

# FFY2005 Project Summaries



## Compilation of Results

All Section 319(h) sub grant projects funded under the FFY2005 grant cycle have been completed. As a result, the following results were achieved during the grant period:

- Removed more than 2,200 linear feet of riparian levee thereby reconnecting the Big Darby Creek to more than 200 acres of fully functioning floodplain.
- Removed 3 lowhead dams and restored 8,137 linear feet of natural stream flow and function.
- Stabilized 1,910 linear feet of severely eroding streambank using bioengineering and/or grading and contouring.
- Restored 2,137 linear feet of stream using natural channel design techniques and enhanced in-stream habitat features in more than 240 linear feet of stream.
- Acquired conservation easements on more than 1,532 acres of riparian lands and headwater streams and 34 acres of riparian wetlands.
- Inspected more than 4,200 home sewage treatment systems and replaced 223 failing home sewage treatment systems.
- Conducted 16 public meetings.
- Conducted 58 stream clean-ups.
- Reduced Nonpoint Source Pollutant Loadings by:
  - Nitrogen—11,088 pounds/year
  - Phosphorus—6,203 pounds/year
  - Sediment—2,938 tons/year
  - Untreated Home Sewage—82,500 gallons/day



## FFY05 Nonpoint Source Project Summary

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**Project Number** #05(h) L662  
**Project Completion** September 5, 2008—Grant Closed

**SubGrantee** City of Delaware  
1 South Sandusky Street  
Delaware, OH 43015

**Project Contact:** Doug White  
City of Delaware  
1 South Sandusky Street  
Delaware, OH 43015

**Total Federal Expended:** \$100,000  
**Local Match:** \$ 6,667

**Project Title:** Central Avenue Lowhead Dam Removal

**Project Location:** Delaware County  
**Watershed:** Olentangy River

**Project Summary:** \$100,000 in supplemental federal grant funding was awarded to the city of Delaware to remove a lowhead dam that was approximately 4-5 feet tall and extends 200 feet across the river. The Central Avenue dam was constructed in 1955 as part of an Olentangy River Beautification Program sponsored by the city in 1944. The dam was originally constructed to be part of a park alongside the river that never was completed. Gradients in this segment of the stream are relatively steep—as a result, the resulting dam pool extends for a significant distance. Removal of this dam will reduce sediment loadings as well as increase dissolved oxygen levels and improved habitat conditions within this stream segment. Removal of this dam greatly improved natural stream function and flow. Pre-project monitoring was conducted by Ohio EPA during the summer of 2007. Follow up monitoring will be completed by Ohio EPA during the 2009 sampling season.

The project is being implemented consistent with recommendations that are included in the state endorsed Upper Olentangy River watershed action plan and the Olentangy River TMDL study that was completed and approved by U.S. EPA in September, 2007..

**Final Project Results:** Successful removal of the Central Avenue Dam was completed in June, 2008.

- Removed Central Avenue Lowhead dam and restored 1,200 linear feet of natural stream function and flow.

- Conducted 2 public meetings to inform residents of the project's plans and solicit local input into the process.
- Completed 1 press release highlighting successful completion of the project and conducted on media day event at the project site in conjunction with Ohio EPA.
- Completed required FEMA floodplain and flow modeling.

**Environmental Results:** Successful completion of this project is expected to result in full attainment of warmwater habitat aquatic life uses at immediately upstream from the project site.





## FFY05 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #05(h) EPA-05  
**Project Completion** May 31, 2009

**SubGrantee** ODNR—Division of Natural Areas & Preserves  
2045 Morse Road, building F-1  
Columbus, OH 45331

**Project Contact:** **Bob Gable**  
ODNR—Division of Natural Areas & Preserves  
2045 Morse Road, building F-1  
Columbus, OH 45331

**Grant Amount:** \$284,000  
**Local Match:** \$189,399

**Project Title:** **Kokosing Scenic River Protection Project**  
**Project Location:** Knox County  
**Watershed:** Kokosing River

**Project Summary:** \$284,000 in federal section 319(h) Clean Water Act grant funding was awarded to the Ohio Department of Natural Resources, Division of Natural Areas & Preserves to acquire 189 acres of conservation easements along the Kokosing Scenic River in Knox County. Landowner interest in the project has been limited—as a result the Division anticipates spending only \$100,000 of the original grant award for conservation easements on 4 parcels encompassing approximately 65 acres. The Kokosing River Comprehensive Watershed Plan was completed in April 2004 and fully endorsed by Ohio EPA and ODNR. This project will implement key riparian protective strategies identified within the watershed action plan.

