



FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number **11(h)EPA-07**

Est. Project Completion June 30, 2014

SubGrantee **Bath Township Trustees**

P.O. Box 1188
Bath, Ohio 44210

Project Contact: **Michael Rorar**

Bath Township Trustees
P.O. Box 1188
Bath, Ohio 44210
330-606-7927
mrorar@bathtownship.org

Federal Amount: **\$57,078**

Local Match: **\$14,272**

Project Title: **Bath Creek Floodplain/Wetland Restoration**

Project Location: Summit County

Watershed: Yellow Creek

Project Summary: \$57,078 in FY 2011 Section 319(h) Nonpoint Source grant funding is recommended to restore a 12-acre degraded wetland and to create a functioning flood plain on a tributary stream to Bath Creek. The project will restore more than 1,700 linear feet of a meandering tributary through an area of existing Category 1 wetlands. In addition to restoring the tributary stream the wetland area will be restored by a combination of invasive species removal incidental to construction and excavation and replanting with native wetland plant species. This project is being implemented consistent with the recommendations in the state-endorsed Yellow Creek Watershed Action Plan. It is also consistent with findings and recommendations within the Yellow Creek Total Maximum Daily Load study completed by Ohio EPA and approved by U.S. EPA in March 2010.

Project Deliverables:

- Restoration of more than 1,700 linear feet of stream channel and floodplain. Restoration activities will include installing erosion and sediment control structures, install in-stream habitat structures and grade structures, and construction of 1,700 linear foot two-stage channel to restore natural flow.
- Restoration and stabilization of more than 1,700 linear feet of streambank by recontouring or regrading area.
- Restoring and improving 12-acres of Class I wetlands via invasive species removal incidental to construction with native wetland plant species.

- Conduct public education and outreach by developing fact sheets and press releases, conducting public meetings, creating/maintaining a project-specific website, install project signs/displays/information kiosks, conducting canoe tours and field stream clean-up days

Progress to Date:

- Acquired 4.5 acres of conservation easements.
- Hired consultant to complete wetland delineation and topographic survey of the 12 acre wetland.
- Initiated work for removal of invasive species.
- Completed field assessments and design plans.
- Conducted 3 public meetings, issued 1 press release, developed 1 kiosk and conducted 1 tour.
- Removed and/or treated 12 acres of invasive species.
- Awarded contract for stream restoration, anticipate project will be complete fall 2013.
- Restore 873 linear feet of stream channel and floodplain.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Yellow Creek and complete the stream restoration work of Bath Creek at the Bath Nature Preserve.

NPS Load Reductions Resulting from Project

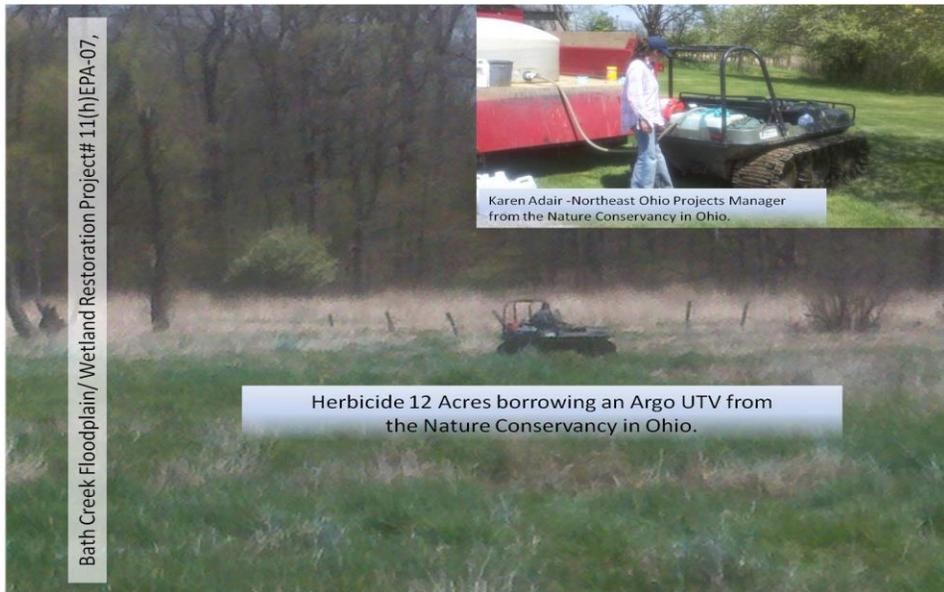
Pollutant	Estimated Loading Reduction
Nitrogen	230 pounds/year
Phosphorus	114 pounds/year
Sediments	114 tons/year



Bath Creek Restoration showing Bath Creek Floodplain/ Wetland



Tributary of Bath Creek through south end of cemetery property





FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number	11(h)EPA-09
Project Completion	Grant Closed December 17, 2012
SubGrantee	City of Springdale 11700 Springfield Pike Springdale, Ohio 45246
Project Contact:	Derrick Parham City of Springdale 11700 Springfield Pike Springdale, Ohio 45246 513-346-5700 dparham@springdale.org
Federal Amount:	\$362,920
Local Match:	\$ 90,790
Project Title:	Beaver Run Riparian Corridor Restoration Phase 2
Project Location:	Hamilton County
Watershed:	Mill Creek

