative Water Supplies	11	Supplies
Install Livestock Exclusion Fencing	800	Linear Feet
Execute Landowner Cost-Share Contracts	43	Cost-Share Agreements

Little Beaver Creek Watershed (continued)

Highlights

- 209 acres of reclaimed mined land was reforested in the Hellbender Bluff County Park. The project was funded by American Municipal Power in exchange for carbon offset credits, the Laura Jane Musser fund, and the Appalachian Coal Country Team.
- The Lake Tomahawk Septic System Reminder Registry has been initiated. This project involves development of a septic system maintenance schedule, and an installer will be contracted to visually inspect 50 systems. The homeowner association will follow-up by requiring verification systems are being maintained, and reminders will be regularly distributed.
- The East Branch Stream Restoration project is in the financial resource acquisition stage. Designs and proposals are complete and have been submitted to several funders. $30,000 has been awarded by the Laura Jane Musser Fund.
- The Lisbon Dam has been identified as a priority for removal; however local opposition is a present obstacle. In an effort to overcome public resistance, the watershed coordinator has hosted a dam education day at Willow Grove Park in Lisbon.
- An Ohio EPA Surface Water Improvement Fund grant proposal was submitted for a riparian reforestation project in the Beaver Creek State Park.
- Coordinating with Cherry Valley Coke Ovens Advisory Commission on master plan and restoration plan for the Cherry Valley Beehive Coke Ovens Park.

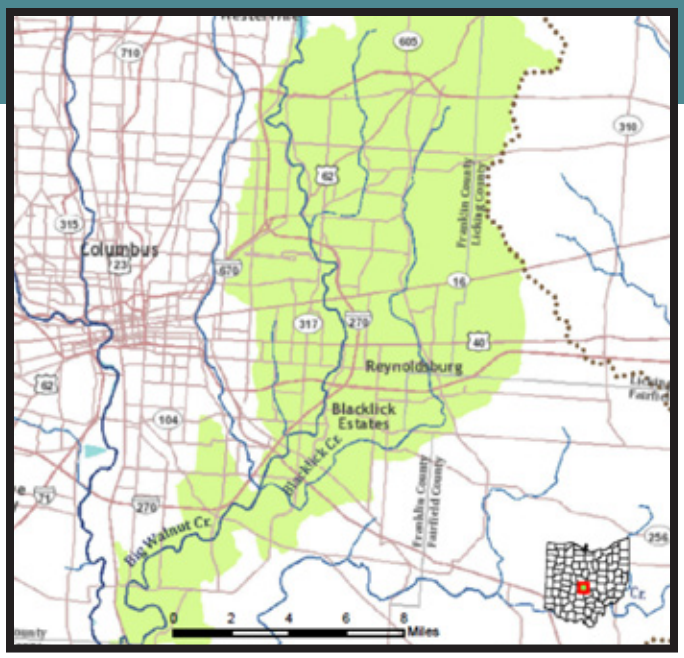
Hellbender Bluff Reforestation - After spraying and mowing

Hellbender Bluff Reforestation - Volunteers planting trees after site is ripped

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Ohio Environmental Education Fund	$10,680	Rain Garden Installation and Educational Workshops
Appalachian Coal Country Watershed Team	$400	Unrestricted grant for participation in reforestation research
Appalachian Coal Country Watershed Team, Appalachian Regional Commission, and Appalachian Regional Reforestation Initiative	$2,000	For volunteer reforestation at Hellbender Bluff and Scenic Vista County Parks
Laura Jane Musser Fund	$30,000	Reforestation at Hellbender Bluff County Park
Laura Jane Musser Fund	$30,000	Cherry Valley Run stream restoration
TOTAL	**$73,080**	

Lower Big Walnut Watershed



SPONSORED BY FRANKLIN SOIL AND WATER CONSERVATION DISTRICT

http://www.franklinswcd.org/

Watershed Coordinator Priorities

- Upgrade failing Home Sewage Treatment Systems (HSTS)
- Reduce elevated nutrients through implementation of agricultural Best Management Practices, i.e. conservation tillage
- Restore and protect streams to protect habitat, stream function, and reduce polluted runoff
- Promote stormwater infiltration and retention practices, e.g. rain gardens, infrastructure retrofits, and rain barrels

IMPLEMENTATION

Reporting Partners

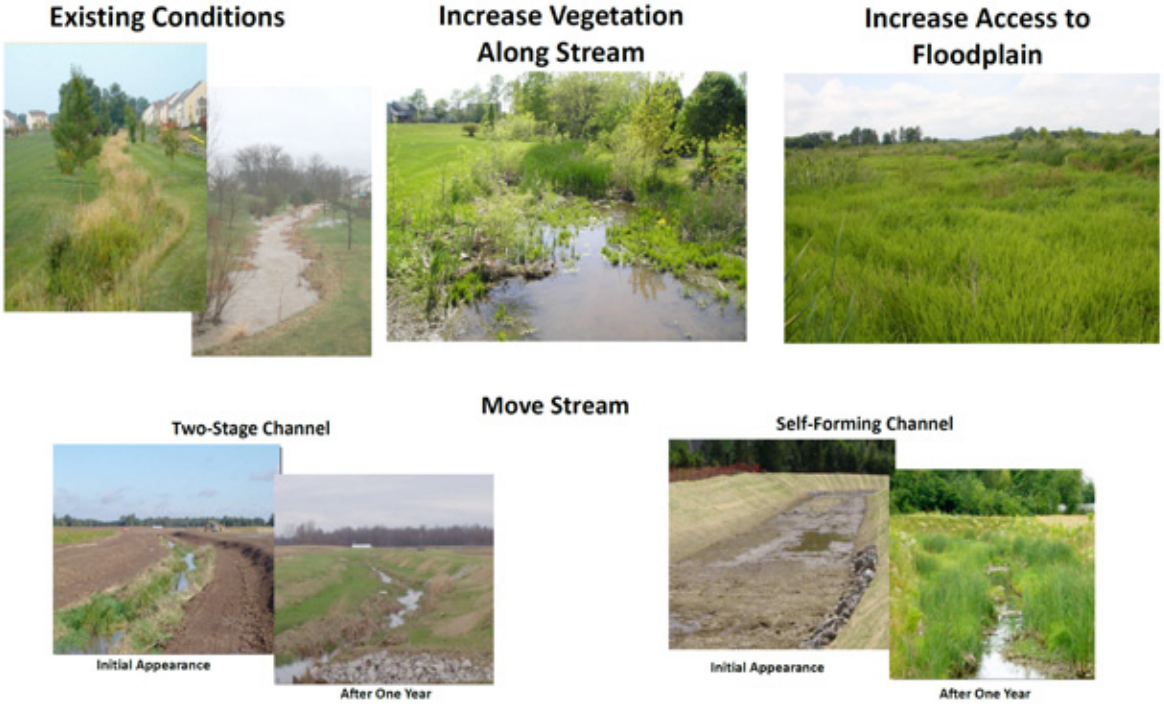
City of Gahanna
City of Reynoldsburg
Franklin County
Franklin County Public Health
Franklin County Public Health
Franklin Soil and Water Conservation District
Metro Parks (Central Ohio)
Reynoldsburg Parks and Recreation
Reynoldsburg Schools
Reynoldsburg Schools
USDA - NRCS

Rain Garden Demonstration - Before (left) and After (below)

Practices	Value	Units
Remove / Treat Invasive Species	2	Acres
Reconstruct & Restore Wetlands	36.7	Acres
Plant Wetland Species	29.7	Acres
Acquire Riparian Conservation Easements	15	Acres
Acquire Wetland Conservation Easements	3.7	Acres
Inspect HSTS	1,214	Inspections
Plant Cover Crops	5	Acres
Develop Whole Farm Management Plans	1	Acres
Implement Prescribed & Conservation Grazing Practices	88	Acres
Install Livestock Crossings	1	Crossings
Install Heavy Use Feeding Pads	2	Pads
Install Roof Water Management Practices	2	Practices
Conduct Watershed Festivals	2	Festivals
Conduct Public Meeting	2	Public Meetings
Create / Maintain Websites	1	Websites
Install Signs	1	Signs
Conduct Stream Clean-Ups	2	Clean-Ups
Conduct Field Days - Land Owner / Manager	1	Days
Conduct Workshops	1	Workshops
Develop or Customize Model Local Conservation Statutes	1	Statutes
Adoption of Local Conservation Statutes	1	Jurisdictions

Lower Big Walnut Watershed (continued)

Fieldstone Subdivision Stream Restoration Project Options



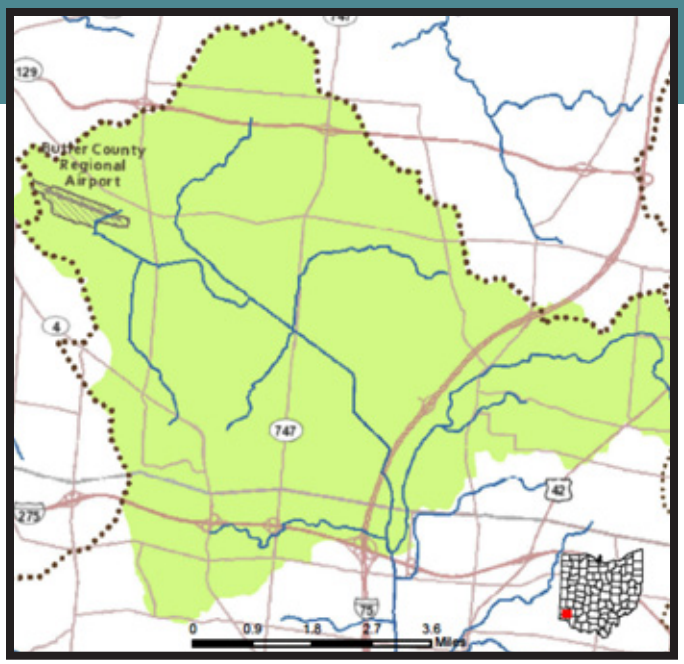
Highlights

- In order to address HSTS issues the watershed coordinator met with officials of City of Columbus, New Albany, Plain Township, and Franklin County Public Health; attended a conference on "Water Quality and Waste Management;" researched various technical options; and developed cost estimates for cluster treatment and STEP/STEG technologies for 3 housing clusters in the watershed.
- Met with one landowner and presented to Farm Bureau to promote agricultural BMPs.
- Assisting Blacklick-Madison Community Plan development process including setback regulations.
- Developed conceptual plans for stream restoration projects in 3 sub-watersheds of the Blacklick Creek Watershed, and coordinating with potential funders, consultants, and stakeholders. Also exploring private funding for small-scale restoration projects.
- Two rain gardens are scheduled for installation Fall 2012.
- Promoted rain barrel adoption with a workshop, postcard distribution to advertise Block Grant funding availability.
- Submitted a stormwater retrofit project proposal to Ohio EPA, which is pending a decision. The City of Columbus has committed $30,000 for match.
- Partnered with consultants and City of Reynoldsburg to develop a stormwater runoff reduction parking lot retrofit project proposal. Unfortunately, lack of local match has prevented the project from moving forward.