In July 2008 the grant was revised to enable the Scenic Rivers Program to complete watershed management plans for the Mohican River and Mad River watersheds. These watershed plans will be developed in accordance with “A Guide to Developing Local Watershed Action Plans in Ohio” and will meet all the necessary criteria to be state endorsed. The Mohican River is the most recently designated Scenic River in the state, being added to the system in December 2006. The development of a watershed plan for the Mohican River is desirable due to the heavy recreational use by canoeists on this stream and the current lack of a local watershed group. The Mad River is currently under scenic river designation consideration due to its unique coldwater habitat. Watershed planning activities are being coordinated with a local advisory board and are expected to be completed during 2009.



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

- Acquisition of up to 65 acres of conservation easements through the ODNR-Division of Natural Areas & Preserves in strategic areas throughout the Kokosing River watershed.
- Successful development of a watershed action plan for the Mohican Scenic River
- Successful development of a watershed action plan for the Mad River

**Environmental Results:** This project will reduce threats of water quality impairment caused by encroachment and loss of riparian buffer areas along this high quality stream in north-central Ohio. Watershed planning activities will also result in future effective nonpoint source pollution management implementation.

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

- Working in conjunction with the village of Fredericktown, negotiations are underway to acquire a conservation easement on 57 acres of high quality riparian lands along the Kokosing Scenic River.
- Acquired 29.5 acres of conservation easements.
- Conducted four canoe floats—two for public officials within the watershed and two for the general public.
- Initiated watershed planning activities in the Mohican Scenic River watershed. Conducted an organizational meeting with canoe livery operators along the Mohican River.
- Initiated watershed planning activities in the Mad River watershed. Conducted organizational meetings with the joint board that is serving as the Mad River Planning Advisory Committee. Update previous draft of Mad River Watershed Action Plan.



## FFY05 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #05(h) EPA-06  
**Project Completion** March 15, 2008—Grant Closed

**SubGrantee** Columbus & Franklin County Metroparks  
1069 West Main Street  
Westerville, OH 43081-1181

**Project Contact:** John O'Meara  
Columbus & Franklin County Metroparks  
1069 West Main Street  
Westerville, OH 43081-1181

**Grant Amount:** \$230,000  
**Total Federal Expended:** \$221,768

**Project Title:** Darby Creek Levee Removal Project  
**Project Location:** Franklin County  
**Watershed:** Big Darby Creek

**Project Summary:** \$230,000 in federal section 319(h) Clean Water Act grant funding was awarded to the Columbus & Franklin County Metropolitan Park District to remove a levee and restore approximately 2,000 linear feet of stream bank along the Big Darby National & State Scenic River. Franklin County Metroparks recently acquired property along big Darby that was formerly operated as a limestone quarry by Olen Materials, Inc. This project provides funding to remove two levees that are currently causing severe stream bank erosion and other NPS impairments due to the increased flow velocity caused by the levees. In addition to restoring natural stream function and connectivity to the natural floodplain the project also will restore riparian areas using plantings of native species. Implementation of this project is being done consistent with recommendations included in the approved Big Darby TMDL.

**Environmental Results:** This project reduced sediment loadings into Big Darby Creek as well as reconnected the stream to its natural functioning floodplain.