Project Summary: \$362,920 in FY 2011 Section 319(h) Nonpoint Source grant funding was awarded to allow the city of Springdale to further stabilize the streambank of Beaver Run adjacent to Chamberlain Park within the city. Streambank stabilization activities included installation of 230 linear feet of terrace wall and geo-cell lifts of bioengineered bank armor as well as revegetating the streambank with native grass, shrub and tree species. In-stream scour and flow will be managed through the installation of multiple in-stream structures. Replanting of the riparian area will further enhance the environmental benefits of this project. The project was supported with a variety of project-specific public awareness and outreach activities such as tours, field days and stream clean-ups. This project is being implemented consistent with the recommendations in the state-endorsed Mill Creek Watershed Action Plan.

Final Project Results:

- Developed and distributed project fact sheet.
- Conducted one public meeting and four project tours.
- Developed press release.
- Created facebook page. For more information please go to:
<http://www.facebook.com/springdale.oh>

- Developed 1 display.
- Installed 1 project sign.
- Stabilized and restored 230 linear feet of streambank using a bioengineered or “green” terrace wall.
- Installed three in-stream structures call stream barbs which help prevent undercutting of the wall by centering the flow of water around the curve, installed a cross vane downstream from the terrace wall which helps prevent the upstream movement of natural stream erosion
- Planted trees, shrubs, and/or live stakes in ¼ acres of riparian area
- Planted grass on ¼ acres of riparian area

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Beaver Run by reducing water velocity and erosion, streambed siltation, and water temperatures. The project will increase stream shading, bank full flow capacity, native plants, habitat, and ecologically functional riparian corridor.

NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	211.1 pounds/year
Phosphorus	105.6 pounds/year
Sediments	105.6 tons/year



Beaver Run Phase II project will improve this current wall failure along with other enhancements to the stream.



This picture shows the brush layer, first row of the geocell constructed, and the second row being constructed. Notice the live stakes between the first and second rows.







FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number 11(h)EPA-10

Project Completion Grant Closed August 2012

SubGrantee Mayfield Village
6622 Wilson Mills Road
Mayfield Village, Ohio 44143

Project Contact: Doug Metzung
Mayfield Village
6622 Wilson Mills Road
Mayfield Village, Ohio 44143
440-461-2210
Dmetzung@mayfieldvillage.com

Federal Amount: \$184,429

Local Match: \$ 46,108

Project Title: Mayfield Village Parking Lot Retrofit Demonstration Project at Wiley Park

Project Location: Cuyahoga County
Watershed: Chagrin River, Main Stem

Project Summary: \$184,429 in FY 2011 Section 319(h) Nonpoint Source grant funding was awarded to allow the village of Mayfield to implement a parking lot retrofit project. The project included the removal of .3 acres of impervious pavement and retrofitting the remaining parking areas with a passive treatment system to treat storm water runoff through 7,545 square feet of pervious pavement and 800 square feet of bio-retention area. The project was supported with education and outreach activities including project signage, project-specific presentations and a newsletter article highlighting the project. The project was implemented consistent with the recommendations in the state-endorsed Chagrin River Watershed Partners, Inc. Watershed Action Plan. It is also consistent with findings and recommendations within the Chagrin River Watershed Total Maximum Daily Load study completed by Ohio EPA and approved by U.S. EPA in 2007.

Final Project Results:

- Installed 7,545 square feet of permeable pavement;
- Installed 800 square feet of bio-filtration (runoff retention and infiltration) island;
- Converted 0.3 acres from impervious pavement to more pervious grass cover;
- Installed project signage in public park;
- Outreach included presentation to watershed stakeholders, and informational newsletter

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings in Fosters Run, a tributary of the Chagrin River that results from precipitation related urban runoff, and also demonstrate to the community the water quality value in water retention in urban landscape. Retention of urban runoff reduces stream flashiness, a key contributor to sediment loading due to streambank erosion.

NPS Load Reductions Resulting from Project

Pollutant	Final Loading Reductions
Nitrogen	1 pounds/year
Phosphorus	0 pounds/year
Sediments	0.39 tons/year





FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number **11(h)EPA-11**
Est. Project Completion June 2013

SubGrantee **Ursulines of Brown County**
20860 State Route 251
St. Martin, Ohio 45118-9705

Project Contact: **Norma Green**
Ursulines of Brown County
20860 State Route 251
St. Martin, Ohio 45118-9705
513-875-2020
ngreen@tds.net