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Woods at Jefferson Homeowners' Association	$10,000	Install Right of Way Rain Gardens
Ohio EPA - Ohio Environmental Education Fund	$47,056	Educate garden centers and nurseries about rain gardens (received for work county-wide, also reported under Olentangy River/Alum Creek))
City of Gahanna	$1,000	Distribute rain barrels
City of Gahanna	$1,500	Backyard conservation and rain gardens
City of Obetz	$500	Stream management workshop
City of New Albany	$1,600	Distribute rain barrels
TOTAL	**$61,656**	

Mill Creek Watershed



SPONSORED BY MILL CREEK WATERSHED COUNCIL OF COMMUNITIES

http://www.millcreekwatershed.org

Watershed Coordinator Priorities

- Reduce erosion by stabilizing stream banks
- Enhance riparian greenways
- Protect streams, floodplains, and wetlands

Water Quality Improvement

- Twin Creek Preserve at the mouth of Upper Mill Creek -- 1,000 ft. of stream stabilized-150 tons sediment, 10 kg P, 15 kg N reduced
- Beaver Run Confluence-City of Springdale-100 ft. of bank stabilization -- 14 tons sediment, 6 kg P, 13 kg N reduced
- Beaver Run Phase II-230 ft. of bank stabilization -- 10 tons sediment reduction

IMPLEMENTATION

Reporting Partners

Butler County Storm Water District

Butler Soil and Water Conservation District

Catholic Heart Workcamp

City of Springdale

Hamilton Soil and Water Conservation District

Mill Creek Watershed Council of Communities

Mill Creek Yacht Club

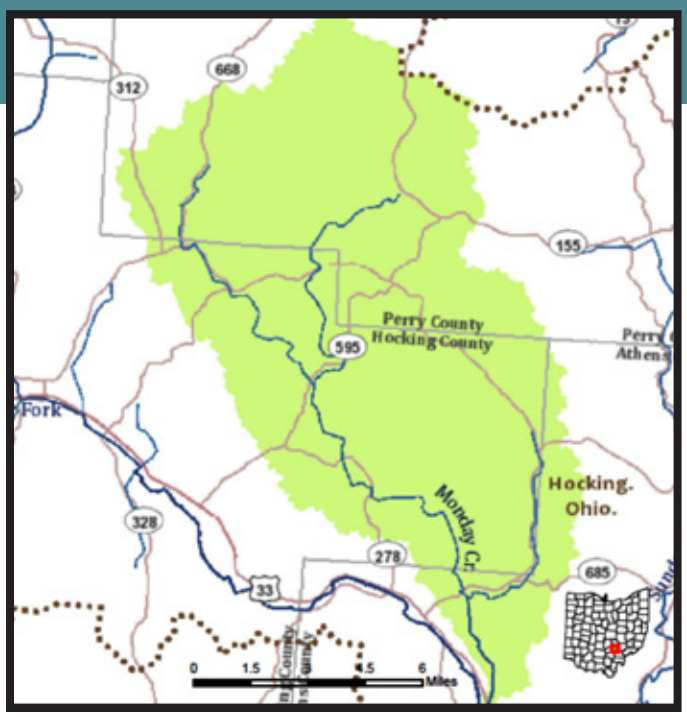
Twin Creek Preserve - Post Construction Canoe Float

Highlights

- Planning invasive species removal for Beaver Run Project to occur Fall 2012
- Coordinating maintenance of Twin Creek Preserve with stakeholders
- Organized volunteer efforts for invasive species removal at Twin Creek Preserve
- Coordinating water quality monitoring of Twin Creek Preserve with Hamilton Soil and Water Conservation District
- Restoration outline developed for Brookstone Restoration Project

Practices	Value	Units
Plant Grasses in Riparian Areas	13	Acres
Remove / Treat Invasive Species	5	Acres
Plant Trees or Shrubs in Riparian Areas	9,600	Acres
Plant Trees or Shrubs in Riparian Areas	13	Acres
Restore Flood Plain	2,000	Linear Feet
Restore Stream Channel	4,531	Linear Feet
Install In-Stream Habitat Structures	14	Structures
Install Grade Structures	16	Structures
Reconnect Wetland to Stream	5	Acres
Reconstruct & Restore Wetlands	5	Acres
Plant Wetland Species	5	Acres
Develop Brochures / Fact Sheets	1	Brochures/ Fact Sheets
Conduct Public Meeting	6	Public Meetings
Develop Press Releases	2	Press Releases
Conduct Tours	1	Tours
Conduct Tours via Canoe	1	Canoe Trips
Conduct Stream Clean-Ups	1	Clean-Ups
Conduct Field Days - Land Owner / Manager	5	Days
Conduct Workshops	1	Workshops
Deliver On-Site Technical Assistance	6	Site Visits

Monday Creek Watershed



SPONSORED BY RURAL ACTION

http://ruralaction.org/

Watershed Coordinator Priorities

- Reduce acid mine drainage with various passive and active treatment practices:
  - Gob Pile Reclamations
  - Wetland Treatment Systems
  - Settling Ponds
  - Treatment Channels
  - Subsidence Closures
  - Doser Installations

Water Quality Improvements

Comparing monitoring results collected in March 2011 to March 2012 the Monday Creek mainstem has experienced a pH increase of 0.24 s.u., a decrease in acidity by 4.04 mg/L, and decrease in iron and aluminum by 0.5 -1.2 mg/L. Although this variability may be largely due to rainfall variation, water quality in Monday Creek is improving. More data is available at www.watersheddata.com

IMPLEMENTATION

Reporting Partners

Hocking Soil and Water Conservation District
Monday Creek Restoration Project
ODNR Division of Mineral Resources
Ohio Department of Transportation
Perry Soil and Water Conservation District
US Forest Service

Limestone Doser

Practices	Value	Units
Install Slag Leach Beds	1	Beds
Install Limestone Leach Beds	3	Beds
Install Limestone Channels	2,640	Linear Feet
Repair Subsidence Sites	14	Acres
Reclaim Abandoned Mine Land	9	Acres
Install Successive Alkalinity Producing Systems	1	SAPS
Restore Positive Drainage	5	Acres
Construct Acid Mind Drainage Wetland	2	Acres
Develop Brochures / Fact Sheets	2	Brochures / Fact Sheets
Conduct Watershed Festivals	1	Festivals
Conduct Public Meeting	6	Public Meetings
Develop Press Releases	5	Press Releases
Create / Maintain Websites	2	Websites
Install Signs	1	Signs
Conduct Tours	8	Tours
Conduct Stream Clean-Ups	4	Clean-Ups
Conduct Workshops	1	Workshops
Conduct Training	7	Training Sessions
Deliver On-Site Technical Assistance	1	Site Visits
Develop Newsletters	2	Newsletters
Conduct Chemical Sampling	87	Sites
Prepare and Submit Final Monitoring Report and Data	1	Reports

Monday Creek Watershed (continued)

Limestone Leach Bed

Steel Slag Leach Bed

Highlights

- A Steel Slag Leach Bed installed in the Lost Run tributary was maintained with funding from ODNR Division of Mineral Resources Management. The project included installation of a manifold piping system and second Agridrain to increase the discharge water. Additional steel slag was also added to increase alkalinity.
- The US Forest Service (USFS) is funding the Snake Hollow Treatment project. The USFS is partnered with Ohio University to explore treatment options that will neutralize acid and precipitate iron for use as a paint pigment or other marketable commodity. The experiment did not result in a marketable product, however, USFS will install a doser in the Snake Hollow tributary.
- USFS is closing several subsidences resulting from the collapse of abandoned underground coal mines. The closures will be complete by the end of 2012.
- USFS and Hocking College are partnering to install a pond to supply water to 2 steel slag leach beds in the Lost Run sub-watershed.

