

# FFY2009 Project Summaries



## Expected Results

All Section 319(h) subgrants awarded under the FFY09 grant cycle have only recently gone to contract and most activity completed thus far includes project engineering, design and planning. Once the construction component of these projects begins in earnest we will provide detailed updates during the next reporting period. Meanwhile, on the following page, an interim report of progress to date is included. Upon successful completion of these projects, the following environmental results are anticipated:

- Protect more than 45 acres of riparian and wetland areas through the acquisition of conservation easements.
- Stabilize more than a mile of severely eroding stream banks.
- Repair/replace 16 home sewage treatment systems.
- Restoring more than 8,000 linear feet of impaired streams using natural channel design methods and enhanced in-stream habitat features.
- Restoring more than 8 acres of riparian wetland areas.
- Enhance 4,000 linear feet of riparian habitat using native plant materials.
- Installing more than 5 miles of livestock exclusion fencing in areas where livestock currently have unimpeded access to streams. Additionally, numerous other agricultural best management practices will be installed as a result of projects funded under this grant cycle.
- Installing 4 milk house wastewater treatment demonstration practices.
- Reduce Nonpoint Source Pollutant Loadings by:
  - Nitrogen – 31,898 pounds/year
  - Phosphorus – 19,116 pounds/year
  - Sediment - 12,056 tons/year

## Results to Date (8/31/10)

- Restored 600 linear feet of severely eroded streambank along State and National Scenic River.
- Repaired one home sewage treatment system.
- Acquired 124 acres of conservancy easements.
- Implemented 108 acres of grazing practices.
- Completed three grazing and pasture management plans.
- Completed one storm water protection plan and one archaeological survey.
- Implemented project plans and designs for five projects.
- Created project-specific website for one project



## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-07

**Project Completion** December 2011

**SubGrantee** **Cuyahoga County Board of Health**  
5550 Venture Drive  
Parma, OH 44130

**Project Contact:** **Erv Ball**  
Cuyahoga County Board of Health  
5550 Venture Drive  
Parma, OH 44130

**Grant Amount:** **\$329,208**

**Local Match:** **\$353,550**

**Project Title:** **Hudson High School/Tinker's Creek Stream Restoration Project**

**Project Location:** Cuyahoga County  
**Watershed:** Tinker's Creek-Cuyahoga River

**Project Summary:** \$329,208 in federal Section 319(h) Clean Water Act grant funding is awarded to the Cuyahoga County Board of Health to complete stream restoration on an unnamed tributary to Tinker's Creek. The project will result in the successful restoration of 2,000 linear feet of severely incised and unstable stream channel. The project will also result in the rehabilitation of 4,000 linear feet of streambank and the reconnection of this small headwater stream with its natural floodplain. Successful completion will reduce sedimentation from severely eroding stream banks and improve riparian and wetland functions while reducing downstream flooding potential.

The project site is located upstream by the Ohio Turnpike and will conclude at the northern boundary of the Hudson High School property. The project site will be protected in perpetuity as a result of a conservation easement that will be placed upon the 3 acre restoration project site. Upon successful completion of this project, the site will be used as a living land laboratory by the Hudson High School.

Although not specifically recommended in the Cuyahoga River Total Maximum Daily Load (TMDL) study that was completed by Ohio EPA approved by U.S. EPA in 2003, this project is being implemented consistent with the habitat improvement recommendations included in the TMDL.

## Project Deliverables:

- Restoration of 2,000 linear feet of an unnamed tributary to the Tinker's Creek using natural channel design and installation of in-stream habitat features such as riffles, runs, pools and a meandering morphology.
- Rehabilitation and enhancement of 4,000 linear feet of riparian habitat using native plant materials such as hardwood seedlings and shrubs. Total acreage to be enhanced will exceed 3 acres.
- Conduct a project-specific public education and outreach program including the installation of two project signs, completion of one media event and dedication ceremony upon successful project completion, two open houses and site tours, a project-specific DVD, a project webpage and production and distribution of a project brochure.

**Environmental Results:** Successful completion of this project is expected to restore an impaired tributary to Tinker's Creek and reduce sediment and nutrient loadings by the amounts listed below:

### NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	340 pounds/year
Phosphorus	170 pounds/year
Sediments	170 tons/year

## Progress to Date:

- Worked to develop contracts with project partners. Contracts should be finalized in April 2010. Once contracts are signed, Cuyahoga County Board of Health will issue the RFP to select a design/build team. Contracts finalized.
- Developed and published RFP May 2010. Selected design build team.



Project Site Before Implementation





## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-09  
**Project Completion** Grant Withdrawn at Sponsor's Request

**SubGrantee** City of Cuyahoga Falls  
2310 Second Street  
Cuyahoga Falls, OH 44221

**Project Contact:** Russ Kring  
City of Cuyahoga Falls  
2310 Second Street  
Cuyahoga Falls, OH 44221

**Grant Amount:** \$175,000  
**Local Match:** \$169,490

**Project Title:** Woodward & Kelsey Creek Restoration Projects  
**Project Location:** Summit County  
**Watershed:** Woodward & Kelsey Creeks-tributaries to the Middle Cuyahoga River

**Project Summary:** \$175,000 in federal Section 319(h) Clean Water Act grant funding is requested by the city of Cuyahoga Falls to hire a qualified contractor to two segments totaling 1,125 linear feet of Woodward and Kesley Creeks within the city. Both project sites are located within established residential areas with homes built with little regard to the streams in the 1950's and 1960's. Successful completion of these two projects will reduce or eliminate channel and bank erosion, decrease over bank flooding, reduce transport of sediment and other nonpoint source pollutants and restore vegetative buffers around both streams.

The Woodward Creek Restoration project will restore the hydraulic capacity and natural flow characteristics to the stream channel and improve riparian habitat conditions. The existing channel will be widened, the banks sloped back and existing meanders will be enhanced. A vegetative cover will be planted along the banks to provide shade and improved conditions for the stream communities. A total of 665 linear feet of Woodward Creek will be restored as a result of this project. The project site runs from West Steels Corners Road south to Blossom Glen subdivision just west of Board Drive in Cuyahoga Falls, Ohio. This project is scheduled for completion during 2009.

The Kelsey Creek Project will restore 460 linear feet of highly urbanized stream by returning the streambed to its original profile, widening the channel, increasing meanders and improving flow capacity. Following completion, the riparian areas will be revegetated to provide shade and improved near stream habitat. The project site runs between Northmoreland Blvd. and

Kennedy Park in Cuyahoga Falls, Ohio. This project is scheduled for completion by September 2011.