Federal Amount: **\$367,805**
Local Match: **\$106,447**

Project Title: **Solomon Creek Dam Removal & Stream Restoration**

Project Location: Brown County
Watershed: East Fork Little Miami

Project Summary: \$367,805 in FY 2011 Section 319(h) Nonpoint Source grant funding is recommended to assist the Ursulines of Brown County with removing a low-head dam and restoring approximately 2,400 linear feet of Solomon Run. Restoration activities will include the removal and beneficial use of accumulated sediments from the former dam pool, natural channel design and bio-engineering methods for restoring the stream channel and surrounding streambanks, and the installation of 2 in-stream habitat structures. The project is being supported with extensive education and outreach activities including the establishment and maintenance of a project specific website, newsletters, project sign and other activities designed to expand public awareness of the project. This project is being implemented consistent with the recommendations in the state-endorsed (2006) East Fork Little Miami Watershed Action Plan. It is also consistent with findings and recommendations within the Little Miami Total Maximum Daily Load study completed by Ohio EPA and approved by U.S. EPA in 2002.

Project Deliverables:

- Removal of one lowhead dam structure
- Removal and beneficial use land application of 17,000 cubic yards of sediment and debris removed from dam pool
- Restoration of 2400 lineal feet of stream channel (using natural channel design)

- Restoration of 2400 lineal feet of streambank using re-grading, re-contouring and bio-engineering
- Installation of two (2) in-stream habitat structures
- Planting ten (10) acres of native grasses in riparian area
- Planting five (5) acres of trees, shrubs, and/or live stakes in riparian area
- Acquisition of forty (40) acres of conservation easements
- Public outreach including website links, signage, display, press releases, public meetings, tours, newsletters, and project signage.

Progress to Date:

- Issued request for proposal.
- Negotiating contract with engineering firm. Anticipated project start date Fall 2012.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant impacts in the East Fork Little Miami watershed by removing the historic low head dam and restoring Solomon Run. Accumulated sediment will be removed, the former dam pool eliminated and an expected increase in IBI, ICI and QHEI scores will result.





FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number **11(h)EPA-12**
Project Completion June 2014

SubGrantee **Toledo Division of Environmental Services**
348 South Erie Street
Toledo, Ohio 43604

Project Contact: **Joel Mazur**
Toledo Division of Environmental Services
348 South Erie Street
Toledo, Ohio 43604
419-936-3944
joel.mazur@toledo.oh.gov

Federal Amount: **\$ 98,420**
Local Match: **\$ 47,270**

Project Title: **Toledo School for the Arts Storm Water Demonstration Project**

Project Location: Lucas County
Watershed: Maumee River

Project Summary: \$98,420 in FY 2011 Section 319(h) Nonpoint Source grant funding is recommended to assist with the design and installation of two areas of green roofing totaling more than 2,860 square feet at the campus of the Toledo School for the Arts. The first area will comprise of approximately 2,460 square feet that will be installed in the upper roof area of the Toledo School for the Arts building. The second roof area will consist of 400 square feet of green roof installed in the more highly visible lower area of the building. Additionally, approximately 1,000 square feet of vegetated bio-swale will be installed in the parking area at the school. To help expand public awareness of the project, outreach activities including public meetings, a project-specific fact sheet, signs, a project-specific display and other public outreach activities will be completed in support of this project. Graphics and artwork will be supplied by students in the Toledo School for the Arts. This project is being implemented consistent with the recommendations in the decades-old Maumee Remedial Action Plan and the multi-partner Toledo-Lucas County Rain Garden Initiative.

Project Deliverables:

- Installation of 1000 square feet of bio-swale for parking lot runoff
- Installation of 2,860 square feet of green roof in two locations (2,460 square feet and 400 square feet, respectively)
- Installation of 305 lineal feet of irrigation matting

- Public outreach including public meetings, tours, website links, signage, displays, informational kiosk, fact sheet, press releases, displays, newsletter article, and project signage

Project Progress to Date:

- Completed structural assessment of the roof support.
- Published RFP and developed project plans.
- Developed and issued three press releases.
- Conducted two tours and one public meeting.
- Installed 1,000 square feet of bio-swale for parking lot runoff.
- Created project website. For more information please visit: www.ts4arts.org
- Created project fact sheet.
- Purchased materials for green roof.
- Installed 2,860 square feet of green roof.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Maumee River. Moreover, this project will provide a tableau for water quality related education opportunities to Toledo School for the Arts students and all who visit.

NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	52 pounds/year
Phosphorus	6.3 pounds/year
Sediments	0.13 tons/year



Existing TSA Roof

Proposed TSA Green Roof



Proposed TSA Parking Lot







FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number **11(h)EPA-14**
Est. Project Completion June 2013

SubGrantee **City of Aurora**
130 South Chillicothe Road
Aurora, Ohio 44202

Project Contact: **Richard Wehrenberg**
City of Aurora
130 South Chillicothe Road
Aurora, Ohio 44202
330-562-9564
wehrenberg@auroraohio.com

Federal Amount: **\$478,075**
Local Match: **\$250,000**

Project Title: **Harmon Homestead Restoration Project**
Project Location: Portage County
Watershed: Upper Aurora Branch of Chagrin River

Project Summary: \$478,075 in FY 2011 Section 319(h) Nonpoint Source grant funding is recommended to restore 3,190 linear feet of two (2) tributaries using natural channel design and installing six (6) grade control structures to eliminate down-cutting and erosion within the project area. The project will also restore 11 acres of previously occurring wetlands and 17.5 acres of riparian corridor. The project site and surrounding acreage will be permanently protected by conservation easements placed on more than 100 acres. The stream and wetland restoration project will be supported by project-specific public awareness and outreach activities including the establishment of a project website, a field day, at least one newsletter article and project specific presentation to the Chagrin River Board of Trustees. This project is being implemented consistent with the recommendations in the state-endorsed Chagrin River Watershed Action Plan. It is also consistent with findings and recommendations within the Upper Aurora Branch of Chagrin River Total Maximum Daily Load study completed by Ohio EPA and approved by U.S. EPA in 2007.

Project Deliverables:

- Restoration of 550 linear feet of stream channel using natural channel design
- Installation of 4-6 grade structures (dependent upon final design) designed to eliminate channel down-cutting and other streambank erosion in the project site.

- Stabilization of 1500 lineal feet of streambank using bio-engineering
- Planting of 17.5 acres of trees, shrubs, and/or live stakes in riparian areas
- Acquisition of 89 acres of non-wetland conservation easements and 11 acres of wetland conservation easements.
- Restoration of 3 acres of wetlands
- Planting of 4 acres of wetland species
- Installation of 1 or 2 water control devices (dependent upon final design)
- Public outreach including website link, signage, field day, newsletter, and a presentation.

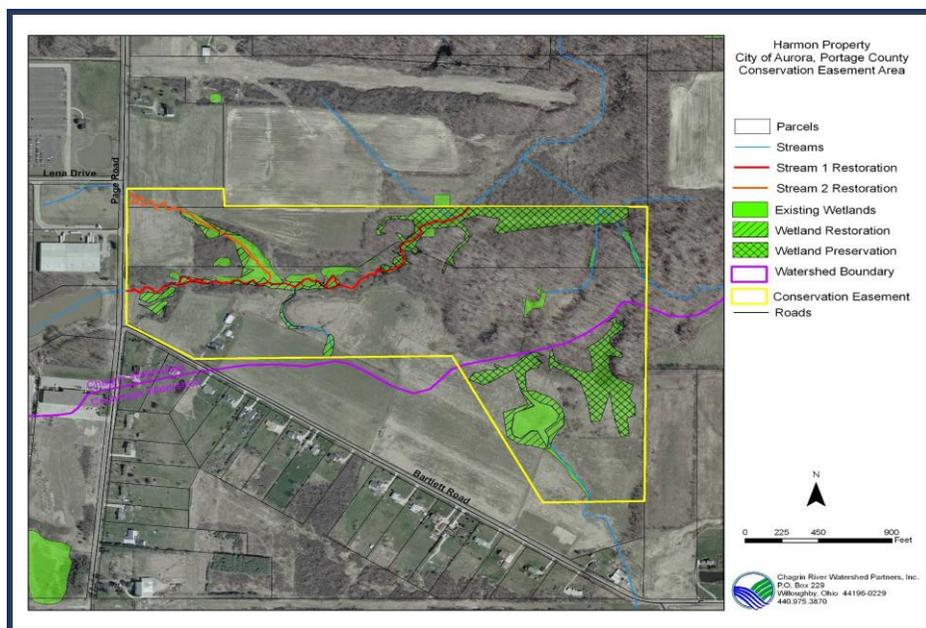
Progress to Date:

- Published request for proposals. Proposals are due January 13, 2012.
- Executed design-build contract.
- Created project website. For more information please go to: http://www.crowp.org/Projects/aurora_harmon_resto.htm
- Conducted surveys, applied for permits and produced project plans.
- City has not yet received its Nationwide 27 permit from the U.S. Army Corps of Engineers.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Upper Aurora Branch of Chagrin River by restoration of natural stream channels, wetlands and riparian corridor. The restoration efforts will recreate natural stream flow, moderate water temperature, increase aquatic and terrestrial habitat, reduce sediment from stream bank erosion, and absorb nutrient rich runoff.

NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	475 pounds/year
Phosphorus	138 pounds/year
Sediments	138 tons/year





FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number **11(h)EPA-18**

Est. Project Completion April 30, 2014

SubGrantee **Columbus Public Utilities Department**

910 Dublin Road
Columbus, Ohio 43215

Project Contact: **Michael Griffith**

Columbus Public Utilities Department
910 Dublin Road
Columbus, Ohio 43215
614-645-2416
mpgriffith@columbus.gov

Federal Amount: **\$500,000**

Local Match: **\$400,240**

Project Title: **Lower Olentangy River Ecosystem Restoration Project, 5th Avenue Dam Removal Design & Construction**

Project Location: Franklin County

Watershed: Lower Olentangy River

Project Summary: \$500,000 in FY 2011 Section 319(h) Nonpoint Source grant funding is recommended to assist the city of Columbus with stream restoration efforts following the removal of the 5th Avenue Dam on the Olentangy River. Removal of the 5th Avenue Dam has been recommended numerous times in a variety of documents and reports. The impounded area behind this dam is noted in the Olentangy TMDL as one of the most biologically impaired segments of the lower Olentangy. This project will facilitate riparian restoration and installation of in-stream habitat and grade structures designed to stabilize the streambanks and stream channel and to prevent headcutting following dam removal. The project is being supported with extensive outreach and public involvement due to the high profile nature of the structure and project location. This project is an extension of the project planning and design work that was completed under provisions of #06(h)EPA-27. This project is being implemented consistent with the recommendations in the state-endorsed Lower Olentangy River Watershed Action Plan. It is also consistent with findings and recommendations within the Lower Olentangy River Total Maximum Daily Load study completed by Ohio EPA and approved by U.S. EPA in 2007.

Project Deliverables:

- Removal of one (1) dam.
- In-stream channel and riparian area restoration of 10,560 linear feet of riparian areas including plantings and grading as needed. In-stream restoration will include the installation of grade

structures and habitat features as needed to eliminate headcutting and other instability that may occur.

- Disposal of 6,350 cubic yards of dam debris.
- Public outreach including a video, website link, signage, fact sheet, tours, newsletters, a survey and project signage.

Project Results to Date:

- Executed construction contract and Notice to Proceed issued in June 2012.

Environmental Results: Successful completion of this project will reduce nonpoint source related impairment in the Lower Olentangy River by restoring approximately two (2) miles of the Olentangy River to an unimpeded natural state.



Olentangy River at 5th Avenue Dam.





FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number **11(h)EPA-20**

Est. Project Completion June 1, 2012

SubGrantee **Westerville Parks & Recreation Department**
350 North Cleveland Avenue
Westerville, Ohio 43082-9105

Project Contact: **Michael Hooper**
Westerville Parks & Recreation Department
350 North Cleveland Avenue
Westerville, Ohio 43082-9105
614-901-6500
michael.hooper@westerville.org

Federal Amount: **\$131,328**
Local Match: **\$ 43,252**

Project Title: **Highlands Park Wetland Expansion & Enhancement**

Project Location: Franklin County

Watershed: Alum Creek

Project Summary: \$131,328 in FY 2011 Section 319(h) Nonpoint Source grant funding is recommended to restore 2.7 acres of wetlands and to re-establish another 0.87 acres of wetlands in Highland Park within the city of Westerville. Restoration activities will include regrading and excavation of an existing stormwater detention basin and include extensive planting of native wetland plant species in this highly visible location. The project will be supported by project-specific education and outreach activities including public meetings, project website, press releases, workshops, articles and project signs. The project is being implemented consistent with the recommendations in the state-endorsed Alum Creek Watershed Action Plan and will serve as an effective and highly visible demonstration project. It is also consistent with findings and recommendations within the Alum Creek TMDL study completed by Ohio EPA and approved by US EPA in 2005.

Project Deliverables:

- Restoration and enhancement of 2.71 acres of wetland
- Planting of 2.89 acres of wetland species
- Installation of one (1) water control device
- Public outreach including public meetings, press releases, website links, fact sheet, press releases, a clean-up, workshops, brochure articles and project signage

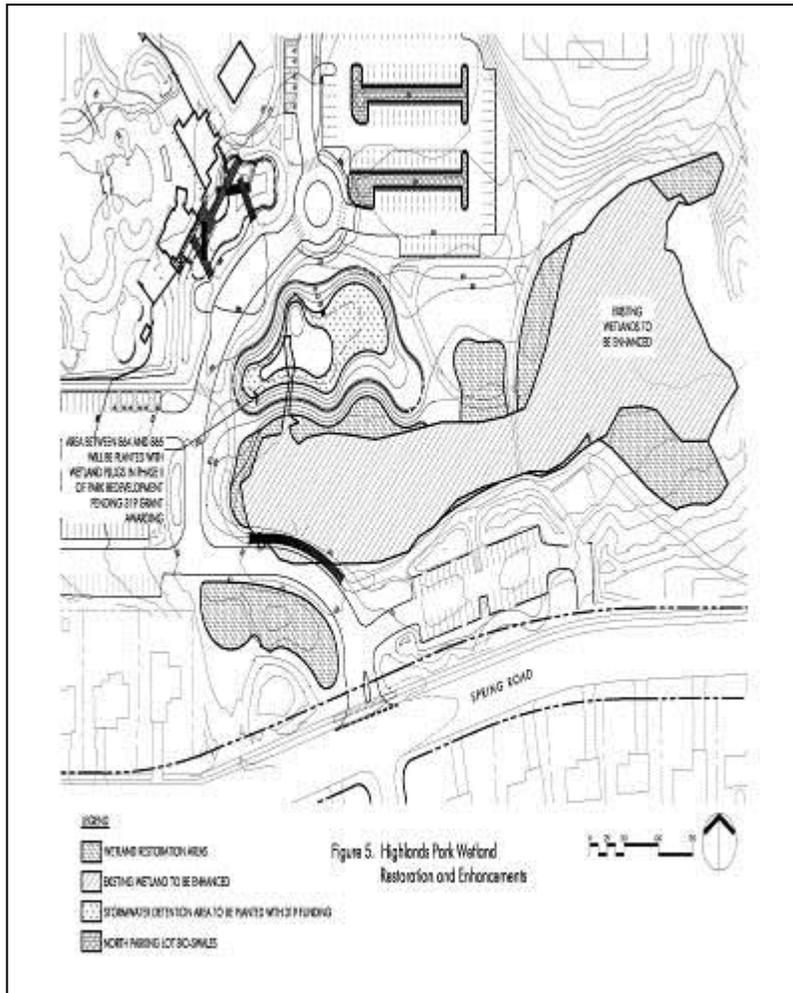
Project Results to Date:

- Published RFP
- Executed design contract.
- Conducted one public meeting.
- Developed one fact sheet and one press release.
- Conducted two public meeting and one workshop.
- Restored and enhanced 2 acres of wetland
- Removed invasive plants on 1.84 acres, and planted native seeds.
- Installed one water control device.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Spring Run (a tributary of Alum Creek) by installing and rehabilitating functional wetlands to assimilate pollutants in runoff. The project also provides citizens who visit an opportunity to learn the value wetlands have in protecting water quality.

NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	64 pounds/year
Phosphorus	23 pounds/year
Sediments	6.5 tons/year







FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number 11(h)EPA-21

Est. Project Completion June 2014

SubGrantee Toledo Botanical Garden

5403 Elmer Drive
Toledo, Ohio 43615

Project Contact: Karen Ranney Wolkins

Toledo Botanical Garden
5403 Elmer Drive
Toledo, Ohio 43615
419-536-5566
Karen.ranneywolkins@toledogarden.org

Federal Amount: \$500,000

Local Match: \$569,525

Project Title: Hill Ditch Stream Restoration & Dam Removal at Toledo Botanical Garden

Project Location: Lucas County

Watershed: Tenmile Creek; Ottawa River (Hill Ditch)

Project Summary: \$500,000 of Section 319 FY2011 grant funding is recommend to enable the Toledo Botanical Garden to remove two lowhead dam structures and restore a 1,050 foot segment of Hill Ditch that flows through their facilities. The two low-head dams currently impound the east and west Crosby Lake ponds at Toledo Botanical Gardens and will be removed during this project. Removal will restore natural flow conditions to Hill Ditch and stream channel restoration activities will follow using natural channel design and include the installation of five in-stream grade control structures and replanting of .32 acres of riparian areas as well as 1.7 acres of previously impounded deep water areas. Employees of Toledo Botanical Gardens and volunteers will plan and implement a comprehensive planting program that will involve native seed collection, germination, plant production, planting and maintenance. Monitoring activities will be completed every 5 years to assess channel stability, verify erosion and sediment reductions, and various other biological monitoring such as QHEI, IBI and ICI assessments. (Section 319 funds may not be used to complete monitoring). This project is in a highly visible location and will serve as an effective demonstration of the importance and value of stream restoration in an urban area. Education and outreach activities supporting this project will include web pages, project signage, fact sheets, press releases, project displays and an information kiosk.

Project Deliverables:

- Removal of two lowhead dams followed by the restoration of natural flow to more than 1,150 linear feet of Hill Ditch throughout the grounds of the Toledo Botanical Garden.
- Installation of five (5) in-stream grade/habitat structures.
- Planting of native grass on 0.5 acre in conjunction with the planting of trees, shrubs and live stakes on 1/3 acre of riparian areas.
- Installation of 0.5 acres of pocket wetlands.
- Installation of 1.7 acres of deep water habitat in floodplain.
- Public outreach including website links, signage, fact sheets, press releases, displays, and an informational kiosk.
- Public participation through three (3) tours, six (6) planting days, six (6) stream clean ups and three (3) workshops.

Progress to Date:

- Published RFP and executed design contract.
- Conducted 2 tours, 1 field day and 1 workshop.
- Developed 1 fact sheet and 3 newsletter articles.
- Conducted 2 public meetings and provided project updates at 15 meetings.
- Installed 2 signs.
- Created one website. For more information please visit: <http://toledogarden.org/content/information/masterplan.aspx>
- Project substantially complete. Finishing education/outreach and plantings.
- Removed two lowhead dams and restored natural flow to more than 1,150 linear feet of Hill Ditch throughout the grounds of the Toledo Botanical Gardens.
- Installed 4 in-stream habitat structures and 3 grade structures.