Gob Pile Reclamation - Before

Gob Pile Reclamation - After

Funding Acquired

Funding Source	Amount	Project Description / Purpose
ODNR-DMRM Federal AMD Set Aside	$116,103	Lost Run II SSLB Rehab Project
ODOT Mitigation Funding	$192,005	Rock Run Phase II SAPS Rehab Project
ODOT Mitigation Funding	$408,753	Big Four Phase II LLB Project
USDA / US Forest Service	$300,000	Cawthorn Reclamation Project
ODNR-DMRM	$250,000	Sand Run Reclamation Project
TOTAL	**$1,266,861**	

Raccoon Creek Watershed

SPONSORED BY OHIO UNIVERSITY VOINOVICH SCHOOL OF LEADERSHIP AND PUBLIC AFFAIRS
http://www.ohio.edu/voinovichschool/

Watershed Coordinator Priorities

- Reduce acid mine drainage with various passive and active treatment practices:
  - Wetland Treatment Systems
  - Settling Ponds
  - Treatment Channels
  - Spoil removal

Water Quality Improvements

Eighteen additional miles now meet IBI and MAIS (macroinvertebrate) water quality standard attainment targets, bringing the total number of stream miles meeting targets to 41 miles.

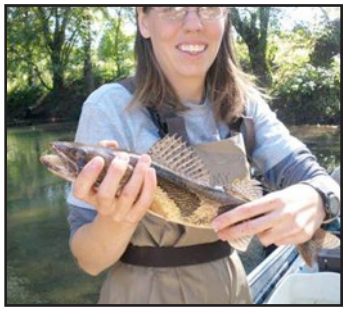
IMPLEMENTATION

Reporting Partners

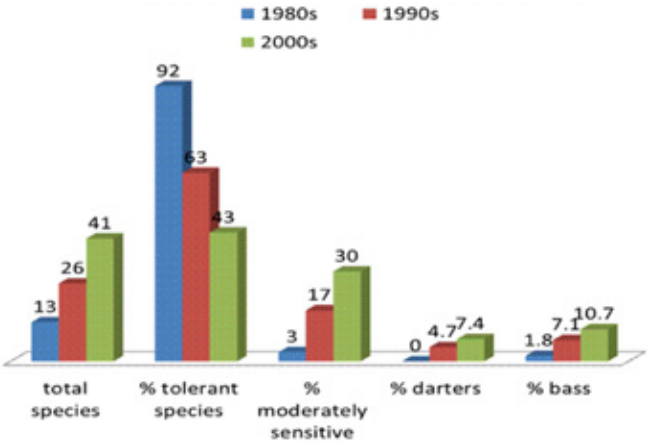
ODNR Division of Mineral Resources Management
Ohio University
Ohio Valley RC&D
Raccoon Creek Partnership
Soil and Water Conservation Districts
USDA - NRCS

Harble Griffith - Before and After

Sauger and Ohio Shorthead redhorse from mouth of Little Raccoon Creek



LITTLE RACCOON CREEK - FISH COMMUNITY RECOVERY



Practices	Value	Units
Plant Trees or Shrubs in Riparian Areas	330	Trees
Install Slag Leach Beds	6	Beds
Install Limestone Channels	2,175	Linear Feet
Reclaim Abandoned Mine Land	34	Acres
Restore Positive Drainage	34	Acres
Cover Toxic Mine Spoils	34	Acres
Construct Acid Mind Drainage Wetland	9.5	Acres
Develop Whole Farm Management Plans	230	Acres
Install Livestock Exclusion Fencing	8,059	Linear Feet
Conduct Soil Testing	3	Tests

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Raccoon Creek Watershed (continued)

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Practices	Value	Units
Implement Grass / Legume Rotations	12	Acres
Execute Landowner Cost-Share Contracts	1	Cost-Share Agreements
Develop Brochures / Fact Sheets	2	Brochures / Fact Sheets
Conduct Watershed Festivals	1	Festivals
Conduct Public Meeting	28	Public Meetings
Develop Press Releases	10	Press Releases
Create / Maintain Websites	1	Websites
Install Signs	1	Signs
Develop Displays	1	Displays
Conduct Tours	2	Tours
Conduct Tours via Canoe	3	Canoe Trips
Conduct Stream Clean-Ups	2	Clean-Ups
Conduct Workshops	4	Workshops
Conduct Training	4	Training Sessions
Deliver On-Site Technical Assistance	11	Site Visits
Develop Newsletters	4	Newsletters
Conduct Chemical Sampling	332	Sites
Conduct Macroinvertebrate (ICI) Sampling	35	Sites
Conduct Fish (IBI) Sampling	19	Sites
Conduct Habitat (QHEI or HHEI) Sampling	19	Sites

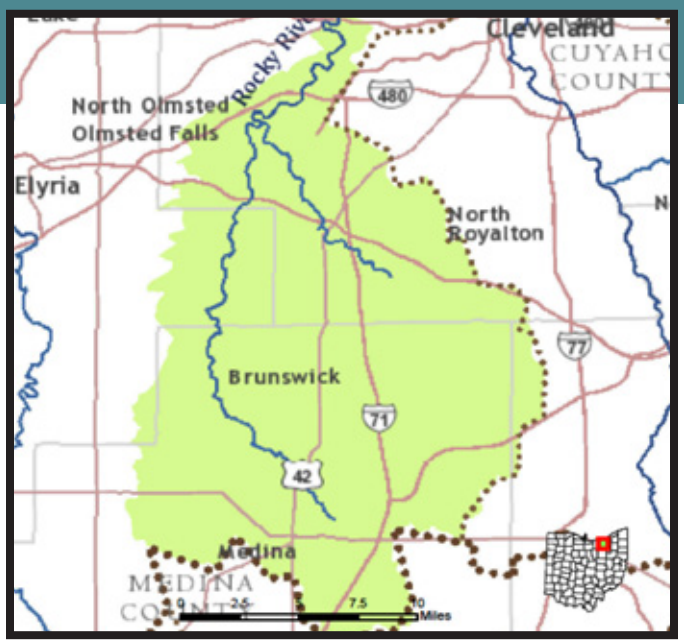
Highlights

- Completed the West Branch Harble Griffith Phase I project. The project consisted of removal of 3 strip pits, installation of a limestone channel to convey water off site, and installation of a wetland swale and stream crossing. Wetland acreage was increased from the original design from 0.5 acres to 9.5 acres. The limestone channel was reduced from 1700 to 1100 feet.
- Completed the Orland Gob Pile project, which consisted of reclamation of a 5 acre gob pile. After gob pile removal, the site was regarded, resoiled, seeded, mulched, limestone channel and signage installed.
- Completed construction and maintenance of East Branch Phase I, II, and III Projects. This consisted of adding slag, plumbing and valves to the slag beds. Water levels in slag beds were lowered to reduce bed and intake pipe clogging due to algae growth. Sediment was also removed.
- Completed project design and obtained permits and right of entry for Lake Morrow project. The lake will be drained and drainage culverts, concrete matting, and rock channels will be installed through 2013.
- Pierce Run project, which consists of installing a slurry wall to prevent water from seeping under the dam and replacement of faulty overflow pipes, will be completed by the end of 2012.

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Raccoon Creek Partnership	$1,250	Water Quality Specialist mileage and supplies
ODNR DMRM / AML	$1,851,748	Reclamation and Treatment projects completed in this fiscal year (Orland Gob Pile, Harble Griffith, and maintenance projects)
ODNR Division of Wildlife Step Outside Grant	$375	Summer Science Camp fishing and archery
Athens Foundation	$1,700	Watershed Education (Raccoon Creek summer camp field trips)
Raccoon Creek Partnership Members	$2,260	Membership donations
Community Members	$375	Fundraisers
ODNR Summer Watershed Intern	$5,760	Fund summer intern for 2012 (hired Renee Reber)
Kroger Community Rewards	$900	General operating expenses
TOTAL	**$1,864,368**	

Rocky River Watershed



SPONSORED BY CUYAHOGA SOIL AND WATER CONSERVATION DISTRICT

http://www.cuyahogaswcd.org/

Watershed Coordinator Priorities

- Remove dams to restore stream function and habitat
- Restore and stabilize streams and eroding streambanks, and reconnect floodplains
- Install and demonstrate stormwater infiltration and retention practices, i.e. rain gardens, rain barrels, and wetlands
- Implement agricultural practices to reduce sediment loading, i.e. cover crops, filter strips, conservation tillage, grassed waterways, and livestock exclusion fencing

Water Quality Improvements

Two Hundred twenty-nine tons of sediment saved in Mallet Creek sub-watershed through adoption of zone tillage. Farmers were provided incentive payment with a grant from the Great Lakes Commission's Sediment and Erosion Control Grant.

IMPLEMENTATION

Reporting Partners

City of Lakewood
City of North Royalton and
Cleveland Metroparks
Cuyahoga County Board of Health
Cuyahoga Soil and Water Conservation District
Northeast Ohio Areawide Coordinating Agency
Northeast Ohio Regional Sewer District

RRWC Board Member and Medina County SWCD Education Specialist Beth Schnabel looks on as workshop participants construct rain barrels

Practices	Value	Units
Restore Streambank Using Bio-Engineering	200	Linear Feet
Install Grade Structures	1	Structures
Inspect HSTS	717	Inspections
Repair or Replace Traditional HSTS	101	HSTS
Install Grassed Waterways	5,250	Linear Feet
Install Roof Water Management Practices	1	Practices
Conduct Public Meeting	5	Public Meetings
Develop Press Releases	8	Press Releases
Create / Maintain Websites	1	Websites
Develop Displays	1	Displays
Conduct Stream Clean-Ups	3	Clean-Ups
Conduct Workshops	9	Workshops
Conduct Training	1	Training Sessions
Provide Technical Assistance to Group(s)	3	Groups
Deliver On-Site Technical Assistance	8,593	Site Visits
Develop Newsletters	3	Newsletters
Adoption of Local Conservation Statutes	2	Jurisdictions
Conduct Chemical Sampling	23	Sites
Conduct Macroinvertebrate (ICI) Sampling	3	Sites
Conduct Fish (IBI) Sampling	3	Sites
Conduct Habitat (QHEI or HHEI) Sampling	3	Sites
Conduct Nitrate Sampling (WATER)	23	Sites

Rocky River Watershed (continued)

Highlights

- The Baldwin Dam removal project continues to move toward construction. The design and engineering is complete, and permits have been obtained. Construction should begin September 2012.
- The Preliminary Restoration Plan for the Removal of Dam #4 on Baldwin Creek was submitted to Ohio EPA Division of Environmental and Financial Assistance for the Water Resource Restoration Sponsorship Program.
- 10 additional residents participated in the Upper Abram Creek Residential BMP Incentive Program, receiving 50% rebates on rain barrels.
- 2 demonstration rain gardens were installed.
- A plan for performing a Bank Erosion Hazard Index study through the Baldwin Creek sub-watershed has been developed in support of the Baldwin Creek Sedimentation Reduction Project. The study will identify the stream reaches with the highest erosion potential for targeting.
- One landowner agreement has been finalized, and the practice installed (16.65 acres of zone tillage) as part of the Mallet Creek and Plum Creek (West) Sediment Reduction project. Additional agricultural practices are in different stages of design/application. Two cover crop demonstration plots are planned to be installed in Fall 2012. The project is funded through a grant from the Great Lakes Commission.
- Provided technical assistance to the City of Medina for development of an Ohio EPA's 319 and Soil and Water Improvement Fund grants for stream restoration and permeable pavement projects in the Champion Creek watershed.