Although not specifically recommended in the Lower Cuyahoga River Total Maximum Daily Load (TMDL) study that was approved by U.S. EPA in 2003, these projects are consistent with the habitat improvement recommendations included in the TMDL.

**Project Deliverables:**

- Restoration of 665 linear feet of Woodward Creek, a tributary to the Middle Cuyahoga River within the city of Cuyahoga Falls. The existing stream channel will be widened, stream banks sloped back to reconnect the stream with its natural floodplain and existing meanders enhanced.
- Rehabilitation and restoration of 1,330 linear feet of riparian habitat using native plant materials to provide shade and habitat features.
- Restoration of 460 linear feet of Kelsey Creek, a tributary to the Middle Cuyahoga River. The existing stream channel will be widened, stream banks sloped back to reconnect the stream with its natural floodplain and existing meanders enhanced.
- Rehabilitation and restoration of 920 linear feet of riparian habitat along Kelsey Creek using native plant materials to provide shade and improve near stream habitat conditions.
- Development of educational and outreach materials distributed to area landowners encouraging proper fertilizer usage, landscaping practices and other methods for reducing nonpoint source pollutants.

**Environmental Results:** Successful completion of these projects is expected to improve natural stream function and flow and restore near-stream habitat conditions along 1,125 linear feet of Woodward and Kelsey Creeks. Additionally, the projects will reduce sediment and other nonpoint source pollutant loadings by the amounts listed below:

**NPS Load Reductions Resulting from Project**

<b>Pollutant</b>	<b>Estimated Loading Reduction</b>
Nitrogen	225 pounds/year
Phosphorus	175 pounds/year
Sediments	9 tons/year

**1 Woodward Creek**



**2 Kelsey Creek**





## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-10  
**Project Completion** GRANT CLOSED AT SPONSOR'S REQUEST

**SubGrantee** Washington County SWCD  
21330 State Route 676 East  
Marietta, OH 45750

**Project Contact:** Andy Bartlett  
Washington County SWCD  
21330 State Route 676 East  
Marietta, OH 45750

**Amount Requested:** \$138,790  
**Local Match:** \$ 92,645

**Project Title:** Wolf Creek Watershed 319 Project

**Project Location:** Washington County  
**Watershed:** Wolf Creek

**Project Summary:** \$138,790 in federal Section 319(h) Clean Water Act grant funding is awarded to the Washington County SWCD to implement a series of agricultural best management practices (BMPs). A total of 18,054 linear feet of stream will be protected using BMPs such as livestock exclusion fencing, alternative watering supplies, manure storage facility construction and other activities effective at preventing sediment and nutrients from leaving livestock operations. Installation of these BMPs is being done consistent with the action items identified within the state endorsed watershed action plan for Wolf Creek.

The South Branch of Wolf Creek in which these practices will be installed is currently in non-attainment of its designated Warmwater habitat aquatic life use with siltation and sediment identified as high magnitude causes of impairment. More than 10,000 linear feet of livestock exclusion fencing, 5 alternative watering supplies and 5 manure storage facilities will be installed as a result of this project. Additionally, Comprehensive Nutrient Management Plans (CNMP) will be completed for five livestock producers.

### Project Deliverables:

- Completion of a Quality Assurance Project Plan and water chemistry monitoring.
- Installation of 10,299 linear feet of livestock exclusion fencing at 5 farms where livestock currently have access to the stream.
- Installation of 5 alternative watering supplies.
- Design and construction of 5 manure storage structures and development of Comprehensive Nutrient Management Plans at 5 operations.

- Development of project-specific education and outreach materials that will be distributed to provide periodic project updates.

**Environmental Results:** Successful completion of this project will protect more than 18,000 linear feet of the South Branch of Wolf Creek. Additionally, the project will reduce sediment and other nonpoint source pollutant loadings by the amounts listed below:

**NPS Load Reductions Resulting from Project**

Pollutant	Estimated Loading Reduction
Nitrogen	21,930 pounds/year
Phosphorus	10,990 pounds/year
Sediments	9,090 tons/year

**Progress to Date:**

- Conducted eight soil tests.
- Producers have been contacted and are in communication with Morgan County Soil & Water Conservation District to develop comprehensive Nutrient Management Plans.

**NOTE:** Grant terminated at sponsor’s request. Practices proposed in the 319 grant agreement were completed under the NRCS Environmental Quality Incentive Program (EQIP). Funds will be reprogrammed by Ohio EPA pending approval by U.S. EPA Region 5.



**Two sites in the South where Best Management Practices will be installed.**



## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-11  
**Project Completion** June 2012  
**SubGrantee** **Brown County SWCD**  
706 South Main Street  
Georgetown, OH 45121

**Project Contact:** **Melody Dragoo**  
Brown County SWCD  
706 South Main Street  
Georgetown, OH 45121

**Amount Requested:** **\$299,507**  
**Local Match:** \$119,806

**Project Title:** **Sterling Run Subwatershed**  
**Project Location:** Brown County  
**Watershed:** Sterling Run-tributary to White Oak Creek

**Project Summary:** \$280,347 in federal Section 319(h) Clean Water Act grant funding is awarded to the Brown County Soil & Water Conservation District to implement a series of agricultural best management practices and to restore natural flow conditions in 2,500 linear feet of currently channelized headwaters. All project sites are located within the Sterling Run subwatershed, a tributary to White Oak Creek. All six Ohio EPA sampling stations in Sterling Run are in non-attainment of their designated aquatic life use with flow alteration, siltation, habitat alteration and nutrients identified as high magnitude causes of impairment.

The project consists of two distinct components. The first proposes to restore 2,500 linear feet of currently channelized and maintained headwater stream using alternative channel designs. The stream is currently used as an agricultural drainage ditch and maintained accordingly. The project proposes to restore natural flow conditions to the ditch using overwide, 2-stage or alternative ditch design practices combined with a restoration of 5 acres of riparian vegetation along the length of the restored stream segment.

The second component of this project will be the installation of a variety of agricultural best management practices such as the installation of 7,920 linear feet of livestock exclusion fencing, constructing 4 heavy use livestock feeding pads, 1,000 linear feet of livestock access lanes, and converting 200 acres of existing cropland to long term hay production in conjunction with pasture management planning on an additional 400 acres. Additionally, grass/legume rotations will be commended on 200 acres using cost-share practices.

Implementation of this project will complete 7 of the 12 identified goals in the state endorsed watershed action plan for the Sterling Run subwatershed.

