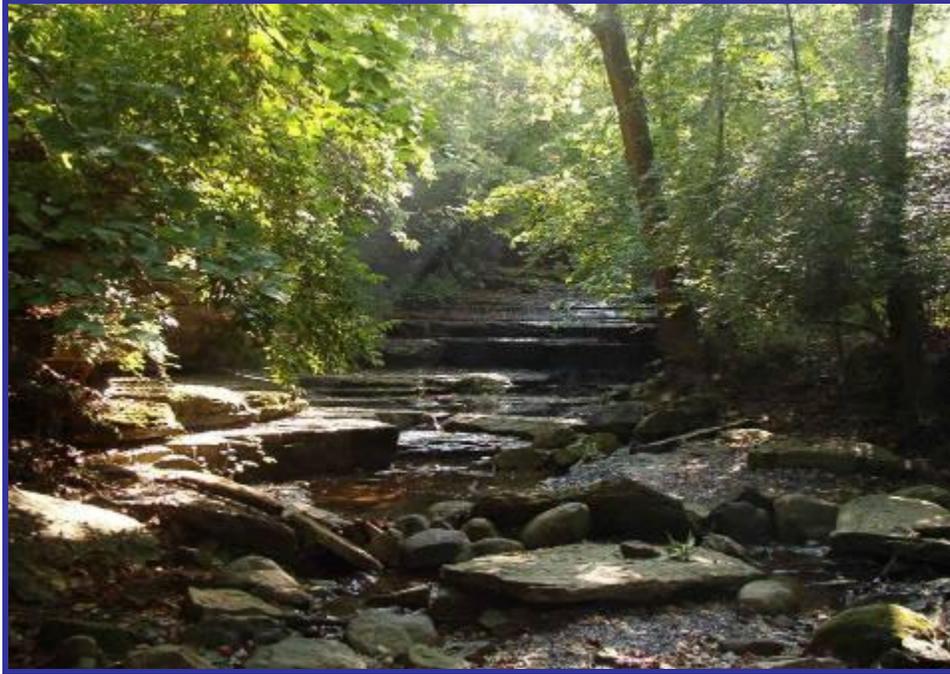


FFY2006 Project Summaries



Compilation of Results

Section 319(h) sub grant projects funded under the FFY2006 grant cycle have only recently begun the process of implementation. We anticipate considerable progress to report during the next Annual Reporting Cycle. Thus far, these projects have achieved the following:

- Successfully acquired conservation easements on 45 acres of riparian lands.
- Completed engineering designs and plans for 7 stream restoration projects.
- Using natural channel design methods restored 1,850 linear feet of urban headwater stream.
- Removed 1 lowhead dam on the Ottawa River in Lucas County.
- Modified 1 levee along a state scenic river.
- Reconnected 3,850 linear feet of streams to their natural floodplain.
- Using cost-share practices, planted 303 acres of cover crops
- Constructed 2 heavy use feeding pads in riparian areas.
- Using cost-share practices, installed 13,892 linear feet of livestock fencing.
- Conducted 7 public meetings
- Completed 13 Quality Assurance Project Plans
- Completed baseline monitoring at 54 project monitoring sites
- Reduced nonpoint source pollutant loadings by:
 - Nitrogen—198 pounds/year
 - Phosphorus—99 pounds/year
 - Sediment—99 tons/year



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-05
Project Status Grant Closed 3/13/07

SubGrantee Honey Creek Watershed Association
8787 Sullivan Rd.
Tipp City, OH 45371

Project Contact: Nikki Reese
Honey Creek Watershed Association
8787 Sullivan Rd.
Tipp City, OH 45371

319 Funds Awarded: \$349,128
Total Federal Expended: \$14,638

Project Title: Stream/Riparian Restoration, Honey Creek;
Riparian Restoration/Easement, West Fork Honey
Creek

Project Location: Miami County
Watershed: Honey Creek

Project Summary: \$349,128 in federal section 319(h) Clean Water Act grant funding was awarded to the Honey Creek Watershed Association to restore stream banks and riparian corridor on West Fork Honey Creek. A permanent conservation easement is also proposed to eliminate cattle access to the stream in a portion of the project area.

The project is located in areas of intensive row crop agriculture and in areas where cattle have unrestricted access to the stream. As a result, there are severe erosion problems, cut banks, and heavy algal growth resulting from manure and nutrient enrichment. Project implementation is consistent with the recommendations in the conditionally endorsed Honey Creek Watershed Action Plan.

Project Results: During the reporting period, 1 project specific education and outreach program was initiated. At the request of the local sponsor, this grant was closed on 3/13/07. The project will be completed by the Miami County SWCD—as a result, a new grant agreement was executed. See project summary for #06(h)EPA-06 for further details.



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-06

Project Completion January 2010

SubGrantee **Miami County SWCD**
1330 N. County Rd. 25A
Troy, OH 45373

Project Contact: **Leigh ann Gerardi**
Miami County SWCD
1330 N. County Rd. 25A
Troy, OH 45373

Grant Amount: \$231,192

Local Match: \$154,128

Project Title: **Honey Creek Streambank Stabilization & Restoration**

Project Location: Miami County
Watershed: Honey Creek

Project Summary: \$231,192 in federal section 319(h) Clean Water Act grant funding was awarded to the Miami County SWCD to complete a streambank stabilization and restoration project on Honey Creek adjacent to the 198 acre Honey Creek Nature Preserve. The project site is located along river miles 0.0 to 1.0 on the outer edges of stream meanders where scour has created severe stream bank erosion. Except for the immediate project area and a 4.9 segment in the mixing zone of a WWTP, Honey Creek is in full attainment of exceptional warmwater habitat aquatic life uses.

Project Deliverables: This project has been revised twice since the initial grant award. A series of local circumstances eliminated two previously agreed upon project sites and resulted in a decrease in the amount of grant funds awarded. Revised deliverables for this project include:

- 510 linear feet of stream bank stabilization and restoration using bio-engineering
- Restoration of 4 acres of riparian areas with native tree and prairie grass plantings.
- Water chemistry and habitat assessment will be completed at two monitoring sites within the project area prior to and following completion of the project.

- Project specific education and outreach will be implemented by the Honey Creek Watershed Coordinator and others.