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Great Lakes Commission Watershed-Scale Sediment Reduction Grant	$400,000	Agricultural sediment reduction practices (incentive/cost share) in Mallet and Plum Creeks, streambank stabilization in Baldwin Creek. 3-yr. grant
Ohio EPA - Ohio Environmental Education Fund	$16,031	Develop Watershed-friendly Stream Maintenance for Communities program and guide.
TOTAL	**$416,031**	

West Branch at Olmsted Falls

Sunday Creek Watershed

SPONSORED BY RURAL ACTION

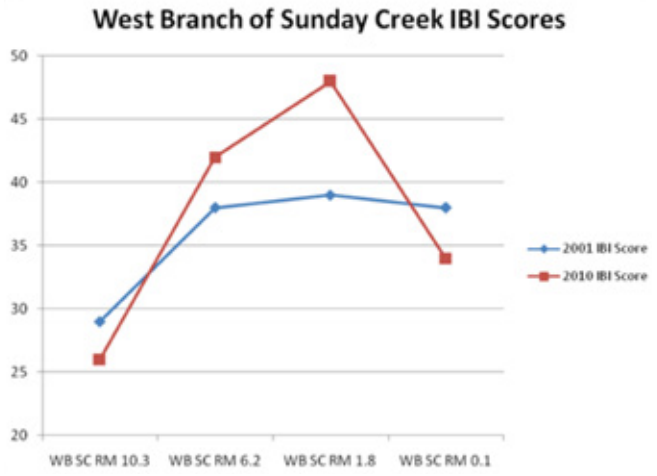
http://ruralaction.org/

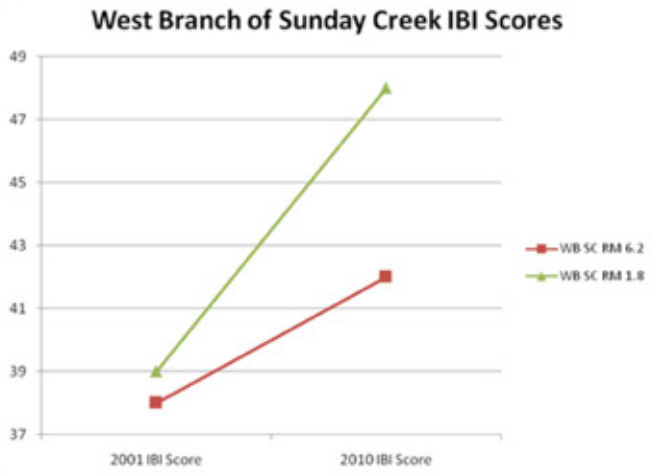
Watershed Coordinator Priorities

- Reduce acid mine drainage with various passive and active treatment practices:
  - Gob Pile Reclamations
  - Wetland Treatment Systems
  - Settling Ponds
  - Treatment Channels
  - Subsidence Closures
  - Doser Installations

Water Quality Improvements

- Several sites along the West Branch of Sunday Creek were measured in both 2001 and 2010 for IBI scores. Two of the sites (WB SC RM 6.2 and WB SC 1.8 increased their scores in 2010. Improvements in the mid section of the West Branch may show the positive impacts of stream capture projects in this area. Additional data is available at www.watersheddata.com.





IMPLEMENTATION

Reporting Partners

ODNR Division of Mineral Resources Management
Sunday Creek Watershed Group

Little Hocking Stream Closure before/after

Practices	Value	Units
Plant Grasses in Riparian Areas	14	Acres
Plant Wetland Species	0.1	Acres
Install Limestone Leach Beds	1	Beds
Install Limestone Channels	845	Linear Feet
Repair Subsidence Sites	14	Acres
Reclaim Abandoned Mine Land	34	Acres
Construct Acid Mine Drainage Wetland	0.1	Acres
Develop Brochures / Fact Sheets	4	Brochures / Fact Sheets
Conduct Public Meeting	4	Public Meetings
Develop Press Releases	6	Press Releases

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Sunday Creek Watershed (continued)

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Practices	Value	Units
Create / Maintain Websites	1	Websites
Install Signs	2	Signs
Develop Displays	6	Displays
Conduct Tours	6	Tours
Conduct Stream Clean-Ups	3	Clean-Ups
Conduct Field Days - Land Owner / Manager	2	Days
Conduct Workshops	14	Workshops
Develop Newsletters	2	Newsletters

West Branch Headwaters

Before

During Construction

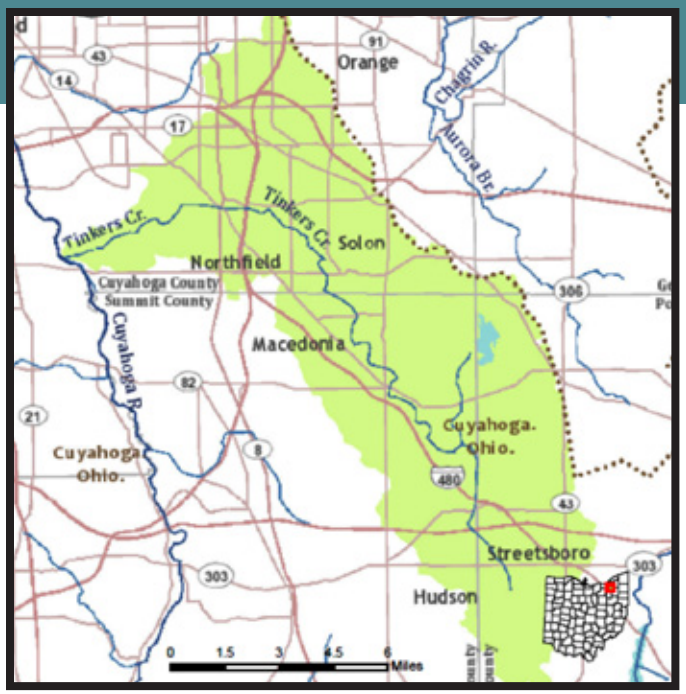
Highlights

- Designs are complete for the Pine Run Lime Doser. A bid will be awarded and construction will begin late Summer 2012.
- A work plan has been developed and approved by the Sunday Creek Technical Advisory Committee (TAC) for the Corning Discharge project. The watershed coordinator is assisting an Ohio University masters student who is conducting biological monitoring at 10 sites alone Sunday Creek to assemble a baseline characterization prior to treatment of the Corning Discharge.
- The West Branch Headwaters Restoration project involved reclamation of 1.28 acres of coal mine spoils, elimination of 4 stream captures, installation of a settling wetland, one limestone leach bed, and 1,524 linear feet of limestone channels. Post construction monitoring is ongoing. A maintenance plan is in place to correct erosion at one of the leach beds, and to repair a pump.
- The watershed coordinator facilitated several meetings of the TAC to identify future project sites including Drakes Wetland. A proposal will be submitted to Office of Surface Mining to restore the wetland for AMD treatment, which will include rerouting mine seepage from an adjacent ditch to through the wetland.
- Collaborated with the Buckeye Trail to present during an evening program in Shawnee at the Tecumseh Theatre and the inaugural Sunday Creek/Buckeye Trail Association winter Hike at Burr Oak State Park. Other events hosted included watershed tours, the second annual Dash for the Darter 5K at Burr Oak State Park, and a "Concert for the Creeks" benefit concert at Casa Nueva in Athens.
- The watershed coordinator is coordinating with Ohio EPA to conduct bacteria sampling throughout the watershed.

Funding Acquired

Funding Source	Amount	Project Description / Purpose
ODNR – Division of Mineral Resources Management	$5,760	Summer Internship
Corporation for National and Community Service	$8,700	AmeriCorps Member
Watershed Daycamp Registrations	$1,250	Watershed Day Camp
Epstein Teicher Philanthropies	$1,000	Watershed Day Camp
Ohio EPA - Ohio Environmental Education Fund	$26,000	Environmental Education - grant was awarded to Rural Action, but this amount of the funds were spent on environmental education in the Sunday Creek Watershed
ODNR – Division of Mineral Resources Management	$310,000	Pine Run Doser Project
US Dept. of Interior - Office of Surface Mining	$100,000	West Rendville Stream Capture
TOTAL	**$452,710**	

Tinkers Creek Watershed



SPONSORED BY TINKERS CREEK WATERSHED PARTNERS

http://www.tinkerscreekwatershed.org/

Watershed Coordinator Priorities

- Restore stream function and habitat through natural channel restoration, bank stabilization, riparian habitat improvement and other means.
- Retrofit stormwater infrastructure to reduce high flow impacts to downstream waters including erosion and floodplain disconnection.