## Project Deliverables:

- Restoration of 2,500 linear feet of channelized headwater tributary to Sterling Run using alternative restoration practices such as overwide, 2-stage channel or other practices.
- Rehabilitation and restoration of approximately 5 acres of natural vegetated filter strips along the entire restoration site(s) planted at least 80 feet wide on each side of the stream.
- Completion of one sediment transport study in association with the stream restoration project.
- Installation of 1.5 miles (7,290 linear feet) of livestock exclusion fencing.
- Installation of four heavy use livestock feeding pads and 1,000 linear feet livestock access lane. In addition, four grazing and pasture management plans will be completed.
- 200 acres of crop rotation with long-term hay land conversion.
- Using cost-share practices, implement grass/legume planting rotations on 200 acres of farmland within the Sterling Run subwatershed.
- Development of educational and outreach materials such as a water quality brochure, alternative drainage channel design booklet, project site tours, production and distribution of a Sterling Run newsletter, and others.

**Environmental Results:** Successful completion of these projects is expected to improve natural stream function and flow in 1.5 miles of channelized headwater tributary streams and improve agricultural practices throughout the Sterling Run subwatershed. Pollutant reductions that will result from successful completion of this project are listed below:

### NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	4,784 pounds/year
Phosphorus	6,138 pounds/year
Sediments	1,683 tons/year

## Progress to Date:

- Completed three grazing and pasture management plans.
- Implemented 107 acres of grazing practices.
- Site assessment report, engineering designs, contract documents and draft bidding proposals are complete for stream restoration project. Cost share agreement is waiting for signature of landowner. Landowner is reluctant to proceed with project so construction will not take place this fall and may not happen at all. Brown SWCD will reevaluate situation and make a decision on how to proceed by December 2010. Project has been cancelled.
- Executed three cost-share agreements with landowners. Work is currently underway on 10,500 feet of heavy use pads, 1,920 feet of access road and 1,850 feet of exclusion fencing.
- No crop rotation has been implemented may need to revise that practice.
- Developed one newsletter.

- Installed 5 heavy use pads and 1,375 linear feet of livestock access lanes.





## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-12

**Project Completion** April 2012

**SubGrantee** Mercer County SWCD

220 W. Livingston Street, Suite 1  
Celina, OH 45822

**Project Contact:** Laura Walker

Mercer County SWCD  
220 W. Livingston Street, Suite 1  
Celina, OH 45822

**Amount Requested:** \$191,650

**Local Match:** \$127,767

**Project Title:** Practices for Water Quality in HUC 0512010010-020

**Project Location:** Mercer County

**Watershed:** Grand Lake Saint Marys

**Project Summary:** \$191,650 in federal section 319(h) Clean Water Act grant funding is awarded to the Mercer County Soil & Water Conservation District to implement a series of agricultural best management practices in the Grand Lake Saint Marys (GLSM) watershed in northwestern Ohio. The GLSM watershed where this project will be completed has approximately 5000 residences using home sewage treatment systems (HSTS). Those targeted by this grant include: 39% of HSTS systems (appx. 2000) that were installed prior to 1973, and no records exist on their designs; and systems older than 10 years which have not been inspected or maintained and/or those tied into sub-surface drainage system and discharge to waters of the State. Dairy milk house parlor discharges (which are sometimes very similar in nature to discharging HSTS systems) are also targeted in this grant. Field tiles control structure are also known to carry nutrients and bacteria to waters of the State. Most crop acreage in the GLSM watershed is underlain with subsurface drainage tile. Tile control structures are an agricultural best management practice that can benefit water quality by reducing runoff quantity and likewise, load of nutrients. Load reductions for nitrogen and phosphorus are identified as critical to improving water quality conditions in the project subwatershed.

Successful completion of this project will result in the installation of five (5) milk house wastewater treatment systems, eighteen (18) and two (2) home sewage treatment system replacements and repairs respectively, and ten (10) tile control structures.

In addition, the Mercer SWCD will conduct project specific education and outreach activities such as distributing a quarterly newsletter to all 4,800 households in the region, 2850 personal letters to all watershed stakeholders, HSTS education and maintenance brochures sent to homeowners, and an open-to-the public tour of centralized wastewater treatment plant.

Implementation of this project is consistent with recommendations included in the TMDL Study for the Wabash River completed and approved by US EPA in 2004.

### Project Deliverables:

- Installation of five (5) milk house wastewater treatment systems
- Replacement of fourteen (14) home sewage treatment systems
- Repair of two (2) home sewage treatment systems
- Installation of tile drainage control structures
- Development of educational and outreach materials such as development of press releases, site tours, production and distribution of letters to homeowners, a quarterly newsletter, and other activities designed to increase public awareness and understanding of the project.

**Environmental Results:** Successful completion of this project is expected to improve agricultural practices throughout this subwatershed to the Wabash River as well as reduce nonpoint source pollution loadings to the watershed by the amounts listed below:

#### NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	1,585 pounds/year
Phosphorus	736.6 pounds/year
Sediments	N/A

### Progress to Date:

- Replaced three home sewage treatment systems.
- Repaired three home sewage treatment systems.
- Developed and distributed one newsletter, one brochure and one press release.
- Installed two (2) milkhouse wastewater treatment systems.





## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-13  
**Project Completion** Grant Terminated at Sponsor's Request

**SubGrantee** City of Marysville  
125 East Sixth Street  
Marysville, OH 43040

**Project Contact:** Jillian Froment  
City of Marysville  
125 East Sixth Street  
Marysville, OH 43040  
937-645-1050

**Amount Requested:** \$400,000  
**Local Match:** \$214,956

**Project Title:** Marysville Town Run Restoration Project

**Project Location:** Union County  
**Watershed:** Mill Creek-tributary to the Scioto River

**Project Summary:** \$322,434 in federal Section 319(h) Clean Water Act grant funding is awarded to the city of Marysville to restore 340 linear feet of Town Run. The existing stream has been channelized and straightened and its banks have been hardened with patches of concrete, asphalt, discarded concrete, bricks and rubble. There is no in-stream or riparian habitat of value. Natural channel design techniques will be employed to attain restoration goals of a QHEI of at least 60, which is the minimum needed to attain Warmwater habitat (WWH) biocriteria. Current QHEI scores in the area are no higher than 46 and the segment is in non-attainment of its designated WWH aquatic life use.

The conceptual design and plans that have been completed will restore the stream and riparian corridor using natural channel design and bio-engineering methods. Natural features that will be restored include meanders, riffles and pools and restored riparian conditions using native plant species. Project-specific education and outreach will also be conducted to inform residents of the city about the project.