Environmental Results: Successful completion of this project is expected to restore natural flow and assimilative capacity to Hill Ditch and associated wetland features in the Toledo Botanical Gardens. In addition this project will provide a tableau for water quality related education opportunities to all who visit.

NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	2677 pounds/year
Phosphorus	1338 pounds/year
Sediments	1338 tons/year



PHOTO 1: *Ad hoc* lake shore stabilization, West Lake.



PHOTO 2: Typical deposition and lakeshore erosion, West Lake.

 3401 Glendale Avenue Suite 300 Toledo, Ohio 43614 © 2007, Hull & Associates, Inc. Phone: (419) 385-2018 Fax: (419) 385-5487 www.hullinc.com	Toledo Botanical Gardens Hill Ditch Stream Restoration & Dam Removal	Date: <p style="text-align: center;">May 2010</p>
	Site Photographs City of Toledo, Lucas County, State	Project Number: TOG001 File Name: TOG001.300.0002.xls





FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number **11(h)EPA-31**

Est. Project Completion June 30, 2014

SubGrantee **Medina County Park District**

6364 Deerview Lane
Medina, Ohio 44256

Project Contact: **Thomas James**

Medina County Park District
6364 Deerview Lane
Medina, Ohio 44256
330-722-9364
tkjames@medinacountyparks.com

Federal Amount: **\$169,000**

Local Match: **\$ 50,382**

Project Title: **Chippewa Lake Upper Watershed Restoration Phase 2**

Project Location: Medina County

Watershed: Chippewa Creek

Project Summary: \$169,000 of FFY2011 Section 319 grant funding is recommended to assist the Medina County Parks District with eliminating 800 feet of channelized farm ditch and restoring it with 3,400 lineal feet of 2-stage channel and functional floodplain. The restored tributary will be directed into existing riparian wetlands adjacent to the Chippewa Lake Inlet tributary. Stream restoration work will include the installation of 2 erosion and sediment control structures; 15 in-stream habitat (rock) structures; and 2 grade control structures. Additionally, wetlands restoration will be completed including the removal of 20 acres of invasive species and replanting with native wetland species of trees, shrubs and grasses. The project will be supported with project-specific education and outreach activities including the preparation and distribution of press releases, a project specific fact sheet, public meetings and project signage. Project monitoring will occur initially to verify baseline conditions and then be completed on an annual basis for a period of five (5) years to verify successful growth, stability and evolution of the natural system and processes. This project is being implemented consistent with the Chippewa Lake Balance Growth Plan.

Project Deliverables:

- Restoration of approximately 800 linear feet of maintained agricultural ditch by converting it to 3,400 linear feet of 2-stage channel and redirecting flow through 20 acres of existing riparian wetlands.
- Restoration of 2000 linear feet of flood plain including planting of native grasses, shrubs and trees on 10 acres of riparian areas.

- Installation of two (2) sediment and erosion control structures
- Installation of 15 in-stream habitat structures
- Installation of two (2) grade structures
- Removal of 20 acres of invasive plant species
- Public outreach including website link, signage, fact sheet, press releases, tours, one workshop and one public meeting

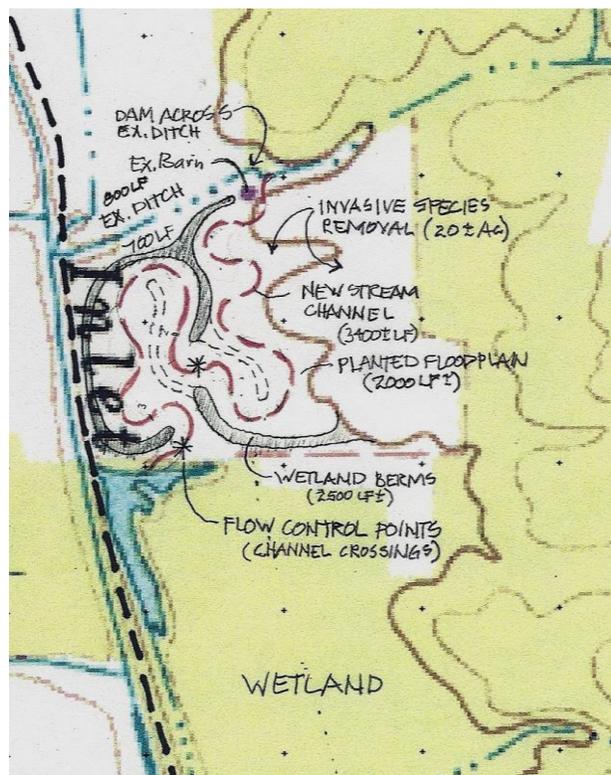
Progress to Date:

- Completed Planning and Engineering.
- Received Army Corps of Engineers permit, will commence construction October 2012.
- Removed/treated 13 acres of invasive species.
- Restored 1,958 linear feet of stream channel.

Environmental Results: Successful completion of this project is expected to restore natural flow and assimilative capacity to this historically channelized system. By redirecting all flow from this tributary through a series of existing wetlands, it is expected that this project will eliminate the nonpoint source loadings of sediment and nutrients from this tributary into Chippewa Lake. It is also expected that this project will improve habitat conditions within the stream by increasing the QHEI rating to 60 or higher.

NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	800 pounds/year
Phosphorus	300 pounds/year
Sediments	200 tons/year





FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number #11(h)EPA-47
Est. Project Completion April 2012

SubGrantee Cuyahoga County Soil & Water Conservation District
6100 West Canal Road
Valley View, Ohio 44125-3330

Project Contact: Jared Bartley, Rocky River Watershed Coordinator
Cuyahoga County SWCD

Amount Requested: \$ none
Match Amount: \$484,200

Project Title: Baldwin Creek Dam Removal and Habitat Enhancement

Project Location: City of Berea, Cuyahoga County
Watershed: Baldwin Creek—Rocky River

Project Summary: \$484,200 in Water Resources Restoration Project (WRRSP) funding is being provided to assist the Cuyahoga County SWCD to remove three small lowhead dams on Baldwin Creek within the city of Berea. This project is being provided as local match to the Ohio Section 319(h) grant for FFY2011. The project sites are located within property owned by the Cleveland Metroparks System and/or by the city of Berea. One intact lowhead dam and two smaller degraded structures impede fish passage and degrade habitat throughout the stream segment. In addition to dam removal activities, this project proposes to enhance in-stream habitat conditions by installing a grade control structure such as a step/pool or cross vane at the downstream end of the stream reach. Activities associated with this project are designed to restore habitat conditions within this segment of Baldwin Creek to its designated warmwater habitat aquatic life use and to restore nearly a mile of natural flow conditions within the stream (4,750 linear feet). The TMDL for Rocky River approved by US EPA in 2001 identifies that “*habitat restoration the stream (Baldwin Creek) could have a high degree of success ... if implemented in conjunction with stream channel barrier removal and enhancements*”. This project is being implemented consistent with those recommendations.

Outreach activities will be conducted by the Cuyahoga County SWCD with assistance from the city of Berea and will include public meetings, newsletter articles, press releases and tours of the completed project sites. Rocky River, of which Baldwin Creek is a tributary, has both a state endorsed watershed action plan and an approved Total Maximum Daily Load Study.

This project will be managed by the Ohio Environmental Protection Agency Division of Environmental and Financial Assistance (DEFA) on behalf of the Division of Surface Water.

Project Deliverables:

- Removal of three small lowhead dam structures and restoration of 4,750 linear feet of natural flow conditions in Baldwin Creek.

- Installation of 3 fish passage and in-stream structures including grade control structures such as a step/pool and/or cross vane at points downstream from the current dam structures.
- Conduct education and outreach activities consisting of 1 project specific fact sheet, 3 public meetings, 2 press releases, 2 tours, 5 project specific newsletter articles, and the maintenance of 1 project specific webpage.

Environmental Results: Successful completion of this project will restore 4,750 linear feet of unimpeded natural flow conditions within the lower reaches of Baldwin Creek and will enhance in-stream habitat conditions and improve QHEI scores for the segment to attainment of WWH standards



Above--3 lowhead dam structures to be removed by this project.



FY 2011 Section 319(h) Nonpoint Source Project Summary

Project Number **Buck11-01**
Est. Project Completion December 31, 2014

SubGrantee **ODNR, Division of Parks and Recreation**
2045 Morse Road #C3
Columbus, Ohio 43229

Project Contact: **Scott Fletcher**
ODNR, Division of Parks and Recreation
2045 Morse Road #C3
Columbus, Ohio 43229-6693
614-265-7055
Scott.fletcher@dnr.state.oh.us

Federal Amount: **\$100,000**
Local Match: **\$ 67,000**

Project Title: **Stormwater Control for Nutrient Reduction at Buckeye Lake
in Fairfield County, Ohio**

Project Location: Fairfield County
Watershed: Buckeye Lake Watershed

Project Summary: \$100,000 in FY 2011 Section 319(h) Nonpoint Source grant funding is recommended to retrofit a boat launching area with a strip of pervious pavement and redirect stormwater run-off to a detention center. In addition, two rain gardens will be constructed to demonstrate the effectiveness of these structures to passively control stormwater run-off in urbanized areas. This project is part of a much larger effort to study the water quality of the lake and the tributaries and to raise public awareness about nutrient loading and measures that can be taken to stabilize and improve water quality.

Project Deliverables:

- Installation of 7,500 square feet of permeable pavement to allow storm water to be collected and channeled to a constructed wetland.
- Installation of two rain gardens as a demonstration of controlling storm water in urbanized areas.
- Conduct public education and outreach by developing fact sheets press releases, conducting a marina workshop, conducting tours and installing project signs/displays/informational kiosks.

Environmental Results: Successful completion of this project will help reduce nonpoint source pollutant loadings to Buckeye Lake. This demonstration project is a component of the Buckeye Lake Nutrient Reduction Project.

NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Phosphorus	TBD