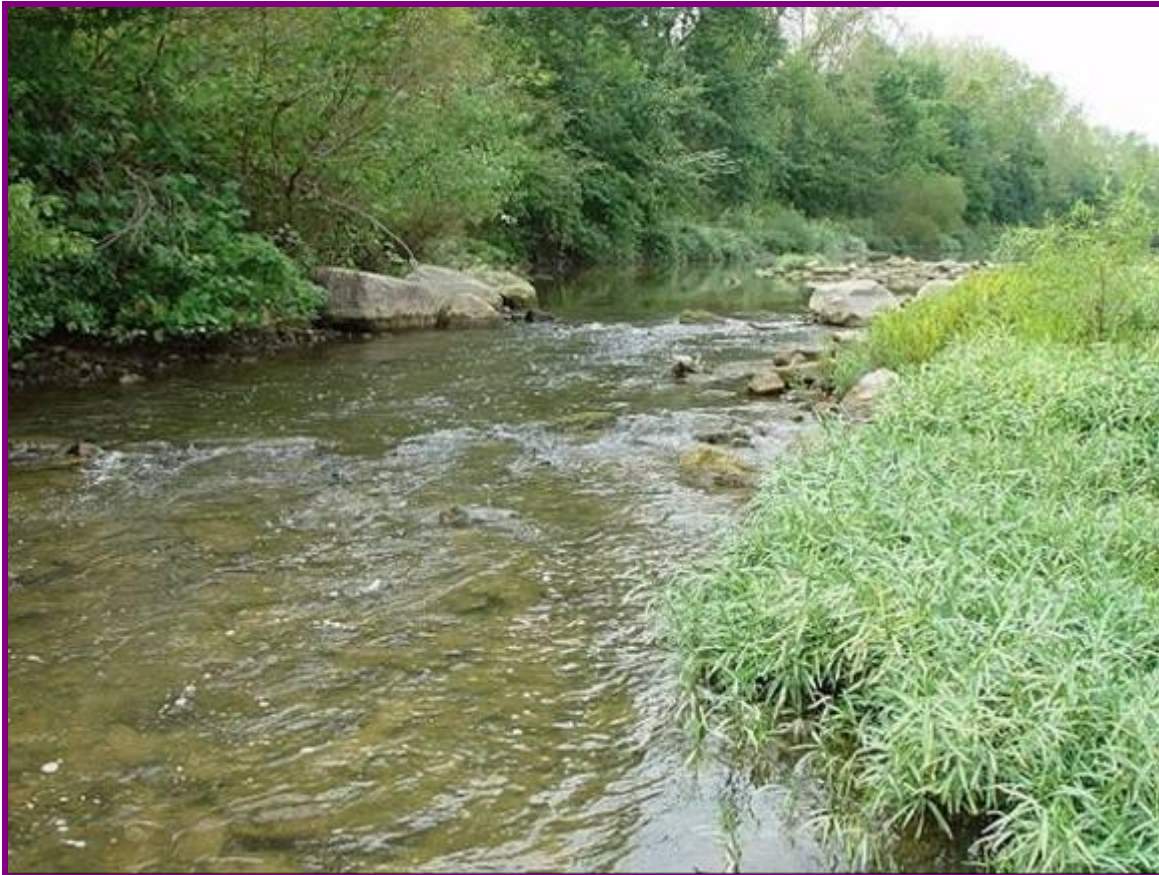
### Final Project Results:

- Completed conceptual engineering analysis and design for the levee removal
- Completed and submitted section 404 permit application to the US Corps of Engineers
- Completed hydrologic modeling of the project area—model concluded that levee removal was a feasible alternative for improving flow and habitat conditions within this segment of the Big Darby Creek

- Biological and water chemistry sampling was completed at 5 sites throughout the project area.
- Conducted 2 public meetings
- Removed 2,200 linear feet of levee and restored 2,200 linear feet of riparian vegetation using native species.
- Stabilized more than 1,000 linear feet of unstable stream bank.
- Installed 4 project signs
- Published 2 newsletter articles about the project

**NPS Load Reductions Resulting from Project**

Pollutant	Total Load Reductions
Sediment	1,680 tons/year





## FFY05 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #05(h) EPA-07  
**Project Completion** Grant Closed November, 2008

**SubGrantee** Delaware General Health District  
1 West Winter Street, P.O. Box 570  
Delaware, OH 43015

**Project Contact:** Susan Sutherland  
Delaware General Health District  
1 West Winter Street, P.O. Box 570  
Delaware, OH 43015

**Grant Amount:** \$110,977  
**Total Federal Expended:** \$ 78,929

**Project Title:** Delaware County Watershed Plan for HSTS NPS Impairments

**Project Location:** Delaware County  
**Watershed:** Olentangy River & Alum Creek

**Project Summary:** \$110,977 in federal section 319(h) Clean Water Act grant funding was awarded to the Delaware County General Health District to conduct a comprehensive project to inventory, inspect and repair or replace all failing discharging home sewage treatment systems within the Olentangy River and Alum Creek watersheds within Delaware County. The Health Department caused the repair and replacement of 126 individual HSTS units. The Olentangy River is designated a state scenic river under Chapter 1517 of the Ohio Revised Code throughout Delaware County. Implementation of this project is consistent with recommendations contained in the state endorsed Lower Olentangy River watershed action plan and the Olentangy River TMDL that was approved in 2007.

**Environmental Results:** This project resulted in the net reduction of 45,360 gallons per day of untreated home sewage from entering the Olentangy River and Alum Creek watersheds.