Implementation of this project is generally consistent with recommendations included in the endorsed watershed action plan for Mill Creek (including Town Run). Implementation of this project is also consistent with the specific habitat recommendations in the completed Mill Creek TMDL that was approved by U.S. EPA in September, 2003.

## Project Deliverables:

- Completion of all necessary site assessment, project engineering, permitting and construction documents.
- Restoration of approximately 340 linear feet of Town Run utilizing natural channel design and bio-engineering methods, including the establishment of riffles, pools and meanders, and streambank stabilization methods such as vegetation reinforce soil slope construction.
- Restoration of 680 linear feet of stream banks, including the planting of native plants species of shrubs and trees. The total acreage of riparian area to be restored will exceed 4 acres.
- Development of educational and outreach materials such as the installation of project signage and an educational kiosk at the project site, project site tours, production and distribution of a quarterly newsletter, and other activities designed to increase public awareness and understanding of the project.

**Environmental Results:** Successful completion of this project is expected to restore 340 linear feet of Town Run, a tributary to Mill Creek in Union County, Ohio. In addition, this project will result in the reduction of nonpoint source pollution loadings to the watershed by the amounts listed below:

### NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	12 pounds/year
Phosphorus	5 pounds/year
Sediments	5 tons/year

## Progress to Date:

- City of Marysville plans to begin implementing 319 grant activities in the second quarter of 2010.





## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-14  
**Project Completion** September 2011

**SubGrantee** **The Metro Parks Serving Summit County**  
975 Treaty Road  
Akron, OH 44313

**Project Contact:** **Michael Johnson**  
The Metro Parks Serving Summit County  
975 Treaty Road  
Akron, OH 44313  
(330) 865-8057

**Amount Requested:** **\$400,000**  
**Local Match:** \$201,750

**Project Title:** **Furnace Run Restoration & Conservation Project**

**Project Location:** Summit County

**Watershed:** Furnace Run—headwater tributary to the Middle Cuyahoga River

**Project Summary:** \$249,984 in federal Section 319(h) Clean Water Act grant funding is awarded to the Metro Parks Serving Summit County to restore degraded sections of Furnace Run within Furnace Run Metro Park. Furnace Run is a headwater tributary to the Cuyahoga River in northwest Summit County. This project will use ecologically sound restoration practices to stabilize eroding portions and improve the hydraulic and ecological integrity of the stream. Successful completion of this project will result in the natural channel design restoration of approximately 1,500 linear feet of the Furnace Run mainstem. Restored segments completed under this project will be placed under a 5 acre conservation easement and protected in perpetuity.

Throughout the project areas, there are indicators of rapid and significant bank erosion, changing depositional patterns of bed material and alterations in the channel shape and location. In addition to added nonpoint source pollution created by this severe erosion, the resulting high flow velocities and loss of stream equilibrium have also impacted stream biology. As a result, the primary design practices that will be incorporated into this project will be to stabilize the channel integrity by installing grade control using installed riffle complexes and reconnecting the channel with the stream's natural floodplains. In addition to riffle grade controls and floodplain reconnection, the design will also incorporate bioengineered bank stabilization methods and practices. The need for riparian plantings will be minimized due to the existing high quality riparian habitat that is present.

Although not specifically recommended in the Middle Cuyahoga River Total Maximum Daily Load (TMDL) study that was approved by U.S. EPA in 2000, the proposed restoration project is consistent with habitat improvement recommendations included in the TMDL.

**Project Deliverables:**

- Completion of all pre-construction stream assessments, final engineering design and all required permitting documents.
- Pre and post project monitoring will be conducted at no expense to the grant or matching funds by the selected contractor.
- Restoration of approximately 1,500 linear feet of Furnace Run using natural channel design methods and bioengineering practices to stabilize eroding stream banks. The project will include the installation of grade controls, riffle/run complexes, improved sinuosity and reconnection of the stream to its natural floodplain.
- Permanent protection of the 5 acre project site by the acquisition of a conservation easement.
- Development of project-specific education and outreach materials that will be distributed to provide periodic project updates.

**Progress To Date:**

- Conducted pre-project tour to describe project.
- Initiated project planning and design.
- Completed draft construction drawings for Site #3.
- Completed storm water pollution prevention plan for Site #3.
- Completed phase I Archaeological Survey for entire project area.
- Completed Hec-Ras hydrology modeling. Anticipate final plans for Site #1 to be available in February.

**Environmental Results:** Successful completion of these projects will restore natural stream channels, stable stream banks and improved habitat conditions along approximately 1,500 linear feet of Furnace Run, a headwater tributary to the Middle Cuyahoga River. Additionally, the project will reduce sediment and other nonpoint source pollutant loadings by the amounts listed below:

**NPS Load Reductions Resulting from Project**

Pollutant	Estimated Loading Reduction
Nitrogen	472 pounds/year
Phosphorus	402 pounds/year
Sediments	804 tons/year

Proposed restoration project site within Furnace Run





## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-15

**Project Completion** December 2011

**SubGrantee** **Mill Creek Watershed Council of Governments**  
One North Commerce Park Dr. Suite 124  
Cincinnati, OH 45215

**Project Contact:** **Dianthe Decker**  
Mill Creek Watershed Council of Governments  
720 East Pete Rose Way  
Cincinnati, OH 45202  
(513) 619-7667

**Amount Requested:** **\$378,420**

**Local Match:** \$211,613

**Project Title:** **Mill Creek Confluence Wetlands Restoration and NPS Educational Project**

**Project Location:** Hamilton County  
**Watershed:** Mill Creek/East Fork/Beaver Run

**Project Summary:** \$317,420 in federal Section 319(h) Clean Water Act grant funding is awarded to the Mill Creek Watershed Council of Governments to conduct wetland restoration and extensive nonpoint source educational and outreach activities. A total of 8.3 acres of wetlands in the vicinity of the confluence of Mill Creek, East Fork and Beaver Run will be completed in association with a concurrent stream restoration project funded by another program. The project will restore 8.3 acres of wetlands, 834 linear feet of stream channel and 3 acres of riparian areas. Restored wetland areas will be replanted with a variety of native wetland plant species, resulting in a variety of wetland habitat conditions. Stream restoration activities will involve natural channel design methods and restore functionality and natural stream flow to this highly modified area of Mill Creek.

Throughout the grant period, the Mill Creek Watershed Council of Governments will conduct extensive nonpoint source pollution education and outreach activities, including conducting public tours, site visits and field trips with local schools, in-school presentations and install five educational and interpretive signs in and around the project sites. Implementation of this project is consistent with habitat improvement recommendations in the Mill Creek Total Maximum Daily Load (TMDL) study that was approved by U.S. EPA in 2005.