Environmental Results: Successful completion of this project will result in the stabilization and restoration of more than 510 linear feet of severely eroding stream banks as well as the revegetation of 4 acres of surrounding riparian areas.

Project Results to Date: The following activities were completed during the reporting period:

- Completed and submitted a Quality Assurance Project Plan
- Completed pre-construction monitoring
- Completed project plans and design documents. Submitted permitting documents to all appropriate regulatory agencies.
- Restored 510 linear feet of stream bank using bio-engineering methods and materials.
- Successfully established a project specific website
- Developed and released 3 press releases.
- Completed a project display that was used at two local events.
- Conducted the 9th annual Honey Creek Watershed Festival that was attended by more than 1,500 area residents.
- Completed and distributed 8 project specific newsletter articles to watershed residents.

NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reductions upon Project Completion
Nitrogen	75	75 pounds/year
Phosphorus	37	37 pounds/year
Sediment	37	37 tons/year





FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-08
Project Completion July 2009

SubGrantee **Little Beaver Creek Land Foundation**
P.O. Box 60
East Liverpool, OH 44432

Project Contact: **Lisa Butch**
Little Beaver Creek Land Foundation
P.O. Box 60
East Liverpool, OH 44432

Grant Amount: **\$107,933**
Local Match: **\$79,536**

Project Title: **Little Beaver Creek Equine Exclusion**
Project Location: Columbiana County
Watershed: Little Beaver Creek

Project Summary: \$107,933 in federal section 319(h) Clean Water Act grant funding was awarded to the Little Beaver Creek Land Foundation to implement cost-share activities to install stream-side livestock exclusion fencing and heavy use feeding pads at 20 sites within the watershed where horses and other livestock currently have unrestricted access to the stream. Areas where grant funded practices are installed will be protected with conservation easements.

Little Beaver Creek is one of only three nationally designated wild and scenic rivers in Ohio. Approximately 20 miles are designated as a wild river and an additional 16 miles are designated as a state scenic river.

Project Deliverables: Successful completion of this project will result in the following:

- Complete water quality monitoring at 40 sites within the project areas. In addition, semi-annual bacteria, biological and habitat assessments will be completed at 20 additional sites within the watershed.
- Install 20,000 linear feet of livestock exclusion fencing located at least 30 feet from the stream bank to allow for renaturalization of the riparian zone.
- Install 20 heavy use feeding pads
- Acquire permanent conservation easements on 5.1 acres of riparian corridor.
- Conduct project specific public education and outreach activities.

Environmental Results: Successful completion of this project will result in the elimination of water quality problems and in-stream habitat degradation caused by unrestricted livestock access to the stream. Additionally the restoration of wooded corridor should improve physical habitat conditions within the project sites.

Project Results to Date:

- Completed and submitted Quality Assurance Project Plan
- Completed pre-construction water chemistry, biological and habitat assessments of 5 project sites.
- Acquired 42.5 acres of permanent conservation easements
- Conducted 1 equine livestock environmental assurance program workshop.
- Installed 4 heavy use feed pads.

NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reductions upon Project Completion
Sediment	79	415 tons/year



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-09
Project Completion July 2009

SubGrantee NEFCO
180 E. South St.
Akron, OH 44311

Project Contact: Eric Akin
NEFCO
180 E. South St.
Akron, OH 44311

Grant Amount: \$248,250
Local Match: \$168,750

Project Title: Potter Creek Habitat Restoration

Project Location: Portage County
Watershed: Middle Cuyahoga River

Project Summary: \$248,250 in federal section 319(h) Clean Water Act grant funding was awarded to the Northeast Ohio Four County Regional Planning and Development Organization (NEFCO) to restore a channelized segment of Potter Creek using overwide ditch technology and design. In addition, the project will re-vegetate and acquire permanent riparian conservation easements along the project area converted to overwide channel. In-stream flow diversion structures will be installed at one of the sites to improve stream morphology and flow, as well as to improve aquatic habitat conditions within the stream.

The project site is currently extensively used for row crop production. As a result, there are a number of agricultural conservation measures already in place in areas along the project site. The potential of these previously installed practices will be enhanced by implementation of this project.

Project Deliverables: Successful completion of this project will result in the following:

- Completion of chemical water quality monitoring at 1 site within the project area and biological and habitat assessments at 3 additional sites within the project area.
- Conversion of 1,400 linear feet of channelized drainage ditch to an overwide ditch with native tree and shrub planting and the acquisition of a conservation easement along both of the converted overwide ditch area.
- Project specific public education and outreach activities.

Environmental Results: Successful completion of this project will result in the conversion of approximately 1,400 linear feet of currently maintained drainage ditch into an overwide (or two-stage) channel, thereby restoring a more natural flow and allowing the stream to re-naturalize over time within the overwide channel.

Project Results to Date:

- Completed and submitted QAPP;
- Completed and distributed 1 project brochure and 1 fact sheet;
- Completed project design.
- Established project specific website.
- Completed appraisal for conservation easement.

NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reductions upon Project Completion
Nitrogen	None to report	154 pounds/year
Phosphorus	None to report	76 pounds/year
Sediment	None to report	76 tons/year



For More Information:
www.portageswcd.org



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number	#06(h) EPA-10
Project Completion	July 2009
SubGrantee	TMACOG P.O. Box 9508. Toledo, OH 43697-9508
Project Contact:	Matt Horvat TMACOG P.O. Box 9508. Toledo, OH 43697-9508
Grant Amount:	\$204,970
Local Match:	\$253,646
Project Title:	Ottawa River Dam Removal & Stream Restoration
Project Location:	Lucas County
Watershed:	Ottawa River

Project Summary: \$204,970 in federal section 319(h) Clean Water Act grant funding was awarded to the Toledo Metropolitan Area Council of Governments (TMACOG) to complete stream restoration subsequent to the Secor Dam removal (to be implemented by the Ohio Department of Transportation using non-319 funds). The Secor Dam is approximately 55 feet wide, 8 feet tall and was installed in the 1920's to create an impoundment. The dam is adjacent to a 120 acre parcel of floodplain that has been reinforced with pilings and bulkheads by the city of Ottawa Hills. A feasibility study indicates that dam removal will not increase flood hazards, release contaminated sediments, or cause siltation problems.

Section 319 funds are provided to complete restoration of the stream channel and adjacent riparian areas following removal of the lowhead dam. Additionally, funds will be used by both the University of Toledo and Bowling Green State University to perform comprehensive environmental monitoring of the project site prior to and following completion of the project.