### Final Project Results:

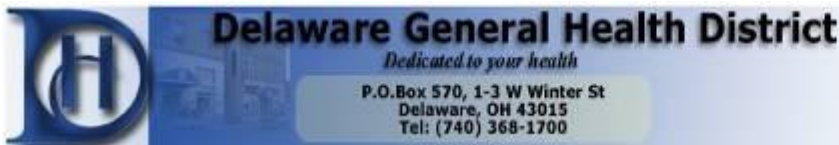
- Completed and submitted a Quality Assurance Project Plan
- Completed pre-project sampling at 5 sites within the project area
- Conducted 26 project specific presentations at local government meetings
- Developed and distributed 3,952 HSTS Operation & Maintenance brochures



- Prepared and distributed 15 project specific news releases
- Conducted 7 landowner workshops on HSTS maintenance
- Repaired and/or Replaced 126 failing HSTS systems.

### NPS Load Reductions Resulting from Project

Pollutant	Estimated Total Load Reductions
Nitrogen	5,463 pounds/year
Phosphorus	2,069 pounds/year
Untreated Home Sewage	45,360 gallons/day





## FFY05 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #05(h) EPA-08  
**Project Completion** Grant Closed—December, 2008

**SubGrantee** Mahoning County SWCD  
490 South Broad Street  
Canfield, OH 44406

**Project Contact:** Kathy Vrable-Bryan  
Mahoning County SWCD  
490 South Broad Street  
Canfield, OH 44406

**Grant Amount:** \$392,600  
**Total Federal Expended:** \$ 92,637

**Project Title:** Mill Creek Improvement Project

**Project Location:** Mahoning County  
**Watershed:** Mill Creek

**Project Summary:** \$392,600 in federal section 319(h) Clean Water Act grant funding was awarded to the Mahoning County Soil & Water Conservation District to implement the Mill Creek Improvement Project. A combination of innovative riparian buffer cost-share activities will be combined with acquiring streamside conservation easements along Mill Creek in northeastern Ohio. Additionally, the sponsor will conduct extensive project-specific public education and outreach activities. Implementation of this project is consistent with provisions of the conditionally endorsed Mill Creek Watershed Action Plan.

**Environmental Results:** Completion of this project protected 50 acres of riparian corridor with conservation easements.

**Project Results to Date:**

- Acquired conservation easements on 50 acres of riparian lands
- Created riparian setback ordinance and trash containment ordinance for use by local governments within the watershed.
- Conducted 76 NPS demonstrations using EnviroScape Model
- Completed riparian management training at 5 sites
- Prepared and distributed 7 newsletters with project-specific information
- Completed 2 riparian buffer workshop for local landscaping firms

- Completed 15 website updates
- Created trash containment ordinance

**Final NPS Load Reductions Resulting from Project**

Load Reduction This Period	Estimated Load Reduction upon Project Completion
Nitrogen	34 pounds/year
Phosphorus	17 pounds/year
Sediment	17 tons/year



## FFY05 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #05(h) EPA-09  
**Project Completion** May 31, 2009

**SubGrantee** OKI Regional Council of Governments  
720 East Pete Rose Way, Suite 420  
Cincinnati, OH 45202

**Project Contact:** Bruce Koehler  
OKI Regional Council of Governments  
720 East Pete Rose Way, Suite 420  
Cincinnati, OH 45202

**Grant Amount:** \$498,010  
**Match Amount:** \$472,600

**Project Title:** Mill Creek Headwaters TMDL Implementation  
**Project Location:** Butler County  
**Watershed:** Mill Creek

**Project Summary:** \$498,010 in federal section 319(h) funding is awarded to the Ohio-Kentucky-Indiana Regional Council of Governments to complete the Mill Creek TMDL Implementation Project. Mill Creek is a severely impaired stream flowing through urban areas of southwestern Ohio before entering the Ohio River. The Mill Creek headwaters project will stabilize eroding stream banks, restore important riparian habitat and restore floodplain functionality by creating 18 acres of pocket wetlands following removal and/or modification of existing riparian levees. The project will also complete water chemistry, macroinvertebrate and habitat monitoring at 20 sites within the project area.

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

- Stabilization of more than 400 linear feet of eroding and currently unstable stream banks
- Restore 3,000 linear feet of riparian habitat using extensive plantings with native plant species
- Restore floodplain connectivity by creating 18 acres of riparian pocket wetlands
- Remove and/or modify 18 acres of levees
- Complete water chemistry, macroinvertebrate and physical habitat assessments at 5 sites within the project area prior to and following completion of the project
- Conduct extensive project specific public education and outreach activities



**Environmental Results:** Completion of this project will restore segments of a this heavily urban and highly impaired stream using stream bank stabilization, levee removal and/or modification and wetland establishment activities.