IMPLEMENTATION

Reporting Partners

Cuyahoga County Board of Health

Cuyahoga Soil and Water Conservation District (SWCD)

Summit County Health Department

Summit SWCD

Tinkers Creek Watershed Partners

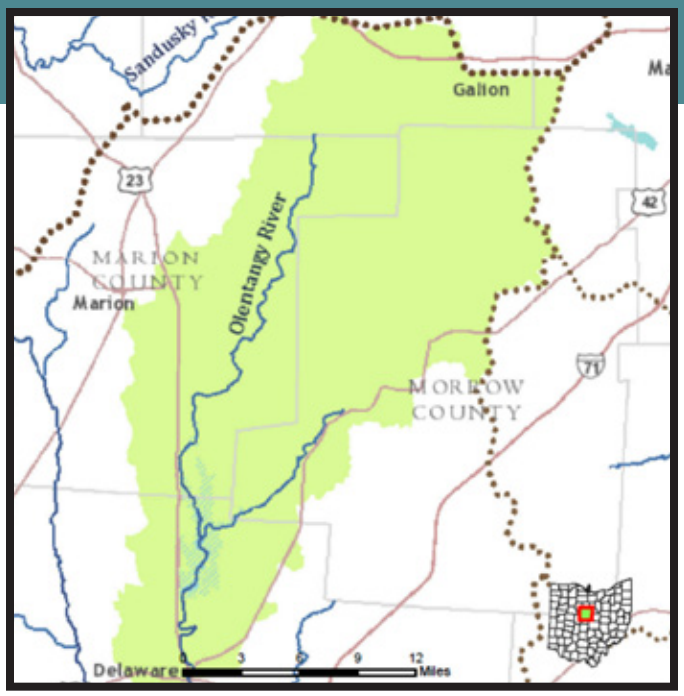
Practices	Value	Units
Restore Streambank Using Bio-Engineering	2,500	Linear Feet
Restore Streambank By Recontouring or Regrading	2,500	Linear Feet
Plant Grasses in Riparian Areas	10	Acres
Plant Prairie Grasses in Riparian Areas	10	Acres
Remove / Treat Invasive Species	1.5	Acres
Plant Trees or Shrubs in Riparian Areas	3,800	Trees
Plant Trees or Shrubs in Riparian Areas	12	Acres
Restore Flood Plain	4,000	Linear Feet
Restore Stream Channel	4,000	Linear Feet
Install In-Stream Habitat Structures	18	Structures
Install Grade Structures	25	Structures
Restore Natural Flow	4,000	Linear Feet
Reconnect Wetland to Stream	3	Acres
Reconstruct & Restore Wetlands	3	Acres
Plant Wetland Species	3	Acres
Remove Dams	1	Dams
Restore Natural Flow	1,000	Linear Feet
Acquire Riparian Conservation Easements	12.2	Acres

Highlights

- Partnering with City of Streetsboro, Cuyahoga County Board of Health and Portage SWCD to develop a grant proposal for the Yoder Ditch Restoration Project.

Practices	Value	Units
Acquire Wetland Conservation Easements	3	Acres
Inspect HSTS	144	Inspections
Repair or Replace Traditional HSTS	10	HSTS
Repair or Replace Alternative HSTS	10	HSTS
Develop Brochures / Fact Sheets	4	Brochures / Fact Sheets
Conduct Watershed Festivals	1	Festivals
Conduct Public Meeting	14	Public Meetings
Create / Maintain Websites	1	Websites
Conduct Tours	1	Tours
Conduct Stream Clean-Ups	1	Clean-Ups
Conduct Workshops	2	Workshops
Deliver On-Site Technical Assistance	2,400	Site Visits
Develop Newsletters	4	Newsletters
Conduct Macroinvertebrate (ICI) Sampling	4	Sites
Conduct Fish (IBI) Sampling	1	Sites
Conduct Habitat (QHEI or HHEI) Sampling	4	Sites

Upper Olentangy River Watershed



SPONSORED BY CITY OF DELAWARE

http://www.delawareohio.net/

Watershed Coordinator Priorities

- Restore stream function and habitat through removal of low head dams and "day-lighting" urban tributaries.
- Reduce nutrient, sediment, and pesticide runoff from agriculture through promotion of filter strips, riparian corridor restoration, cover crops, and other agricultural practices.

Water Quality Improvements

- Removal and treatment of uncovered manure storage pile (1,036 tons) at Delaware County Fairgrounds resulted in removal of approximately 30,000 gallons of contaminated leachate from the watershed.
- Daylighting the Weiser Ave. stream reduced 1,296 lbs/year of nitrogen, 648 lbs/year of phosphorus, and 648 lbs/year of sediment according to Ohio EPA estimates.

IMPLEMENTATION

Reporting Partners

City of Delaware
Crawford Soil and Water Conservation District (SWCD)
Delaware SWCD
Health Departments
Marion SWCD
Morrow SWCD
ODNR Division of Soil and Water Resources
Ohio EPA
USDA - NRCS

Weiser Ave. Stream Daylighting Project

Practices	Value	Units
Plant Grasses in Riparian Areas	22.2	Acres
Remove / Treat Invasive Species	7.7	Acres
Plant Trees or Shrubs in Riparian Areas	4.8	Acres
Reconstruct & Restore Wetlands	6.5	Acres
Plant Wetland Species	6.5	Acres
Acquire Riparian Conservation Easements	0.6	Acres
Inspect HSTS	30	Inspections
Plant Cover Crops	2,454	Acres
Install Nitrogen Reduction Practices	500	Acres
Develop Nutrient Management Plans	1	Plans
Implement Conservation Tillage Practices	25	Acres
Install Heavy Use Feeding Pads	1	Pads
Construct Animal Waste Storage Structures	1	Structures
Implement Manure Management Practices	190	Acres
Conduct Soil Testing	8	Tests
Execute Landowner Cost-Share Contracts	17	Cost-Share Agreements
Develop Brochures / Fact Sheets	3	Brochures / Fact Sheets
Conduct Public Meeting	3	Public Meetings

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Upper Olentangy River Watershed (continued)

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Practices	Value	Units
Develop Press Releases	2	Press Releases
Create / Maintain Websites	2	Websites
Install Signs	2	Signs
Conduct Stream Clean-Ups	2	Clean-Ups
Provide Technical Assistance to Group(s)	5	Groups
Deliver On-Site Technical Assistance	44	Site Visits
Conduct Macroinvertebrate (ICI) Sampling	4	Sites

Weiser Ave. Stream Daylighting Project

Highlights

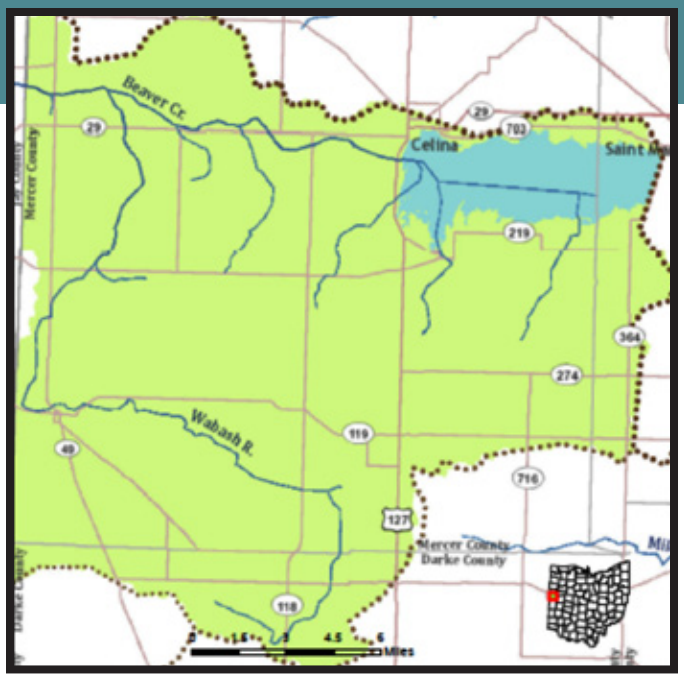
- Coordinated with the Delaware County Agricultural Society to remove 1,036 tons of horse manure/ bedding and adopt new manure handling practices at the Delaware Fair Grounds.
- The Weiser Ave Stream Daylighting project was completed, which resulted in 600 feet of stream restored from buried culvert to open channel with naturalized features.
- The watershed coordinator assisted with development of the Olentangy River, and Whetstone Creek Balanced Growth Plans (BGP). The Olentangy River BGP has received state endorsement. The Whetstone Creek BGP is still in development.
- Coordinated with Ohio EPA and ODNR regarding land clearing practices of City of Galion on the Olentangy River. Discussions have resulted in phased site disturbance, expedited re-vegetation efforts and increased involvement with Galion regarding stormwater practices.
- Assisted with planning and hosting the 2011 Olentangy Forum on November 2011.
- Coordinating with Village of Cardington in Morrow County regarding the development of Maxwell Park adjacent to Whetstone Creek. Provided assistance with the Olentangy General Construction Permit requirements, wetland determinations, and development of a NatureWorks grant proposal.