Project Deliverables: Successful completion of this project will result in the following:

- Completion of water chemistry, biological and habitat monitoring and assessment prior to and following completion of this project.
- Restore approximately 1,000 linear feet of stream by establishing a natural floodplain contour as well as installing in-stream riffles, pools, bio-engineered streambank stabilization on the south bank of the river.

- Conducting project specific public education and outreach activities including holding public meetings and other events to inform the public of the benefits of this project.

Environmental Results: Successful completion of this project will result in the removal of the Secor Road lowhead dam and restoration of approximately 1,000 linear feet of in-stream and riparian habitat. Following completion of the dam removal and restoration activities the project site will be permanently protected as park land through a deed restriction already in place.

Project Results to Date:

- Completed pre-construction water chemistry, biological and habitat assessment activities both upstream and downstream of the project site. Completed and submitted sediment characterization report.
- Conducted public meetings and site tours.
- Conducted dam mitigation and site restoration workshop.
- Successfully removed the Secor Road lowhead dam.
- Completed restoration design documents.
- Stabilized 1,000 linear feet of stream banks downstream from dam removal site.
- Restored 1,000 linear feet of stream by restoring natural floodplain contour as well as installing in-stream riffles and pools.

NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reductions upon Project Completion
Nitrogen	None to report	117 pounds/year
Phosphorus	None to report	59 pounds/year
Sediment	None to report	59 tons/year





FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number	#06(h) EPA-11
Project Completion	June 2009
SubGrantee	Muskingum County SWCD 225 Underwood Street, Suite 100. Zanesville, OH 43071
Project Contact:	Kylene Wilson Muskingum County SWCD 225 Underwood Street, Suite 100. Zanesville, OH 43071
Grant Amount:	\$96,625
Local Match:	\$229,649
Project Title:	Salt Creek Watershed NPS Pollution Prevention
Project Location:	Muskingum County
Watershed:	Salt Creek

Project Summary: \$96,625 in federal section 319(h) Clean Water Act grant funding was awarded to the Muskingum County SWCD to install agricultural BMPs to address livestock waste and sediment. Practices such as stream-side cattle exclusion fencing and off-stream livestock watering systems will be cost-shared with riparian agricultural producers. Unrestricted livestock access to streams in the watershed increases nutrient loadings and damages stream banks, denuding riparian vegetation. There are also areas of conventional tillage where nutrient and sediment run-off is adversely affecting water quality. In these areas, cost-share for practices such as cover crops will be made available to producers.

Project Deliverables: Successful completion of this project will result in the following:

- Complete quarterly chemical, biological and habitat water quality monitoring at 20 sites within the project area prior to and following installation of the BMPs.
- Installation of 33,000 linear feet of stream side livestock exclusion fencing.
- Installation of 10 off-stream watering systems to be implemented in conjunction with livestock fencing project sites.
- Planting of more than 114 acres of cool-season grasses and legume in riparian areas where vegetation is sparse.
- Planting of 500 acres of cover crops within selected project areas.
- Conduct project specific public education and outreach activities.

Environmental Results: This project will successfully protect approximately 33,000 linear feet of stream in which livestock currently have unrestricted access to the water. In addition to reducing nutrient loading to the stream, this will result in the re-naturalization of both in-stream habitat areas as well as the riparian zone.

Project Results to Date:

- Completed and submitted Quality Assurance Project Plan
- Completed chemical monitoring at 18 sites. Conducted biological monitoring (fish and bugs) at 1 site.
- Conducted 2 informational meeting with agricultural producers
- Using cost-share, successfully planted 303 acres of cover crops
- Using cost-share, successfully installed 3,303 linear feet of livestock exclusion fencing.
- Conducted 1 watershed family fun day.
- Published 3 newspaper articles, completed and distributed 1 brochure and 1 flyer, and obtained project coverage on 3 television spots, all to promote the implementation project.

NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reductions upon Project Completion
Nitrogen	2,770 pounds/year	9,014 pounds/year
Phosphorus	1,494 pounds/year	4,508 pounds/year
Sediment	1,471 tons/year	2,650 tons/year



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-17
Project Completion June 2009—Grant Closed

SubGrantee Village of New Albany
99 W. Main St..
New Albany, OH 43054

Project Contact: William Dorman
Village of New Albany
99 W. Main St..
New Albany, OH 43054

Grant Amount: \$23,622
Total Federal Expended: \$15,748

Project Title: Restoration of Rose Run
Project Location: Franklin County
Watershed: Big Walnut Creek

Project Summary: \$23,622 in federal section 319(h) Clean Water Act grant funding was awarded to the Village of New Albany to remove a lowhead dam, abandoned bridge, pilings and other debris from Rose Run, a headwater tributary in the Big Walnut Creek watershed. During high flow conditions, the dam and associated bridge structure impede and impound flow so that the stream is severely silted in. The upstream stream bed elevation is 4 feet higher than downstream of the dam. A large 5 to 6 foot deep hole has developed on the west side of the dam due to scouring resulting from these flow impediments. Although removal of the dam is the primary objective of this project, there is a considerable amount of restoration work that will occur.

Rose Run is a 3.5 mile urban perennial stream with a drainage area of 2,800 acres. Rose Run flows into the Rocky Fork, one of two main tributaries to Big Walnut Creek. 2000 Ohio EPA water quality assessment data from a location less than a mile downstream of the project site shows non-attainment with warmwater habitat aquatic life uses.

Environmental Results: This project resulted in the restoration of natural stream channel morphology and in-stream habitat conditions along 350 linear feet of this headwater stream.

Final Project Results:

- Successfully completed and submitted a Quality Assurance Project Plan. Completed QHEI/HHEI assessments at 3 sites prior to and following restoration.
- Removed low-head dam structure on Rose Run and associated logging bridge structure.
- Restored 350 linear feet of floodplain, stream channel and riparian areas.
- Stabilized 200 linear feet of streambank using bio-engineering.
- Established and maintain a project specific web-site. Also published a project specific article in the village's newsletter.
- Completed construction and design documents in preparation for construction activities associated with the project.