**Project Results to Date:**

- Completed and submitted Quality Assurance Project Plan
- Conducted pre-construction monitoring activity at 2 sites within project area
- Published 5 project-specific articles in newsletters
- Completed 3 website updates
- Acquired conservation easements on 5 acres of the project site. Received donations of conservation easements on an additional 18 acres where restoration work will be completed.
- Completed all necessary permitting paperwork and submitted to appropriate regulatory agencies.
- Awarded construction contracts.
- Conducted 1 field day
- Restored 390 linear feet of riparian habitat using extensive plantings with native tree and shrub species.
- Planted 2 acres of wetland area with herbaceous species plugs
- Developed and distributed 1 educational CD and 2 project-specific educational brochures

**NPS Load Reductions Resulting from Project**

Pollutant	Final Load Reduction
Nitrogen	1,043 pounds/year
Phosphorus	522 pounds/year
Sediment	454 tons/year

**Project #05(h)EPA-09**  
OKI Regional Council of Governments  
Mill Creek Watershed



**Project #05(h)EPA-09 (continued)**  
 OKI Regional Council of Governments  
 Mill Creek Watershed

**Streambank stabilization project at Beckett Water Quality Basin in May 2009**



Before: This Mill Creek tributary was cutting into a federally funded water quality basin



After: JF New & Associates installed three layers of soil lifts



The streambank stabilization project protected the Beckett Water Quality Basin from an un-named Mill Creek tributary that was cutting into the basin's northern end. A heavy rainstorm in late June 2009 caused the stream to overflow onto the water quality basin, but the recently stabilized streambank held firm.

**The project also posted willow live stakes and eradicated honeysuckle bushes.**



More than half the willows survived



West Chester Township cleared honeysuckle from this spot



OKI cleared honeysuckle from this stream segment





## FFY05 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #05(h) EPA-10  
**Project Completion** Grant Closed October, 2008

**SubGrantee** Western Reserve Land Conservancy  
Post office Box 314  
Novelty, OH 43054

**Project Contact:** Mark Skoronski  
Western Reserve Land Conservancy  
Post office Box 314  
Novelty, OH 43054

**Grant Amount:** \$400,000  
**Total Federal Expended:** \$400,000

**Project Title:** Critical Riparian Habitat and Wetland Preservation  
in the Chagrin River Watershed

**Project Location:** Geauga County  
**Watershed:** Chagrin River

**Project Summary:** \$400,000 in federal section 319 funding was awarded to the Western Reserve Land Conservancy to implement two strategies outlined within the endorsed Chagrin River Watershed Action Plan. This project will acquire conservation easements on and protect critical riparian and wetland habitat within the watershed. Additionally the Chagrin River Watershed Partners will assist local governments with establishing voluntary and/or regulatory based riparian protection programs by developing model riparian set-back ordinances. Project will also conduct extensive project-specific public education and outreach activities.

**Environmental Results:** The project resulted in the protection of more than 1,426 acres of streamside lands by acquiring easements on 87,912 linear feet of riparian lands and 34 acres of connected wetland parcels.

### Final Project Results:

- Acquired conservation easements on 12 properties with riparian lands, protecting more than 1,426 acres along the Chagrin River. Approximately 87,912 linear feet of riparian corridor is protected by these easements as well as 34 acres of high quality wetlands. Details about the protected parcels follow:
  - **Ravencrest Property**—154 acres with 16,000 linear feet of headwater streams and 550 linear feet of Chagrin River frontage. Additionally, 3



acres of wetlands are protected on this property as a result of this easement.