Weiser Ave. Stream Daylighting Project

Funding Acquired

Funding Source	Amount	Project Description / Purpose
ODNR Division of Recycling & Litter Prevention Litter Clean-up Grant	$2,000	Stream clean-up on Delaware Run
TOTAL	**$2,000**	

Wabash River and Grand Lake St. Marys Watershed



SPONSORED BY MERCER SOIL AND WATER CONSERVATION DISTRICT

http://www.mercercountyohio.org/swcd/

Watershed Coordinator Priorities

- Reduce nutrient runoff from livestock operations
- Reduce nutrient runoff from failing home sewage treatment systems
- Reduce nutrient runoff from residential and commercial properties
- Lake and wetland restoration
- Educate watershed residents and stakeholders regarding partnership efforts to address harmful algal blooms

IMPLEMENTATION

Reporting Partners

4-H
Findlay University
Grand Lake St. Marys Restoration Commission
Grand Lake/Wabash Watershed Alliance
Mercer County Health Department
Mercer SWCD
RARE Project
USDA - NRCS
Wright State Lake Campus

"Grand Again" multimedia education program promotes lake focused stewardship of residential and commercial portions of the Grand Lake St. Marys Watershed.

Practices	Value	Units
Restore Streambank Using Bio-Engineering	100	Linear Feet
Remove / Treat Invasive Species	4	Acres
Install Grade Structures	4	Structures
Reconstruct & Restore Wetlands	61	Acres
Inspect HSTS	90	Inspections
Repair or Replace Traditional HSTS	39	HSTS
Plant Cover Crops	496	Acres
Develop Nutrient Management Plans	25	Plans
Implement Conservation Tillage Practices	58	Acres
Implement Prescribed & Conservation Grazing Practices	8	Acres
Install Erosion & Sediment Control Structures	6	Structures
Install Grassed Waterways	25	Linear Feet
Install Vegetated Buffer Strips	24	Acres
Install Livestock Crossings	3	Crossings
Install Heavy Use Feeding Pads	1	Pads
Construct Animal Waste Storage Structures	11	Structures
Implement Manure Transfer Practices	3	Practices
Install Roof Water Management Practices	11	Practices
Execute Landowner Cost-Share Contracts	35	Cost-Share Agreements

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Wabash River and Grand Lake St. Marys Watershed (continued)

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Practices	Value	Units
Conduct Public Meeting	6	Public Meetings
Develop Press Releases	2	Press Releases
Create / Maintain Websites	1	Websites
Develop Displays	3	Displays
Conduct Tours	3	Tours
Conduct Workshops	1	Workshops
Conduct Training	2	Training Sessions
Provide Technical Assistance to Group(s)	4	Groups
Develop Newsletters	1	Newsletters

Highlights

- Ohio EPA, Heidelberg College, and USDA-Agricultural Research Service continue concentrated nutrient monitoring of the watershed
- Continued implementation of Hickory Branch Special Environmental Quality Incentive Program (USDA-NRCS)
- Mississippi River Basin Initiative application submitted
- Hosted Ohio Watershed Leaders Conference
- Involvement in the watershed's Home Sewer Treatment System Upgrade Program motivated Mercer County Health Department to develop central sewer feasibility study
- 35 Land and Garden soil sample coupons sold

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Lake Improvement Association	$500	Residential Lawn and Garden Soil Sample Cost Share Program
Ohio Environmental Education Fund (OEEF)	$49,900	Nonpoint Source Pollution Education Project
TOTAL	**$50,400**	

Conservation Day Camp

Floating Wetland Demonstration

West Creek Watershed

SPONSORED BY WEST CREEK PRESERVATION COMMITTEE

http://www.westcreek.org/

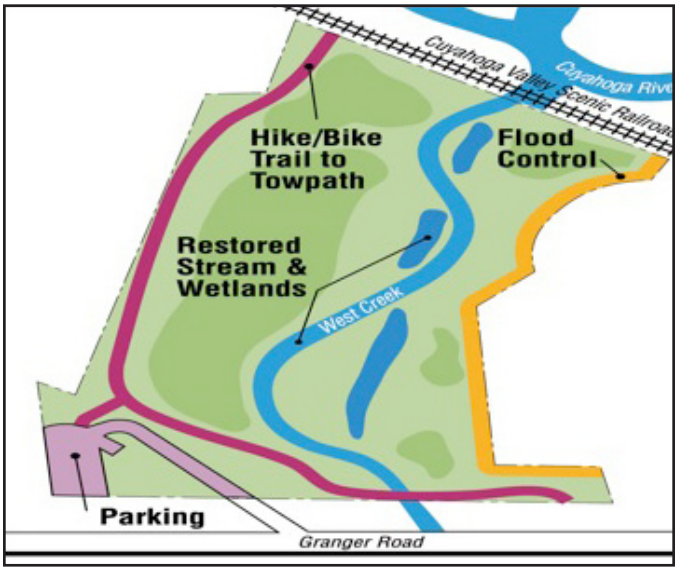
Watershed Coordinator Priorities

- Protect critical watershed features such as floodplain, riparian corridor, and wetlands through easement or property acquisition.
- Improve stream quality and function by removing/modifying dams and restoring natural, stable structure
- Restore upland and floodplain wetlands

IMPLEMENTATION

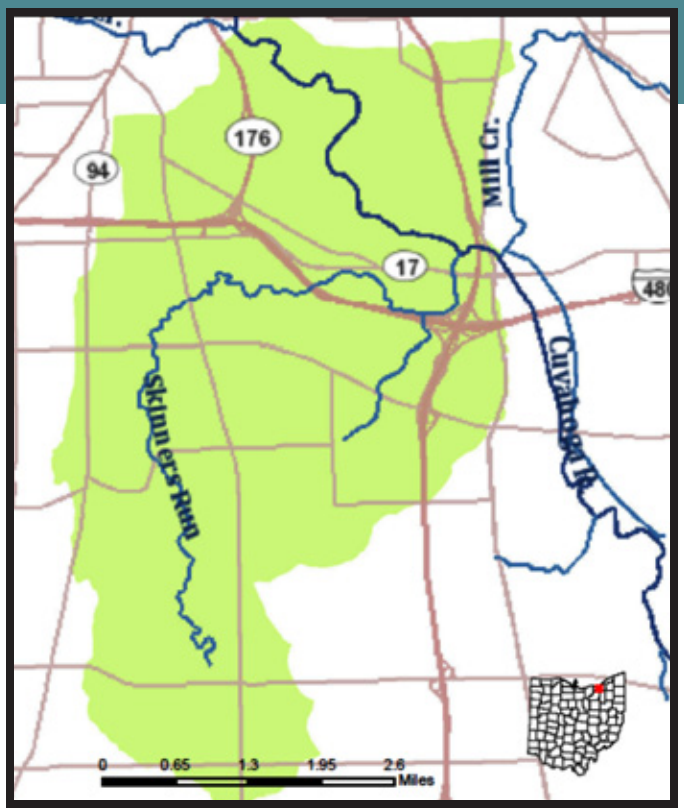
Reporting Partners

Cuyahoga Soil and Water Conservation District
West Creek Preservation Committee



Confluence Restoration Project

Practices	Value	Units
Restore Streambank Using Bio-Engineering	150	Linear Feet
Restore Streambank By Recontouring or Regrading	500	Linear Feet
Plant Grasses in Riparian Areas	1	Acres
Plant Prairie Grasses in Riparian Areas	1	Acres
Remove / Treat Invasive Species	5	Acres
Plant Trees or Shrubs in Riparian Areas	80	Trees
Plant Trees or Shrubs in Riparian Areas	4	Acres



Practices	Value	Units
Restore Flood Plain	600	Linear Feet
Restore Stream Channel	300	Linear Feet
Install In-Stream Habitat Structures	4	Structures
Restore Natural Flow	500	Linear Feet
Reconnect Wetland to Stream	2	Acres
Plant Wetland Species	1	Acres
Acquire Riparian Conservation Easements	3	Acres
Conduct Public Meetings	4	Public Meetings
Develop Press Releases	6	Press Releases
Create / Maintain Websites	1	Websites
Install Signs	2	Signs
Develop Displays	1	Displays
Conduct Tours	3	Tours
Conduct Stream Clean-Ups	4	Clean-Ups
Provide Technical Assistance to Group(s)	2	Groups
Deliver On-Site Technical Assistance	642	Site Visits
Develop Newsletters	3	Newsletters
Develop or Customize Model Local Conservation Statutes	2	Statutes
Adoption of Local Conservation Statutes	1	Jurisdictions

West Creek watershed (continued)

Highlights

- The Watershed Stewardship Center and Reservation is expected to open October 2012. The watershed coordinator collaborated with many partners on this $12 million project, which will serve as a watershed learning and science center for the entire Greater Cleveland area.
- Completed the Valley Tavern project with over 800 trees, shrubs, and wetland plants installed. The project also included 200 feet of bank restoration, one acre of floodplain restoration, and the removal of over 40,000 square feet of impervious surface. The once commercial/industrial site is now a streamside green space and floodplain wetlands.
- Completed the Pleasant Valley Restoration project with nearly 1000 linear feet of stream and riparian floodplain restored.
- An additional 13 acres of conservation property was protected though promotion of fee simple property donations and acquisition.
- Partnership with Cleveland Metroparks, City of Parma, NOACA, and NEORSD will result in demonstration and controlled evaluation of site level stormwater retrofits.
- The Confluence Restoration Project will result in ten acres of reclaimed industrial property restored as wetland. A partnership with NEORSD, City of Independence, and Ohio EPA will result in over 1000 feet of stream and 6-8 acres of floodplain wetland restored. The project is currently under contract, and construction is expected to begin Fall 2012.
- Coordinated with three communities to revise policies to allow installation of rain collection systems, right-of-way swales, and similar stormwater management practices.
- Coordinating with NEORSD, Cleveland Metroparks, NOACA and other partners to conduct a Bank Habitat Evaluation of the West Creek watershed, which will enable the applicable partners to identify and prioritize restoration sites.