Rose Run Before and After Restoration



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number	#06(h) EPA-18
Project Completion	July 2009
SubGrantee	Cuyahoga County Board of Health 5550 Venture Drive Parma, OH 44130
Project Contact:	Harry Stark Cuyahoga County Board of Health 5550 Venture Drive Parma, OH 44130
Grant Amount:	\$280,899
Local Match:	\$187,266
Project Title:	Restoration of Mill Creek at Highland Park
Project Location:	Cuyahoga County
Watershed:	Mill Creek

Project Summary: \$280,899 in federal section 319(h) Clean Water Act grant funding was awarded to the Cuyahoga County Board of Health to restore a headwater segment of Mill Creek running through the Highland Park Golf Course. The project site is owned and operated by the City of Cleveland. Within the project site, Mill Creek is a deeply incised urban stream with severely eroding banks, very little riparian cover and failing gabion baskets that are causing flow obstructions and severe erosion.

The 19 square mile Mill Creek is a sub-watershed of the Cuyahoga River in northeast Ohio. More than 1,000 linear feet of Mill Creek will be restored and renaturalized as a result of this project. In addition to in-stream restoration, riparian areas will be planted extensively using native hardwood trees, grasses and forbs.

Project Deliverables: Successful completion of this project will result in the following:

- Restoration of approximately 1,000 linear feet of urban headwater stream, including bio-engineered meanders and natural channel development within the stream bed.
- Restoration of natural flow by removing failing gabions and stabilizing severely eroding stream banks using root wads and other bio-engineered practices.

- Restoration of riparian zone along both sides of the creek by planting native hardwood trees, grasses and forbs in a 25-foot wide swath.
- Complete water chemistry and project appropriate macroinvertebrate and physical habitat assessments at 5 sites within the project area prior and following restoration.
- Completion of project specific public education and outreach activities including a stakeholder forum to provide input on the project conceptual design.

Environmental Results: This project will result in the restoration and protection of 1,000 linear feet of urbanized headwater habitat as well as re-vegetating a 25-foot wide zone along both sides of the restored segment of stream.

Project Results to Date:

- Completed and submitted a Quality Assurance Project Plan
- Completed water chemistry and bacterial sampling analysis at 5 sites within the project area to establish a baseline from which improvements may be measured against following project implementation.
- Completed volunteer macroinvertebrate monitoring at 5 sites within the project area. Due to storm sewer chemical issues, it is expected that this component of the project will be eliminated.
- Executed contract for successful completion of the project design(s), went to bid and selected a firm to complete the restoration project.
- Completed restoration of 1,500 linear feet of urban headwater stream.
- Conducted 1 field day for school aged children, technical experts, project stakeholders and the general public.
- Stabilized 500 linear feet of riparian zone with erosion control matting and plantings. Planting will be completed in the spring of 2009.

NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reduction upon Project Completion
Nitrogen	198 pounds/year	198 pounds/year
Phosphorus	99 pounds/year	99 pounds/year
Sediment	99 tons/year	99 tons/year





FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number	#06(h) EPA-23
Project Completion	July 2009
Subgrantee	Five Rivers Metroparks 1375 E. Siebenthaler Avenue Dayton, OH 45414
Project Contact:	Joseph Zimmerman Five Rivers Metroparks 1375 E. Siebenthaler Avenue Dayton, OH 45414
Grant Amount:	\$224,000
Local Match:	\$153,400
Project Title:	Phase 1, Stillwater Low Dam Modification, Stream Restoration and Wetland Enhancement
Project Location:	Montgomery County
Watershed:	Stillwater River

Project Summary: \$224,000 in federal section 319(h) Clean Water Act grant funding was awarded to Five Rivers Metroparks to complete the first of three phases of modifying an 8 foot high impounding dam on the Stillwater River. The existing dam is a 150 foot wide arch dam constructed during the 1920s for flood control. This first phase will involve notching the dam to lower impoundment levels by 3 feet, installing cross vanes and other grade control structures to prevent head-cutting and constructing a new inlet channel to Englewood Lakes (wetland areas). Approximately 7,000 linear feet of stream bank along the Stillwater River will be renaturalized and restored as a result of this project.



The project site is located near the outlet of the 673 square mile Stillwater watershed in southwest Ohio. All but the 1 mile segment immediately upstream from this dam of the

Stillwater River mainstem are in attainment with exceptional warmwater habitat aquatic life uses.

Phase 2 of this project is funded under project #06(h) EPA-35. Phase 3 is scheduled for funding under the FFY08 section 319 grant cycle.

Project Deliverables: Successful completion of this project will result in the following:

- Removal of the top 3 feet of the lowhead impounding dam, resulting in a lowering of the impoundment behind the dam and allowing for the monitoring of sediment transport from the behind the dam as well as stabilizing of exposed sediments.
- Installation of cross vanes and other grade control structures upstream from the dam to insure that head-cutting is prevented.
- Enhancement of existing wetland functions by constructing a new inlet channel (with dense root mats) to the 88-acres of riparian wetland areas within the Englewood Lakes area of the project site.
- Completion of water chemistry, macroinvertebrate, fish and habitat assessments throughout the project area prior to and following completion of the dam modification.
- Completion of extensive public education and outreach activities specific to the project, including public meetings, sign development and installation and distribution of brochures and other materials.

Environmental Results: This project will result in the full attainment of exceptional warmwater habitat (EWH) aquatic life use within the Stillwater River mainstem. Additionally, nearly 88 acres of currently poorly functioning wetlands will be restored to more effectively assimilate nutrient loadings within the river.

Project Results to Date:

- Completed and submitted Quality Assurance Project Plan
- Completed pre-construction water quality chemistry sampling biological (macroinvertebrate and fish) and habitat assessments at project site.
- Completed conceptual project design(s)
- Completed and submitted all environmental permitting documents required for the project including 404/401 permit applications.
- Developed and Installed 3 project specific signs and one display board within the park area providing details about the project.
- Completed and distributed 2 project brochures and 2 fact sheets;

NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reduction upon Project Completion
Nitrogen	None to report	135,000 pounds/year
Phosphorus	None to report	67,500 pounds/year
Sediment	None to report	67,500 tons/year



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-24
Project Completion July 2009

Subgrantee **Greene County Soil & Water Conservation**
1363 Burnett Drive
Xenia, OH 45385

Project Contact: **Don Leeds**
Greene County SWCD
1363 Burnett Drive
Xenia, OH 45385

Grant Amount: **\$223,600**
Local Match: \$149,067

Project Title: **Little Beaver Creek Stream Restoration**

Project Location: Greene County
Watershed: Little Miami River

Project Summary: \$223,600 in federal section 319(h) Clean Water Act grant funding was awarded to Greene County Soil & Water Conservation District to complete in-stream habitat restoration and stream bank stabilization along 2,100 linear feet of Little Beaver Creek adjacent to a previously restored segment near Greene County Park District property.