### **Project Deliverables:**

- Restoration of 834 linear feet of stream channel in the Mill Creek, East Fork and Beaver Run confluence area using natural channel design methods. Restoration shall include

the installation of j-hooks, cross vanes and other practices to stabilize the stream channel and adjacent riparian areas.

- Restoration and enhancement of 8.3 acres of riparian wetland areas, including the replanting with native wetland species.
- Acquisition of conservation easements on 8.3 acres of restored riparian wetlands thereby permanently protecting restoration site in perpetuity.
- Conduct an extensive project and nonpoint source specific public education and outreach program including the installation of project and interpretive signage at the project sites, conducting of public and school tours of restoration sites, development of a high quality four-color brochure highlighting the projects and conducting school presentations and soils and water chemistry sampling training.

**Progress to Date:**

- Acquired 25.7 acres of conservation easements.
- Executed project design contract.
- Conducted 2 public meetings, 1 tour and 3 powerpoint presentations.
- Developed 1 project fact sheet.
- Recorded environmental covenant December 2010.
- Anticipate project construction early 2011.

**Environmental Results:** Successful completion of this project is expected to enhance and restore 8.3 acres of high quality wetlands in the Mill Creek watershed and to restore and stabilize more than 834 linear feet of stream channel and riparian areas. Additionally, the project will reduce sediment and nutrient loadings by the amounts listed below.

**NPS Load Reductions Resulting from Project**

<b>Pollutant</b>	<b>Estimated Loading Reduction</b>
Nitrogen	1,280 pounds/year
Phosphorus	581 pounds/year
Sediments	454 tons/year



## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-16

**Project Completion** June 2012

**SubGrantee** **City of Xenia**  
101 North Detroit Street, 1<sup>st</sup> Floor  
Xenia, OH 45385

**Project Contact:** **Jason Tincu**  
City of Xenia  
101 North Detroit Street, 1<sup>st</sup> Floor  
Xenia, OH 45385  
(937) 376-7271

**Amount Awarded:** **\$341,700**

**Local Match:** **\$247,000**

**Grant Reduced:**

**Federal:** **\$238,500**

**Local Match:** **\$174,272**

**Project Title:** **Little Miami River Restoration & Shawnee Creek Preservation**

**Project Location:** Greene County  
**Watershed:** Little Miami River

**Project Summary:** \$238,500 in federal Section 319(h) Clean Water Act grant funding is awarded to the city of Xenia to conduct stream restoration and riparian restoration activities on the Little Miami River in the vicinity of Ford Road, northwest of the city of Xenia. The project will include restoration of 600 linear feet of stream channel, restoration of 1.7 acres of riparian buffer and preservation of approximately 30 acres of wooded riparian areas along the mainstem of the Little Miami River and 93 acres along Shawnee Creek.

Streambank stabilization and restoration will include the installation of brush layering and other bioengineering techniques, including the treatment of invasive species and replanting 1.7 acres of riparian area with native tree and shrub species. The objective of the project is to preserve riparian habitat, reduce severe bank erosion in the project area, and reduce sediment loadings to the Little Miami River. The Little Miami River is currently designated Exceptional Warmwater Habitat (EWH) and according to Ohio EPA is only marginally meeting its designated aquatic life use in the project vicinity. The project is being implemented consistent with recommendations in the approved Little Miami Total Maximum Daily Load (TMDL) study.

Due to a reduction in available project match, grant funding and scope of project was reduced.

### **Project Deliverables:**

- Restoration of 600 linear feet of stream channel in the Little Miami River using natural channel techniques. Restoration shall include bioengineering bank stabilization techniques only.
- Stabilization and restoration of 600 linear feet of severely eroding streambank along the Little Miami State and National Scenic River. Riparian restoration and streambank stabilization will employ regrading and recontouring and bioengineering methods such as branch layering and other techniques.
- Rehabilitation and enhancement of a 100-foot wide riparian buffer by planting with native species of trees, shrubs and herbaceous plantings; 1.7 acres of riparian corridor will also be completely restored.
- Acquisition of conservation easements on 115 acres of land on the Little Miami River and Shawnee Creek.
- Conduct a project-specific public education and outreach program including the creation and maintenance of a project-specific website, conducting public meetings and publishing project-specific articles in two local newsletters.

**Environmental Results:** Successful completion of this project is expected to stabilize and restore severely eroding streambank areas and in-stream channel habitat in the Little Miami State and National Scenic River and Shawnee Creek. Additionally, the project will reduce sediment and nutrient loadings by the amounts listed below.

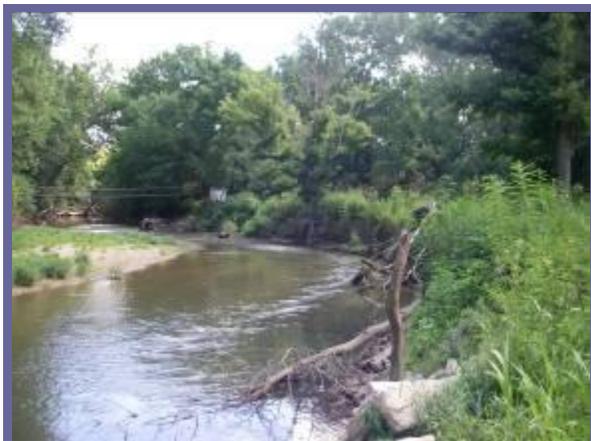
### **Progress to Date:**

- Executed engineering contract on October 8, 2009.
- Executed construction contract on January 20, 2010.
- Issued notice to proceed with stream restoration February 2010.
- Completed hydrological and hydraulic modeling.
- Prepared floodplain permit application in November 2009.
- Flood Hazard Area Development permit was approved by the Greene County Department of Building Regulation on December 23, 2009.
- Website for the project was established on October 5, 2009 and updated in January and April 2010 (<http://www.ci.xenia.oh.us/index.php?page=grant-funded-watershed-restoration-projects>).
- Published one newsletter.
- Restored 600 linear feet of stream channel in the Little Miami River using natural channel techniques. Restoration included bioengineering bank stabilization techniques only.
- Stabilized and restored 600 linear feet of severely eroding streambank along the Little Miami State and National Scenic River. Streambank restoration work reached substantial completion December 2010 and included: installation of Type A rock toe protection, grading of banks to a 3:1 slope, installation of geotextile fabric, placement of soil backfill, installation of cellular confinement system, installation of brush layering, invasive species control and riparian tree plantings and seeding.
- Planted 1.7 acres of riparian area with native tree and shrub species.
- Completed appraisal report for the conservation easement areas in July 2009.