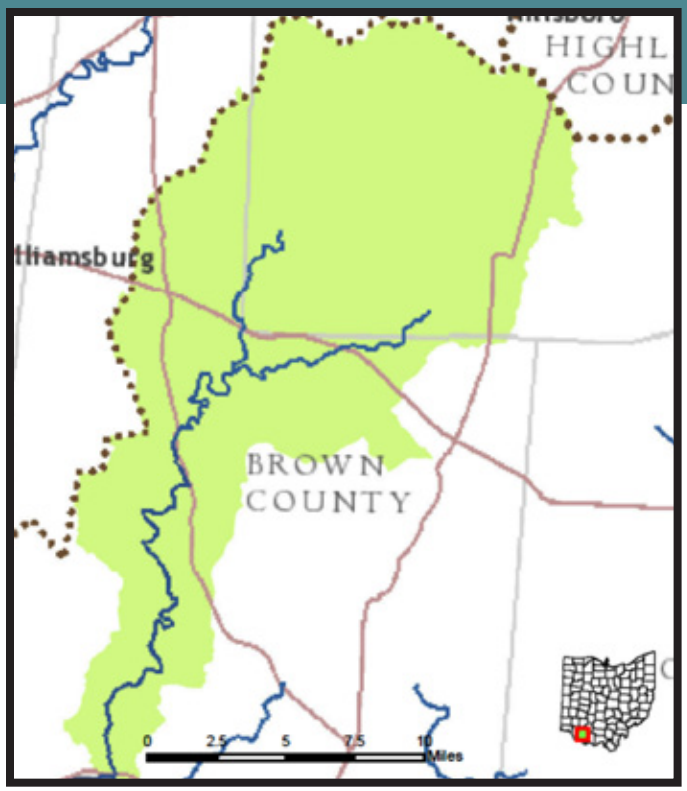
Valley Tavern Restoration Project - Before

After

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Northeast Ohio Regional Stormwater District	$35,000	Watershed Operating Support
Ohio EPA	$42,000	Watershed Volunteer Program
TOTAL	**$77,000**	

White Oak Creek Watershed



SPONSORED BY BROWN SOIL AND WATER CONSERVATION DISTRICT
http://www.brownswcd.org/

Watershed Coordinator Priorities

- Reduce nutrient runoff and other nonpoint source pollutants from agricultural operations by promoting livestock stream exclusion fencing, installing prescribed grazing, and cover crops.
- Restore stream function and habitat through dam removal and riparian forest protection.
- Restore wetlands

Water Quality Improvements

U.S. EPA monitored three sites in the Sterling Run sub-watershed weekly for 20 water quality parameters over a 6-month period. Data is currently being analyzed with a full report forthcoming.

IMPLEMENTATION

Reporting Partners

Brown Soil and Water Conservation District (SWCD)
Clermont SWCD
Ohio EPA Division of Surface Water
USDA - NRCS
ODNR Division of Wildlife
U.S. EPA

Sterling Run Watershed Signage

Practices	Value	Units
Remove Dams	1	Dams
Plant Cover Crops	586	Acres
Implement Prescribed & Conservation Grazing Practices	51	Acres
Install Alternative Water Supplies	2	Supplies
Install Grassed Waterways	1,180	Linear Feet
Install Livestock Crossings	4	Crossings
Install Heavy Use Feeding Pads	1	Pads
Install Livestock Exclusion Fencing	13,373	Linear Feet
Install Chemical Mixing Pads	1	Pads
Implement Grass / Legume Rotations	16	Acres
Conduct Public Meetings	1	Public Meetings
Develop Press Releases	1	Press Releases
Conduct Workshops	1	Workshops
Provide Technical Assistance to Group(s)	2	Groups
Deliver On-Site Technical Assistance	15	Site Visits
Conduct Chemical Sampling	12	Sites

White Oak Creek watershed (continued)

Highlights

- Coordinated to launch a new Junior Naturalist GREEN Camp. The 3-day event provides conservation education for all 5th and 6th grade students in Brown County.

Sterling Run Cover Crop Fields and Water Quality Monitoring Stations

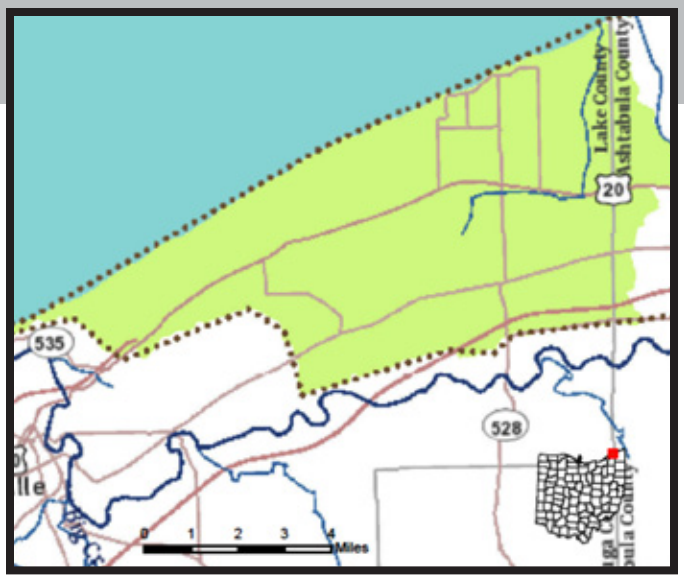
Funding Acquired

Funding Source	Amount	Project Description / Purpose
Solid Waste Authority Grant	$38,000	"GREEN" environmental education camp, county wide composting program, and personnel
Rumpke Waste, Inc.	$48,000	Walnut Run Farms - Conservation easement fencing & stream crossing
Ohio State University Extension & Brown SWCD	$40,000	Sterling Run Subwatershed Signage Project
TOTAL	**$128,400**	

Williams
Fulton
Maumee River (Lower)
Duck and Otter Creeks
Henry
Defiance
Wood
Portage River
Maumee River (Upper)
Putnam
Hancock
Paulding
Outlet / Lye Creek and Riley Creek
Van Wert
Allen
Hardin
Mercer
Auglaize
Wabash River / Grand Lake St Marys
Shelby
Logan
Stillwater River
Miami
Mad River
Twin Creek
Honey Creek
Greene
Clark
Preble
Warren
Butler
Mill Creek (Ohio River)
Stonelick Creek
Hamilton
Lower EFLMR
Middle Fork EFLMR
Lake Tributaries EFLMR
Brown
Clinton
Todds Fork
Headwaters (EFLMR)
White Oak Creek
Adams
Highland
Pike
Scioto
Fayette
Paint Creek
Pickaway
Ross
Madison
Franklin
Big Walnut (Lower)
Union
Alum and Olentangy Creeks (Lower)
Delaware
Bokes and Mill Creeks
Indian Lake
Scioto River (Upper)
Olentangy River (Upper)
Wyandot
Crawford
Seneca
Sandusky
Erie
Ottawa
Old Woman Creek
Huron
Sandusky River
Richland
Ashland
Lorain
Black River
Rocky River
Cuyahoga
Summit
Medina
Wayne
Euclid Creek
West Creek
Chagrin River
Tinkers Creek
Cuyahoga River (Middle)
Nimishillen Creek
Stark
Holmes
Coshocton
Kokosing River
Knox
Big Walnut (Upper)
Licking
Rocky Fork
Blacklick Creek
Fairfield
Perry
Muskingum
Tuscarawas
Guernsey
Harrison
Jefferson
Belmont
Carroll
Huff Run
Yellow Creek
Portage
Trumbull
Mill, Yellow, and Meander Creeks
Little Beaver Creek
Mentor Marsh
Arcola Creek
Ashtabula
Grand River (Lower)
Grand River (Upper)
Salt Creek
Meigs Creek
Noble
Monroe
Captina Creek
Duck Creek
Monday Creek
Sunday Creek
Southern Watershed (Lower Muskingum R.)
Hocking
Raccoon Creek Headwaters
Raccoon Creek
Wolf Creek
Federal Creek
Athens
Meigs
Leading Creek
Jackson
Gallia
Lawrence
FULL
IN PROGRESS
CONDITIONAL

PLANNING PHASE GRANTS

Arcola Creek Watershed



SPONSORED BY LAKE SOIL AND WATER CONSERVATION DISTRICT

http://www.lakecountyohio.gov/swcd/Home.aspx

Watershed Action Plan Status

- Inventory section complete
- Draft problem statements, goals, objectives and actions submitted for review

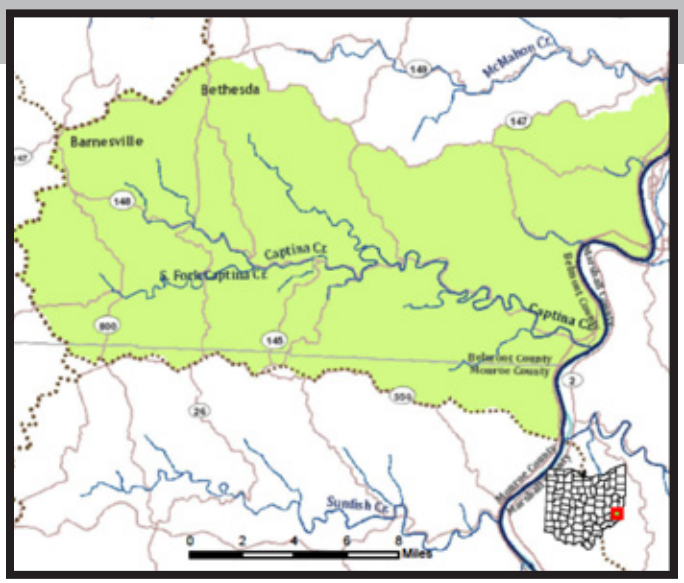
Highlights

- Planned and conducted a spring clean-up in association with Madison Clean and Green Days to pick up litter along the waterways in Madison Village.
- Presented to Madison Garden Club on the Arcola Creek watershed planning effort.
- Attended various training events including Proposal Development for Ohio EPA Surface Water Improvement Fund Grants.