The 28 square mile Little Beaver Creek watershed is located in a rapidly developing area south of Wright Patterson Air Force Base. Much of the stream has been previously modified by historic impacts and the stream is highly entrenched with significant flow modification. Riparian habitat conditions are generally good due to it's proximity to county park property however several locations along the stream bank are artificially armored and severe erosion is resulting. Restoration work that will be completed by this project will help to restore sinuosity, improve riparian and in-stream habitat conditions and protect the stream from future impacts through a conservation easement. This project will enhance a significant amount of restoration work in the area



that will be completed using Water Resources Restoration Sponsor Program (WRRSP) funds.

Project Deliverables: Successful completion of this project will result in the following:

- Restoration of 2,100 linear feet of Little Beaver Creek that includes the installation grade control structures such as 7 J-Hook weirs, and 2 W-weirs. Additionally, 300 linear feet of new channel will be constructed to assist with the restoration of natural flow conditions within the stream. Following restoration, the riparian area will be re-vegetated and protected with a conservation easement.
- Project will restore 2 acres of riparian zone through invasive species control and re-vegetating with native hardwoods and shrubs.
- Water chemistry and biological monitoring as well as physical habitat assessment (QHEI) will be completed at 4 monitoring sites within the project area prior to and following completion of restoration work.
- Project specific public education and outreach activities will be completed to inform the public of the benefits of this project.

Environmental Results: This project will result in the restoration and stabilization of more than 2,000 linear feet of Little Beaver Creek. It is anticipated that successful completion of this project in conjunction with work being completed under the WRRSP program will result in this segment of Little Beaver Creek attaining its designated warmwater habitat designated aquatic life use.

Project Results to Date:

- Completed and submitted Quality Assurance Project Plan
- Completed conceptual project design(s) and overall watershed restoration plan.
- Completed all necessary permitting paperwork and submitted to appropriate regulatory agencies.
- Project went to bid for construction in mid-August.
- Prepared a project specific website. Completed 8 updates as needed.
- Conducted the Little Miami Watershed Festival. Attendance estimated at 1,350.
- Completed all pre-construction monitoring.
- Commenced construction November, 2008. Completion expected spring 2009.

NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reduction upon Project Completion
Nitrogen	None to report	416 pounds/year
Phosphorus	None to report	208 pounds/year
Sediment	None to report	208 tons/year



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-25
Project Completion July 2009

SubGrantee **West Creek Preservation Committee**
P.O. Box 347113..
Parma, OH 44134

Project Contact: **Derek Schafer**
West Creek Preservation Committee
P.O. Box 347113..
Parma, OH 44134

Grant Amount: **\$187,500**
Local Match: \$125,000

Project Title: **West Creek Urban Stream Repair**
Project Location: Cuyahoga County
Watershed: West Creek

Project Summary: \$187,500 in federal section 319(h) Clean Water Act grant funding was awarded to the West Creek Preservation Committee to complete stream restoration at 2 project sites that will extend restoration work completed by previously funded WRRSP projects. Both proposed restoration sites are located within heavily urbanized areas of the West Creek watershed. Stream reaches are very entrenched (stream banks 10-12 feet high) with significant portions of the toes of the banks currently stabilized with concrete slabs and covered with invasive plant species.

West Creek is a predominately bedrock stream draining approximately 9,000 acres, flowing 9 miles through heavily urbanized areas of Parma, Seven Hills, Independence, Brooklyn Heights and small portions of Cleveland. More than 600,000 northeastern Ohioans live within the watershed. Project sites are adjacent to stream segments in partial and non-attainment of designated warmwater habitat aquatic life uses. The primary cause of impairment in the lower stream reaches is hydromodification.

Project Deliverables: Successful completion of these projects will result in the following:

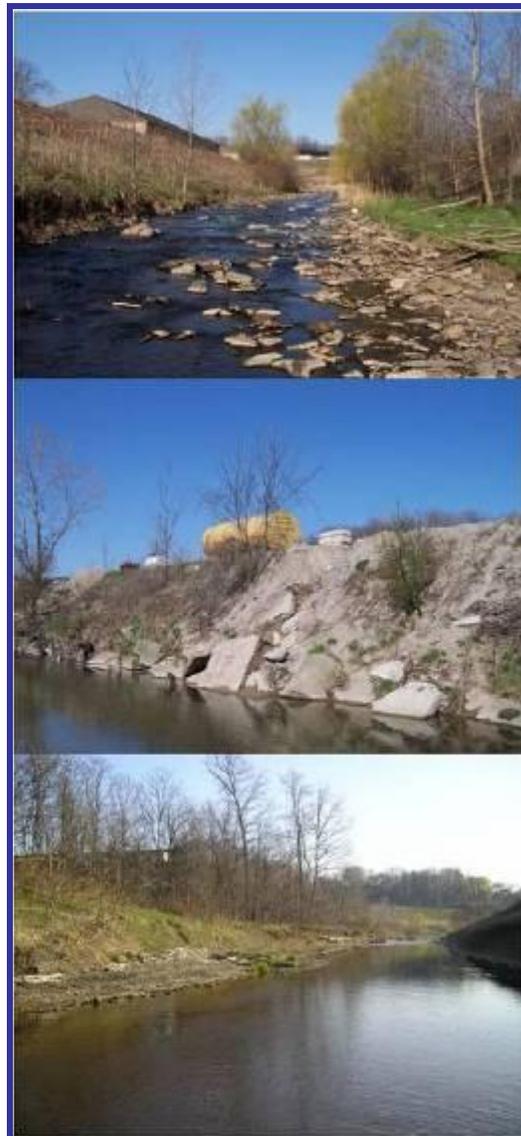
- Completion of chemical, biological and habitat monitoring upstream and downstream of restoration project sites prior to and following completion of this project.