- Acquired conservation easements on 115 acres of land on the Little Miami River and Shawnee Creek.
- Substantial project completion reached December 14, 2010. Final project monitoring will be conducted in Spring 2011 to ensure the project meets the desired objectives. Any necessary corrective actions will be implemented in spring prior to project closeout.

### NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	2,550 pounds/year
Phosphorus	500 pounds/year
Sediments	300 tons/year



Severe streambank erosion as seen at the project site is contributing to high sediment and nutrient loadings in the Little Miami State and National Scenic River. Stream restoration and streambank stabilization activities will be completed by the city of Xenia as a result of this Section 319 grant funded project.



## NEW! Current Project Photos (September-October 2010)



*Clockwise from top left: (1) Pre-construction (March 2010) view of area upstream of the outfall to be stabilized; (2) current view (September 2010) of area upstream of outfall, including rock foundation, fill and Cellular Confinement System (CCS) installation in progress; (3) installation of the base layer of the CCS; the outer cells are filled with topsoil and planted with native vegetation to improve stream bank habitat; (4) final installed view of CCS; a brush layer will be planted on top of the CCS to provide additional vegetation and bank stability; (5) view of riparian area immediately following invasive species control; (6) native tree plantings.*



## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-17

**Project Completion** September 2010

**SubGrantee** Village of New Albany  
99 West Main Street  
New Albany, OH 43054

**Project Contact:** William Dorman  
Village of New Albany  
99 West Main Street  
New Albany, OH 43054

**Amount Requested:** \$101,742

**Local Match:** \$ 67,828

**Project Title:** Village of New Albany Stream Restoration Project

**Project Location:** Franklin County

**Watershed:** Rose Run

**Project Summary:** \$101,742 in federal Section 319(h) Clean Water Act grant funding is awarded to the Village of New Albany to restore two unnamed tributaries within the Rose Run and Rocky Fork Creek watersheds. Natural channel design restoration methods will be used along 340 linear feet and include the removal of more than 130 linear feet of box culverts, enhancement of riparian habitat conditions and the construction of riffles and runs to improve in-stream aquatic habitat conditions. Completion of these restoration projects is consistent with habitat improvements identified as needed within the Rocky Fork Creek watershed action plan which is nearing completion but not yet endorsed.

Both streams have been severely modified for many years. The first project site is on a direct ephemeral tributary to Rose Run draining more than 100 acres with a 100 year base flood discharge of 180 cfs. The stream is impaired by the upstream box culvert and disconnected floodplain. The culvert will be removed and the restored stream reconnected to its natural floodplain. The second stream is also a highly modified waterway that drains more than 1 square mile and has a 100 year flood discharge of 431 cfs. This stream was previously enclosed in a three sided box culvert which was removed by the village in 2008 using local funding. Grant funds for the second stream are requested to complete restoration activities that are needed following the village's removal of the box culvert in 2008.

In addition to restoration activities, the village will conduct project-specific education and outreach activities including the installation of project construction signage and periodic updates in the Village of New Albany's "Storm Water News" newsletter.

**Project Deliverables:**

- Completion of engineered project designs and plans for each restoration project site.
- Restoration of 340 linear feet of two unnamed tributary streams within the village of New Albany. Such activities will include the removal at least 130 linear feet of box culvert, and the installation of riffles, runs and other habitat structures.
- Restoration of 0.5 acre of riparian habitat.
- Development of project-specific education and outreach materials including project signs identifying funding partners etc. and periodic project updates in the village's "Storm Water News" newsletter that is distributed to village residents.

**Environmental Results:** Successful completion of this project will restore at least 340 linear feet of unnamed tributaries to Rose Run within the village of New Albany. As a result the project will reduce sediment and other nonpoint source pollutant loadings as well as make considerable improvement to in-stream habitat conditions.



## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h) EPA-18  
**Project Completion** September 2010

**SubGrantee** ODNR-Division of Parks & Recreation  
2045 Morse Road, Bldg C-3  
Columbus, OH 43229-6693

**Project Contact:** **Scott Fletcher**  
Field Support Group-Ohio State Parks  
2045 Morse Road, Bldg C-3  
Columbus, OH 43229-6693

**Amount Recommended:** \$250,000  
**Local Match:** \$250,000

**Project Title:** **Alum Treatment Demonstration and Strategic Dredging Project for Grand Lake St. Marys in Mercer County**

**Project Location:** Mercer County  
**Watershed:** Grand Lake St. Marys Watershed

**Project Summary:** \$250,000 in federal section 319(h) Clean Water Act grant funding is recommended for the Division of Parks & Recreation (Ohio State Parks) to conduct two demonstration projects involving the application of aluminum sulphate in selected areas of Grand Lake St. Marys (GLSM) to test the effectiveness of inactivating internal loadings of phosphorus in the lake. GLSM is home to Grand Lake St. Marys State Park and has experienced significant harmful algae blooms of cyanobacteria during each of the past two summers. Internal loadings of phosphorus are 250µg/L and are the result of excessive nutrients running off of agricultural fields within the watershed. These alum demonstration projects will be conducted in two areas of GLSM, each approximately 20-40 acres in size. Project area #1 will demonstrate the effectiveness of just alum dosing while the second project area (#2) will demonstrate the effectiveness of pre-treating the area with hydrogen peroxide prior to applying the alum. Extensive baseline and post-project monitoring will be conducted to evaluate the success of the projects. Data collected during this project will be critical in determining whether a whole lake alum treatment may provide benefits in reducing harmful algal blooms.

In conjunction with these two demonstration projects, the Ohio State Parks dredge crews will conduct sediment removal activities (suction dredging), at strategic locations around the mouths of the six main tributary streams leading into GLSM. Sediment loadings to tributary streams are high and when they empty into the lake, there is a resultant deposition of nutrient laden sediments at their mouths. Removal of these sediments will assist in reducing the internal

loads of phosphorus that are believed to be “feeding” blue-green algal blooms. This activity will be conducted to meet the local match requirements for the project and no grant funds will be used for dredging activities.

Alum demonstration and strategic sediment removal activities will be supported with public outreach, education and awareness activities carefully coordinated between the Ohio Department of Natural Resources and the Ohio Environmental Protection Agency. Activities will include the preparation and distribution of press releases, project-specific fact sheets, public meetings, project signage and other activities as appropriate. Public outreach activities will also be coordinated with local entities such as local governments, the GLSM state park staff, Lake Improvement Association, the local watershed coordinator and others.