Arcola Creek Signage

Mouth of Arcola Creek to Lake Erie

Captina Creek Watershed



SPONSORED BY BELMONT SOIL AND WATER CONSERVATION DISTRICT

http://www.belmontswcd.org/

Watershed Action Plan Status

- Inventory section complete
- Draft problem statements, goals, objectives and actions in development

Highlights

- The Belmont SWCD with the support of many partners hosted the third Captina Creek Rally with featured guest, Jack Hanna.
- The Captina Conservancy has applied for 501(c)3 status and will preserve over 900 acres in the watershed.
- US Fish and Wildlife removed a low-head dam in the watershed

Middle Cuyahoga River Watershed

SPONSORED BY NORTHEAST FOUR COUNTY REGIONAL PLANNING AND DEVELOPMENT ORGANIZATION (NEFCO)

http://www.nefcoplanning.org/

Watershed Action Plan Status

- Draft submitted for endorsement review ftp://ftp.dnr.state.oh.us/Soil_&_Water_Conservation/WatershedActionPlans/WAPs%20In%20Review/MidCuy9.13.12.pdf

Highlights

- Coordinating with the City of Cuyahoga Falls and other partners on a proposal development to restore Kelsey Creek, which presents a severe erosion problem in the watershed. The watershed coordinator met with Cuyahoga Falls officials, who have hired a consultant for initial assessment Spring 2012.
- Facilitated employment of a City of Ravenna intern to monitor nutrients in and entering Lake Hodgson.

Muskingum River Southern Watershed

SPONSORED BY FRIENDS OF LOWER MUSKINGUM RIVER

http://www.muskingumriver.org/

Watershed Action Plan Status

- Draft inventory largely complete
- Livestock and septic system inventories underway

Highlights

- Awarded a YSI Pro Plus Multiple parameter Meter for data collection.
- In partnership with the City of Marietta installed a rain garden during a workshop at Greenleaf Landscapes, Inc. as a component of the "Rain Gardens, Clean River Initiative"

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Duke Energy Foundation	$9,600	Funding for our AmeriCorps VISTA position and their project goals. VISTA will work on a Phase I AMDAT study in the Olive Green watershed, a bacterial analysis of Meigs Creek and our initiative "Rain Gardens, Clean River".
Norcross Wildlife Foudnation	$1,500	Handheld GPS unit, new Dell Desktop with 1 TB of data, ArcGIS program 4 year renewal fee
TOTAL	**$11,100**	

Upper Grand River Watershed

SPONSORED BY WESTERN RESERVE LAND CONSERVANCY

http://www.wrlandconservancy.org

Watershed Action Plan Status

- Draft submitted for state endorsement review ftp://ftp.dnr.state.oh.us/Soil_&_Water_Conservation/WatershedActionPlans/Draft/UGR%20Draft%20WAP%20-%20Final%206-28-2012.pdf

Highlights

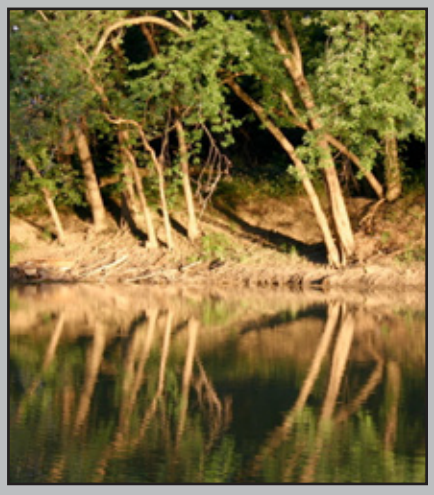
- Organized and conducted 2012 Grand River Clean-up. Over 50 volunteers collected 2 flatbed trailers of litter from 16 miles of the Grand River.
- Removed invasive species from 531 acres.

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Clean Ohio - District 06 - Round 6A	$695,318	Sheridan - Mosquito Creek Wetlands Protection Project, North Bloomfield, Trumbull County
REX East Migratory Bird Account	$210,000	Sheridan - Mosquito Creek Wetlands Protection Project, North Bloomfield, Trumbull County - 455 acres
Clean Ohio Agricultural Easement Purchase Program (AEPP)	$273,107	Bill Nye Protection Easement, 236 acres
Farm and Ranch Land Protection Program	$204,831	Bill Nye Protection Easement, 236 acres
Partners for U.S. Fish & Wildlife	$55,288	Grand River Restoration, 150 acres
Section 6 Cooperative Endangered Species Conservation	$103,235	Conservation of the Eastern Massasauga in Northeastern Ohio
TOTAL	**$1,541,779**	

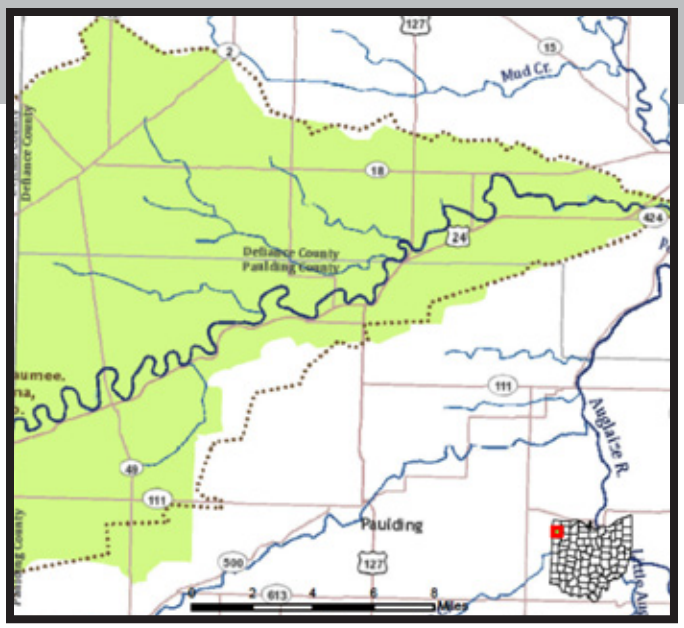
Grand River Headwaters

Yellow Creek



Upper Maumee River

Upper Maumee River Watershed



SPONSORED BY DEFIANCE SOIL AND WATER CONSERVATION DISTRICT

http://www.defiance-county.com/swcd

Watershed Action Plan Status

- Draft inventory complete (http://www.uppermaumeewatershed.com/Files/uppermaumee.pdf)

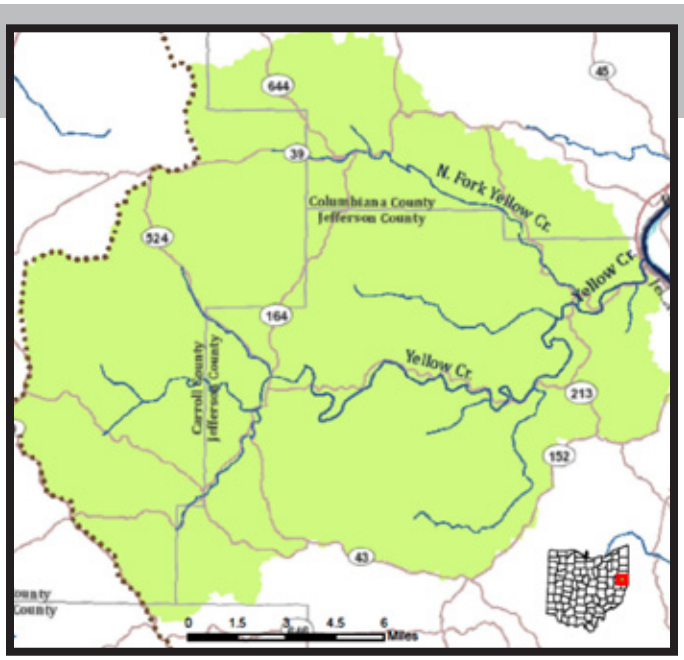
Highlights

- The Upper Maumee Watershed Action Plan is being jointly developed across state lines according to both Ohio and Indiana guidelines.

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Great Lakes Commission (Watershed Scale)	$353,400	Promoting Sediment Reduction in the UMW
Ohio Environmental Education Fund	$5,000	Signage and EnviroScape
TOTAL	**$358,400**	

Yellow Creek Watershed



SPONSORED BY JEFFERSON SOIL AND WATER CONSERVATION DISTRICT

http://www.jeffersonswcd.org/

Watershed Action Plan Status

- Draft submitted for state endorsement review ftp://ftp.dnr.state.oh.us/Soil_&_Water_Conservation/WatershedActionPlans/Draft/Yellow%20Creek%20WAP%20Draft.pdf

Highlights

- The watershed coordinator participated in the reintroduction of a state endangered species into the Yellow Creek Watershed. This is the first reintroduction attempt for this species in Ohio, and its success is continuously being monitored.
- Partnering with the Western Reserve Land Conservancy in an attempt to acquire a conservation easement upstream of the endangered species release site, and coordinating with stakeholders to ensure the area of stream receives as much protection as possible.

Funding Acquired

Funding Source	Amount	Project Description / Purpose
Carroll County Community Foundation	$725	Rain Garden expansion at Bell-Herron Middle School
Jefferson-Belmont Solid Waste Authority	$250	Reusable shopping bags for leaf pounding program at library
TOTAL	**$975**	

Brindled Madtom Reintroduction

Christina Znidarsic, Chagrin River Watershed Coordinator, planting trees at Kenston Lake Dam Modification site.

AmeriCorps volunteer, Lauren Armeni, educates local children at Leading Creek.

Tinker's Creek

James Zehringer, Director
Ohio Department of Natural Resources
odnr.com

Karl Gebhardt, Chief
Division of Soil and Water Resources
ohiodnr.com/soilandwater

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