- Restoration and stabilization of 1700 linear feet of stream bank by re-grading and installing boulders at the bank toes as well as re-vegetating riparian areas with native plant species.
- Installation and restoration of 1700 linear feet of in-stream habitat with 200 linear feet of enhanced meanders, a rock cross vane upstream and J-Vanes and root wad installation in existing pools where existing erosion is a concern.
- Protection of 6 acres of riparian area through the acquisition of conservation easements.
- Completion of project specific public education and outreach activities.

Environmental Results: This project will restore 1700 linear feet of urbanized stream including the enhancement of 700 linear feet of in-stream habitat using a variety of habitat improvement practices. Additionally, the 6-acre project sites will be protected with conservation easements.

Project Results to Date:

- Completed and submitted Quality Assurance Project Plan
- Completed and distributed 3 editions of project newsletter with project specific information and articles. Completed 3 updates of the project website. Completed project display board.
- Acquired conservation easements on 2.5 acres of riparian lands within project area.
- Completed pre-construction project monitoring at 2 sites within project area.



NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reduction upon Project Completion
Nitrogen	None to report	183 pounds/year
Phosphorus	None to report	91 pounds/year
Sediment	None to report	91 tons/year



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-27
Project Completion July 2009

SubGrantee City of Columbus, Dept. of Public Utilities
910 Dublin Road
Columbus, OH 43215

Project Contact: Rob Herr
City of Columbus, Dept. of Public Utilities
910 Dublin Road
Columbus, OH 43215

Grant Amount: \$416,063
Local Match: \$277,376

Project Title: Lower Olentangy River Ecosystem Restoration
Project Location: Franklin County
Watershed: Lower Olentangy River

Project Summary: \$416,063 in federal section 319(h) Clean Water Act grant funding was awarded to the City of Columbus to implement stream restoration following removal of the 5th Avenue Dam in the Lower Olentangy River, 2 miles upstream from the confluence with the Scioto River. The segment of the Lower Olentangy River spanned by the Fifth Avenue Dam has the lowest QHEI score in the entire Olentangy River and is currently in non-attainment of its Modified Warmwater Habitat designated aquatic life use. Impairments contributing to poor biological community performance are identified as hydromodification and habitat alteration caused by the 8-foot high dam. Removal of the dam should restore this reach of the Lower Olentangy and result in full attainment of warmwater habitat aquatic life use designation.

Grant funds will be used for restoration of the stream channel and adjacent riparian areas that are currently inundated by the impoundment in the dam pool. Additional funding for removal of the dam has been obtained through the WRRSP program as well as supplemental environmental project funding.

Project Deliverables: Successful completion of this project will result in the following:

- Completion of water chemistry, biological and habitat assessments (QHEI) at 5 monitoring sites within the project area. Monitoring will be completed prior to and following completion of this project.

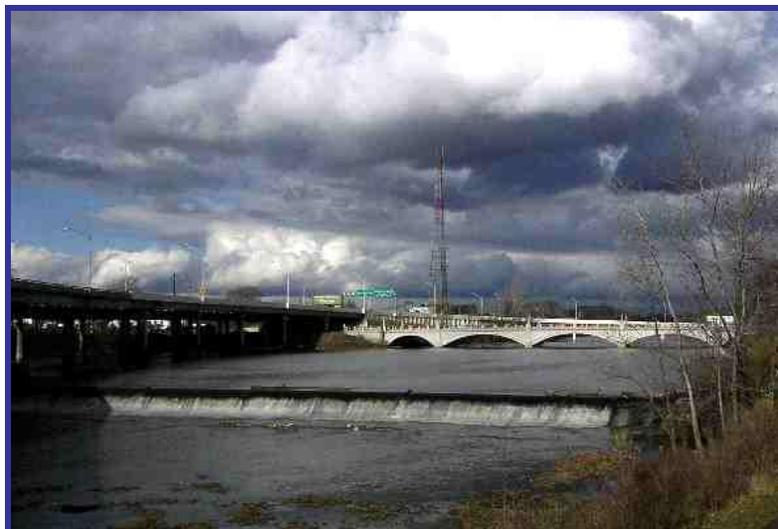
- Where appropriate, wetlands delineation will be completed following removal of the dam.
- Production of a river migration model following removal of the dam using remote sensing. A report will be prepared documenting changes in the structure and composition of substrates within the project area.
- Restoration of approximately 2 miles of river banks and in-stream habitat conditions, including beds, riffles, pools, riparian forest and functioning floodplain. The amount and characteristics of restoration features will be specified in an Ohio EPA approved plan for dam removal, modification and restoration.
- Completion of extensive project specific public education and outreach activities.

Environmental Results: Restoration of approximately 2 miles of stream channel and riparian features—Ohio EPA also anticipates recovery of 2-3 miles of currently non-attaining modified warmwater habitat to full attainment of warmwater habitat.

Project Results to Date:

- Completed and submitted Quality Assurance Project Plan
- Initiated water quality and monitoring data web site.
- Initiated production of a project specific video for use in informing and educating the public on the benefits of the project
- Completed 1 citizen’s survey to capture community attitudes and knowledge of the river and the project.

NOTE: A recent change in the city administration has currently stalled this project. Although a recent Corps of Engineers Feasibility Study recommends full removal of the dam, the city of Columbus is concerned that it does not have sufficient funding or support to embark on this project. The project is located in a very highly visible section of Ohio State University—some opposition has been voiced by various parties recommending that the dam not be removed. We anticipate that delays will be sufficient that the grant funds awarded for this project may need to be reprogrammed to another project within the city’s jurisdiction.





FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-28
Project Completion July 2009

SubGrantee Holden Arboretum
9500 Sperry Road
Kirtland, OH 44094

Project Contact: Roger Gettig
The Holden Arboretum
9500 Sperry Road
Kirtland, OH 44094

Grant Amount: \$150,000
Local Match: \$100,000

Project Title: Shadybrook Dam Removal and Stream Restoration

Project Location: Geauga County
Watershed: Chagrin River

Project Summary: \$150,000 in federal section 319(h) Clean Water Act grant funding was awarded to the Holden Arboretum to remove a failing lowhead dam and restore the associated stream channel to a natural and free-flowing condition. The project site is on Holden Arboretum property in the headwaters of a coldwater habitat unnamed tributary to the East Branch of the Chagrin River.