The alum demonstration projects and strategic sediment removal activities are being implemented consistent with Ohio’s Nonpoint Source Management Plan and also are consistent with recommendations included in both the Grand Lake St. Marys/Wabash watershed action plan as well as the approved Grand Lake St. Marys/Beaver Creek Total Maximum Daily Load Study (TMDL).

### **Project Deliverables:**

- Work with Tetrattech under contract with US EPA to craft a scope of services for the alum demonstration projects. Develop project plans, designs and complete all necessary permitting documents.
- Conduct pre-treatment of alum demonstration site with hydrogen peroxide to determine extended alum benefits that pre-treatment may provide.
- Conduct demonstration of alum treatment in a selected demonstration sites on GLSM.
- Install approximately 1,000 linear feet of embayment isolation berms in conjunction with alum dosing demonstration project.
- Complete strategic sediment removal at the mouths of tributaries leading into GLSM.
- Develop project specific education and outreach materials including 2 project signs, 1 fact sheet, 6 press releases and conducting 2 public meetings to inform the communities around the lake and the general public about the benefits of the proposed project activities.

**Environmental Results:** Successful completion of this project will result in the reduction/inactivation of approximately 90% of internal phosphorus loads within the two alum treatment demonstration areas. Additionally, strategic sediment removal will result in the removal of nutrient laden sediments, resulting in substantial load reductions in nitrogen, phosphorus and sediments. NPS pollutant load reductions will be quantified as part of the monitoring and evaluation components of this project.



## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h)EPA-19

**Est. Project Completion** June 2011

**SubGrantee** **City of Reynoldsburg**  
7232 East Main Street  
Reynoldsburg, OH 43068

**Project Contact:** **Trica Moore**  
Coordinator of Community Outreach  
Reynoldsburg City Schools  
614-501-5793  
tmoore@reyn.org

**Federal Amount:** \$137,010

**Local Match:** \$103,325

**Project Title:** **Alexander W. Livingston Wetland & Riparian Corridor Restoration**

**Project Location:** Franklin County

**Watershed:** Blacklick Creek

**Project Summary:** \$137,010 in FY 2009 Section 319(h) Nonpoint Source grant funding is requested to: restore and expand a wetland; install new and enhance existing wetlands in the riparian corridor along an unnamed tributary of Blacklick Creek; expand the width of riparian corridor through tree planting; and protect the restoration effort through the acquisition of a conservation easement. In addition, the reestablished wetland will be part of a larger ecological laboratory (Eco-Lab) on the shared campus of one of the state's 10 platform STEM (Science, Technology, Engineering and Mathematic) schools and an elementary STEM magnet school, both part of the Reynoldsburg City School District. This project is being implemented consistent with the recommendations in the Blacklick Creek Watershed Action Plan, which is pending full state endorsement and is also consistent with recommendations within the Alum Creek Total Maximum Daily Load study completed by Ohio EPA and approved by U.S. EPA in 2005.

**Project Deliverables:**

- Reconstruct and rehabilitate 2 acres of wetland
- Planting of 2 acres of wetland species
- Installation of one (1) water control device.
- Removal of 0.5 acres of invasive plant species
- Planting tree, shrubs and/or live stakes in 3 acres of riparian area.
- Acquire a conservation easement on 3 acres of wetland and riparian areas
- Public outreach including two (2) public meetings, three (3) press releases, a website link, signage, display and kiosk. Development of a fact sheet, annual clean-ups, two (2) workshops. Ten tours/field days will also be conducted.

**Environmental Results:** Successful completion of this project will reduce nonpoint source pollutant loadings to the unnamed tributary of Blacklick Creek, and Blacklick Creek by installing/rehabilitating functional wetlands to assimilate pollutants in runoff. The project also provides students who will be focusing a portion of their studies on these wetlands, real world ecological science experience. Additionally, citizenry who visit will have opportunity to learn the value wetlands have in protecting water quality.

**NPS Load Reductions Resulting from Project**

<b>Pollutant</b>	<b>Estimated Loading Reduction</b>
Nitrogen	685 pounds/year
Phosphorus	349 pounds/year
Sediments	207 tons/year



## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h)EPA-20  
**Est. Project Completion** May 2013

**SubGrantee** **University of Toledo**  
2801 West Bancroft  
Toledo, Ohio 43606

**Project Contact:** **Patrick Lawrence**  
University of Toledo  
2801 West Bancroft  
Toledo, Ohio 43606  
419-530-4128  
patrick.lawrence@utoledo.edu

**Requested Federal Amount:** \$240,724  
**Match Amount:** \$ 71,715  
**Additional Match Needed:** \$ 88,767

**Project Title:** **Multifaceted Urban Stream Restoration Project for the Ottawa River at the University of Toledo**

**Project Location:** Lucas County  
**Watershed:** Ottawa River/Ten Mile Creek

**Project Summary:** \$240,724 in FY 2009 Section 319(h) grant funding is recommended to allow the University of Toledo to partner with the Toledo Metropolitan Area Council of Governments to restore 900 linear feet of impaired waters of the Ottawa River and address habitat and hydromodification impacts on the main campus of the University of Toledo. Stream restoration will incorporate natural channel design including grade work in areas adjacent to stream structures to restore a more natural stream channel and functional floodplain. The project will also install habitat and flow control features such as riffles, bend-way weirs, low flow concentrators and hydrologic cover stones. Bank shape and stability will be addressed using bioengineering techniques at this highly visible site. Streambank restoration and stabilization work will include planting native grasses, shrubs and trees and will include live stacking, establishing vegetated terraces (where possible), and protecting and enhancing storm water discharge points and placement of vegetated filter strips (where appropriate).

This project is being implemented consistent with the recommendations in the partially-endorsed Ottawa River/Ten Mile Creek Watershed Action Plan.

**Project Deliverables:**

- Restoration of 900 linear feet of stream channel using natural channel and bioengineering methods and techniques. Restoration will include the installation of 4 erosion and sediment control structures, 4 in-stream habitat structures, and 2 grade structures.
- Restoration of 400 linear feet of streambank by recontouring/regrading and installation of bio-engineering practices such as live-stacking and others where appropriate and planting native grasses, trees, shrubs and/or live stakes in riparian areas.
- The project will be supported with project-specific education and outreach activities including developing/distributing fact sheets and press releases, developing/installing displays, informational kiosks and project signs, conducting/hosting tours, stream clean-up days, field days and workshops, and creating/maintaining a project-specific web page.