The pond associated with the dam is filled with sediment and is heavily colonized by invasive non-native plant species. The stream is currently down-cutting through the deposited sediments and is contributing excessive sediment loads downstream to the Chagrin River. The stream within the project site currently has no floodplain connectivity, little or no meanders, and very poor substrate composition and diversity.

Project Deliverables: Successful completion of this project will result in the following:

- Completion of water chemistry, site specific biological and physical habitat monitoring at 3 monitoring sites within the project area.
- Removal and/or modification of an impounding lowhead dam
- Removal of approximately 1,500 cubic yards of accumulated sediment from the dam pool.

- Restoration of 350 linear feet of natural stream channel, including reconnecting the stream with the active floodplain and riparian zones. Riparian areas will be restored as needed with plantings of native species and ongoing maintenance to eradicate non-native invasive plant species.
- Completion of project specific public education and outreach activities.

Environmental Results: Removal and/or modification of this dam and restoration of natural stream channel morphology in this segment will eliminate the only impairment in this headwater stream and result in the protection of coldwater habitat aquatic life uses as well as the elimination of a fish barrier to a population of endangered native Ohio brook trout.

Project Results to Date:

- Completed pre-construction monitoring
- Published 1 newsletter article highlighting project
- Prepared RFP for project design and build.
- Executed design-build contract.
- Propagated 5,000 native shrubs, trees and herbaceous plants for use on the project sites.

NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reduction upon Project Completion
Nitrogen	None to report	0 pounds/year
Phosphorus	None to report	0 pounds/year
Sediment	None to report	2,650 tons/year





FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number	#06(h) EPA-29
Project Completion	GRANT CLOSED AT SPONSOR'S REQUEST
SubGrantee	Champaign County Commissioners 1512 S. US Highway 68 Urbana, OH 43078
Project Contact:	Jennifer Ganson Champaign County Commissioners 1512 S. US Highway 68 Urbana, OH 43078
Grant Amount:	\$268,815
Local Match:	\$188,245
Project Title:	Drinking Water Nitrate Reduction in the Mad River Aquifer
Project Location:	Champaign County
Watershed:	Upper Mad River

Project Summary: \$268,815 in federal section 319(h) Clean Water Act grant funding was awarded to the Champaign County Commissioners to reduce and prevent nitrate contamination in several public drinking water supplies. Several different approaches will be used, including the installation of various agricultural BMPs such as cover crops cost-shares and precision farming methods. In addition, preventative measures would be implemented by acquiring conservation easements on ground within the one and five-year time of travel zones around public well fields. The project also will enhance in-stream habitat conditions within 15,840 linear feet of previously channelized coldwater habitat stream.

Stream restoration efforts within the Mad River will expand upon previously successful habitat enhancements within the mainstem. The Mad River is one of only 3 streams within Ohio capable of supporting a year-round trout fishery. A TMDL report that is nearing completion identified the lack of suitable habitat and hydro-modification as two significant causes of impairment.

Project Deliverables: Successful completion of this project will result in the following:

- Completion of isotope and nitrate sampling of public and private wells throughout the one and five-year time of travel zones prior to and following installation of various cost-shared practices.

- All private drinking wells, home septic units and nitrate storage facilities will be located and plotted by GIS within the project areas.
- 625 acres of conservation easements will be acquired within the one and five-year time of travel zones in and around public water supply well fields.
- 1,666 acres of cover crops will be planted using cost-share funds within the project areas.
- More than 1,500 acres of precision farming will be implemented within the project areas.
- 2 acres of riparian areas will be planted using native hardwood tree seedlings.
- More than 15,000 linear feet of in-stream habitat enhancements will be installed, including footer logs, boulders and root wads. Rock vanes will also be installed to improve stream bank stability and 3 acres of riparian areas will be planted using native hardwood tree seedlings.

Environmental Results: This project will result in the reduction of nitrates in the one and five-year time of travel zones around public water supplies identified within the project area. The project will also restore and enhance more than 15,000 linear feet of in-stream habitat conditions within designated coldwater habitat in the Mad River mainstem.

Project Results to Date:

- Completed pre-implementation nitrate sampling at 19 public and private well sites to identify potential sources of nitrate contamination;
- Established project web-site;
- Obtained one opportunity for radio presentation on the project;
- Published 10 project-specific newspaper articles.

NOTE: Recent changes in personnel and fragmentation of project partners have stalled this project. Following a meeting conducted 8/07 with the Champaign County Commissioners this project will be terminated at the sponsor's request and funds will be reprogrammed by Ohio EPA pending approval by Region 5 of US EPA.



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number	#06(h) EPA-31
Project Completion	July 2009
SubGrantee	Columbus & Franklin County Metro Parks 1069 West Main Street Westerville, OH 43081-1181
Project Contact:	John O' Meara Columbus & Franklin County Metro Parks 1069 West Main Street Westerville, OH 43081-1181
Grant Amount:	\$315,172
Local Match:	\$210,114
Project Title:	Pleasant Valley Quarry Habitat Restoration
Project Location:	Franklin and Pickaway Counties
Watershed:	Lower Big Darby Creek

Project Summary: \$315,172 in federal section 319(h) Clean Water Act grant funding was awarded to the Columbus & Franklin County Metro Parks to remove portions of an existing levee and to restore approximately 400 linear feet of stream channel and associated riparian forest. The project will also restore 1.3 acres of naturally occurring riparian wetlands. The project site is located along the main stem of the Big Darby Creek in central Ohio, a stream of exceptionally high quality with a rich and diverse biological community. The project site is located between river miles 25.21 and 24.0 and the stream is in full attainment of its designated exceptional warmwater habitat aquatic life use, but is generally threatened by habitat alteration, hydro-modification, sediments, and excessive nutrients.

The project is consistent with recommendations in the US EPA approved Big Darby Creek TMDL Report. The project will enhance ongoing efforts by the project sponsor to restore a 156 acre parcel formerly used as a quarry operation. The project site will be provided permanent protection as part of the Battelle-Darby Metro Park.

Project Deliverables: Successful completion of this project will result in the following:

- Removal of 280 linear feet of an existing levee, thereby reconnecting the stream to 157 acres of natural floodplain.
- Restoration of 400 linear feet of the Lower Big Darby Creek.