**Environmental Results:** Successful completion of this project will result in the restoration of 900 linear feet of impaired stream and will address habitat/hydromodification impairments on the Ottawa River. Additionally, the project will result in the pollutant load reductions listed below:

**NPS Load Reductions Resulting from Project**

Pollutant	Estimated Loading Reduction
Sediments	80 tons/year





## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number**                    **09(h)EPA-21**  
**Est. Project Completion**    May 2013

**SubGrantee**                        **Olander Park System**  
6930 Sylvania Avenue  
Sylvania, Ohio 43606

**Project Contact:**                **Erika Buri**  
Olander Park System  
6930 Sylvania Avenue  
Sylvania, Ohio 43606  
419-882-8313  
eburi@olanderpark.com

**Federal Amount:**                **\$185,112**  
**Local Match:**                    **\$ 46,602**

**Project Title:**                    **Restoring Tributaries of Ten Mile Creek in Maumee AOC**  
**Project Location:**                Lucas County  
**Watershed:**                        Ten Mile Creek

**Project Summary:** \$185,112 in FY 2011 Section 319(h) Nonpoint Source grant funding is requested to restore 1,200 feet of Palmer Ditch and 2,400 feet of Kimball Ditch. Restoring the 1,200-foot segment of Palmer Ditch with an overwide or self-forming channel and planting wetland and riparian vegetation will restore 40% of Ten Mile Creek stream, riparian areas and floodways. Restoring the 2,400-foot segment of Kimball Ditch with an overwide or self-forming channel will restore 35% of its stream length with riparian areas and floodways. After the construction and restoration of the overwide change and riparian zone is complete, monitoring and native planting will continue. This project is being implemented consistent with the recommendations in the federally-endorsed Maumee Remedial Action Plan (RAP)

### **Project Deliverables:**

- Restore 1,200 linear feet of floodplain and stream channel in Palmer Ditch with construction of 2-stage channel.
- Restore streambank by recontouring and regrading 1,200 linear feet in Palmer Ditch.
- Remove/treat 2.2 acres of invasive species and plant native grasses in riparian area of Palmer Ditch.

- Plant 1.1 acres of trees, shrubs and/or live stakes in riparian area of Palmer Ditch.
- Restore 2,400 linear feet of floodplain and stream channel in Kimball Ditch with construction of 2-stage channel.
- Restore streambank by recontouring and regrading 2,400 linear feet in Kimball Ditch.
- Remove/treat 4.4 acres of invasive species and plant native grasses in riparian area of Kimball Ditch.
- Plant 2.2 acres of trees, shrubs and/or live stakes in riparian area of Kimball Ditch.
- Conduct public education and outreach by holding one public meeting, developing three press releases, creating/maintaining one website, installing four project signs, developing one display, conducting three tours, conducting two stream clean-ups, conducting one field day, conducting one workshop, developing two newsletters and two public educational programs.

**Environmental Results:** Successful completion of this project will reduce nonpoint source pollutant loadings to Ten Mile Creek and restore Palmer and Kimball Ditches to facilitate more natural flow and floodplain access.

**NPS Load Reductions Resulting from Project**

Pollutant	Estimated Loading Reduction
Nitrogen	300 pounds/year
Phosphorus	125 pounds/year
Sediments	53 tons/year



Kimball Ditch – traditional trapezoidal ditch at near capacity



## FFY09 Section 319(h) Nonpoint Source Project Summary

**Project Number** #09(h)EPA-22

**Est. Project Completion** October 2011

**SubGrantee** **Mill Creek MetroParks**  
7574 Columbiana-Canfield Road  
Canfield, Ohio 44406-0596

**Project Contact:** **Justin Rogers**  
Mill Creek MetroParks  
7574 Columbiana-Canfield Road  
Canfield, Ohio 44406-0596  
330-702-3000  
justin@millcreekmetroparks.org

**Federal Amount:** \$76,880

**Local Match:** \$13,251

**Additional Match Needs:** \$38,002

**Project Title:** **Newport Wetlands Storm Water Management System**

**Project Location:** Mahoning County

**Watershed:** Mill Creek

**Project Summary:** \$76,880 in FY 2011 Section 319(h) Nonpoint Source grant funding is recommended to assist the Mill Creek Metroparks with installing a storm water demonstration project at the Newport Wetlands in Mill Creek Park. This demonstration project includes installation of more than 8,000 square feet of permeable pavement in parking areas that will reduce the rate and amount of stormwater runoff to Mill Creek. The project also includes the establishment of 0.30 acres of vegetated infiltration area between the parking lot and Mill Creek to further reduce stream pollutant loading resulting from rain and thaw related parking lot runoff. The project will be supported by project-specific education and outreach activities including the installation of project signs, newsletter articles, a website and press releases. This project is being implemented consistent with the recommendations in the Mill Creek Watershed Action Plan which was endorsed by the state in 2007.

### **Project Deliverables:**

- Site preparation, grading and installation of 8,368 square feet of permeable pavement.
- Installation of 13,187 square feet of vegetated infiltration area.

- Outreach to citizenry through the installation of 2 signs at the project site, development of news letter article, development and posting of a website link, and issuance of three (3) press releases.

**Environmental Results:** Successful completion of this project will reduce nonpoint source pollutant loadings to Mill Creek and Newport Wetlands, and additionally will provide hydraulic buffering capacity to reduce stream bank erosion often caused by the flashy nature of urban runoff.

**NPS Load Reductions Resulting from Project**

Pollutant	Estimated Loading Reduction
Nitrogen	2 lbs/year
Sediment	240 lbs/year



**Picture demonstrates proximity of Mill Creek to §319 Newport Wetlands project site.**



## FFY09 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #09(h)EPA-23  
**Est. Project Completion** December 31, 2012

**SubGrantee** **Ohio Department of Natural Resources**  
Division of Parks and Recreation  
2045 Morse Road, C-3  
Columbus, Ohio 43229-6693

**Project Contact:** **Scott Fletcher, Field Support Group**  
Ohio Department of Natural Resources  
2045 Morse Road, C-3  
Columbus, Ohio 43229-6693  
614-265-7055  
Scott.fletcher@dnr.state.oh.us

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

**Project Title:** **Alum Treatment Demonstration and Strategic Dredging Project for Grand Lake St. Marys in Mercer County**

**Project Location:** Mercer County  
**Watershed:** Grand Lake St. Marys Watershed

**Project Summary:**

**Project Deliverables:**

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**Environmental Results:**

### NPS Load Reductions Resulting from Project

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