- Restore 35 acres of riparian areas and 1.3 acres of riparian wetlands.
- Plant more than 11 acres of prairie grasses and 25 acres of native hardwood seedlings and shrubs in riparian areas.
- Conduct habitat assessments (QHEI) at 4 monitoring sites within the project area prior to and following completion of the project.
- Conduct 1 public meeting, install 3 signs and include a project specific article in the park newsletter.

Environmental Results: This project will result in the restoration of natural floodplain functions on 157 acres, restore 1.3 acres of naturally occurring riparian wetlands, plant 35 acres of riparian areas in trees & shrubs and restore 400 linear feet of in-stream and near stream habitat along a designated exceptional warmwater habitat stream.

Project Results to Date:

- Completed and submitted QAPP
- Completed final project design and documents
- Restored 300 linear feet of riparian area.
- Restored 2.75 acres of wetlands.
- Modified 1 levee thereby reconnecting more than 2,000 linear feet of floodplain with the Big Darby Creek.
- Planted 15 acres of native species of trees and shrubs in riparian areas. Planted 2.75 acres of native wetland species.
- Conducted 1 public meeting to discuss project plans and design.
- Conducted QHEI sampling at 5 sites within the project site.
- Prepared and distributed 1 newsletter.

NPS Load Reductions Resulting from Project

Pollutant	Load Reduction This Period	Estimated Load Reduction upon Project Completion
Nitrogen	13 pounds/year	13 pounds/year
Phosphorus	11 pounds/year	11 pounds/year
Sediment	1 ton/year	1 ton/year





FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number	#06(h) EPA-35
Project Completion	December 2009
SubGrantee	Five Rivers MetroParks 1375 E. Siebenthaler Avenue Dayton, OH 45414
Project Contact:	Joseph Zimmerman Five Rivers MetroParks 1375 E. Siebenthaler Avenue Dayton, OH 45414
Grant Amount:	\$176,568
Local Match:	\$117,512
Project Title:	Phase 2, Stillwater Low Dam Modification, Stream Restoration and Wetland Enhancement
Project Location:	Montgomery County
Watershed:	Stillwater River

Project Summary: \$176,568 in federal section 319(h) Clean Water Act grant funding was awarded to Five Rivers MetroParks to complete the second in three phases of modifying the 8 foot high impounding dam on the Stillwater River. The existing dam is a 150 foot wide arch dam constructed during the 1920s for flood control.

The project site is located near the outlet of the 673 square mile Stillwater watershed in southwest Ohio. 31.38 of the 32.38 miles of the Stillwater main-stem are in attainment with exceptional warmwater habitat aquatic life uses. The only area of main-stem impairment is the 1 mile impounded by the above-referenced dam.

Project Results to Date: We only recently contracted with this sub-grantee. We anticipate considerable progress will be made and reported during the FFY 2008 Annual NPS Program Report.



FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-36
Project Completion December 2009

SubGrantee **The River Institute**
P.O. Box 1041
Delaware, OH 43015

Project Contact: **Dan Binder, Executive Director**
The River Institute
P.O. Box 1041
Delaware, OH 43015

Grant Amount: **\$280,523**
Local Match: \$187,280

Project Title: **Beetree Run Stream Restoration**

Project Location: Defiance County
Watershed: Beetree Run

Project Summary: \$280,523 in federal section 319(h) Clean Water Act grant funding is awarded to The River Institute to restore a 2,334 linear foot segment of Beetree Run using natural channel design methods. Beetree Run is a 1.68 square mile headwater tributary to the lower Auglaize River in northwestern Ohio. It has historically been channelized for agricultural drainage and is currently on the schedule for county ditch maintenance. Completion of this project will remove the ditch from maintenance and return and restore Beetree Run to a natural functioning stream system.

The current QHEI score is poor (30) and is the result of a silt substrate (versus the natural sand and gravel substrates), long shallow pools, few and poorly defined riffles, narrow to no riparian vegetation, and sparse in-stream fish habitat and cover. The project site will be permanently protected in its natural state via a conservation easement that will be placed on the site.

Project Deliverables:

- Restore 2,334 linear feet of stream using natural channel design that will result in the full restoration of the floodplain, installation and establishment of riffles and pools, and a meandering morphology.
- Restore riparian area by recontouring and planting with 9,540 native trees and shrubs.
- Permanently protecting the project site by acquiring conservation easement on the 5 acre area of restoration.

- Conduct a project specific public education and outreach program.

Environmental Results: Successful completion of this project is expected to restore 15% of the total length of the Beetree Run watershed to attainment with warmwater aquatic life uses and improve QHEI scores to 60 or better.

Project Results to Date:

- Completed and submitted QAPP.
- Completed field assessment and survey work.
- Initiated development of project plans and design.
- Executed design and construction contract.

NPS Load Reductions Resulting from Project

Pollutant	Estimated Loading Reduction
Nitrogen	382 pounds/year
Phosphorus	190 pounds/year
Sediments	190 tons/year





FFY06 Section 319(h) Nonpoint Source Project Summary

Project Number #06(h) EPA-37
Project Completion June 2009

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

Project Contact: Harry Stark, RS, MPA
Cuyahoga County Board of Health
5550 Venture Drive
Parma, Ohio 44130

Grant Amount: \$9,100
Local Match: \$8,500

Project Title: Restoration of Mill Creek at the Highland Park Golf Course

Project Location: Cuyahoga County
Watershed: Mill Creek

Project Summary: \$9,100 in federal section 319(h) Clean Water Act grant funding is awarded to the Cuyahoga County Board of Health to design and install signage along the site of a stream restoration project that was completed under project 06(h) EPA-18. The interpretive signs will provide information on the restoration project and how such restoration efforts improve the overall health of the Mill Creek Watershed.

Under project 06(h) EPA-18 Cuyahoga County Health received funds to restore a headwater segment of Mill Creek running through the Highland Park Golf Course. Shortly after the restoration work was completed the area received minor flood damage. The money that was originally to be used for signage in project 06(h) EPA-18 was needed instead to make the necessary repairs to the damaged area.

Project Deliverables:

- On-site project interpretive signs with photos of phases of construction.

Environmental Benefits: This project will improve the benefits derived from 06(h) EPA-18 by serving to enhance the project's value as a demonstration site. Public awareness of natural stream channel restoration efforts will be increased as a result of the installation of interpretive signs in this highly visible public area.