- **Livers Property**—19 acres and 500 linear feet of stream corridor are protected by this easement.
- **Heinen Property**—11 acres and 700 linear feet of headwater stream protected by this easement.
- **Hegarty-Whitney Property**—106 acres including 7,750 linear feet of stream corridor and 0.67 acre of wetlands are protected by this easement.
- **Tulip Knoll Property**—26 acres with 1,200 linear feet of Chagrin River frontage and more than 500 linear feet of headwater stream protected.
- **Salmen Property**—127 acres including 4,450 linear feet of the Chagrin River, 8,600 linear feet of headwater stream and 9.86 acres of wetland areas are protected by this easement.
- **Hillbrook Property**—7 acres including 1,100 linear feet of stream corridor and 0.35 acres of wetlands are protected.
- **Wick Property**—25 acres protecting 958 linear feet of stream corridor and 6 acres of wetlands are protected by this easement.
- **Nash Property**—76.2 acres, including 2,400 LF of the Chagrin River, 24,500 LF of headwaters and approximately 15 acres of wetlands.
- **Warner Nurseries**—75 acres including 4,400 LF of the Chagrin River.
- **Doody Property**—28 acres located within a corridor of protected land along the Chagrin River, including easements on 1,800 LF of streams.
- **Emmons Property**—87 acres including 12,500 linear feet of tributaries to the East Branch of the Chagrin River.



**This project is protecting critical habitat such as the wetlands above left and headwater stream above right. These parcels are part of the Wicks Property Easement described above.**



## FFY05 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #05(h) EPA-11  
**Project Completion** Grant Closed March 2009

**SubGrantee** Miami County Health Department  
510 West Water Street  
Troy, OH 45202

**Project Contact:** Ron Jackson  
Miami County Health Department  
510 West Water Street  
Troy, OH 45202

**Grant Amount:** \$125,000  
**Match Amount:** \$266,880

**Project Title:** Reduction of NPS from Household Sewage Disposal in Miami County

**Project Location:** Miami County  
**Watershed:** Stillwater River

**Project Summary:** \$125,000 in federal section 319(h) funding was awarded to the Miami County Health Department to allow for the successful completion of a comprehensive inventory, inspection and upgrading of failing home sewage treatment systems within areas of Miami County in the Stillwater River watershed. These funds were provided to assist Miami County Health Department in completing work that was initiated under Project #01(h) EPA-24. Upon identification of failing systems homeowners were advised of needed replacement and when qualified, made aware of cost-share funding that was available under this project. The project was implemented consistent with recommendations contained in the approved Stillwater River TMDL and recently endorsed Stillwater River Watershed Action Plan.

### Final Project Results:

- Prepared and distributed one project specific brochure.
- Conducted 4 public meetings.
- Inspected more than 4,261 HSTS systems.
- Repaired or replaced 38 failing HSTS units using cost-share funding.
- Repaired 27 failing aeration systems

**Final NPS Load Reductions**

<b>Pollutant</b>	<b>Final Load Reduction</b>
Nitrogen	1,409 pounds/year
Phosphorus	533 pounds/year
Untreated Home Sewage	11,700 gallons /year



## FFY05 Section 319(h) Nonpoint Source Project Summary

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<b>Project Number</b>	<b>#05(h) EPA-12</b>
<b>Project Completion</b>	<b>Grant Closed February, 2009</b>
<b>SubGrantee</b>	<b>Friends of Alum Creek &amp; Tributaries (FACT)</b> 2820 Watkins Road Columbus, OH 45202
<b>Project Contact:</b>	<b>Kimberly Williams</b> Friends of Alum Creek & Tributaries (FACT) 2820 Watkins Road Columbus, OH 45202
<b>Grant Amount:</b>	<b>\$305,700</b>
<b>Match Amount:</b>	<b>\$203,800</b>
<b>Project Title:</b>	<b>Lower Alum Creek Watershed Action Plan Implementation</b>
<b>Project Location:</b>	Franklin
<b>Watershed:</b>	Alum Creek

**Project Summary:** \$305,700 in federal section 319(h) funding is awarded to the Friends of Alum Creek & Tributaries (FACT) to remove two lowhead dams located in Wolfe and Nelson Park within the Alum Creek Watershed. IN addition to removing the dams and restoring natural stream flow, the project will restore in-stream riffle and pool habitat and reestablish riparian habitat. All work completed by this project will be protected in perpetuity with the acquisition of 6 acres of conservation easements on the restoration sites. Extensive water quality monitoring, morphological assessments, and erosion control during and after dam removal will also be completed.

**Environmental Results:** The project resulted in the removal of two lowhead dams, enhanced in-stream and riparian habitat on more than 4,800 linear feet of Alum Creek.

**Project Results to Date:**

- Completed and submitted Quality Assurance Project Plan
- Completed pre-construction monitoring
- Installed 1 project specific sign kiosk.
- Published and distributed 12 watershed newsletters and 2 brochures
- Completed 35 presentations to local organizations and groups
- Conducted 56 Creek Clean-Ups
- Removed 2 lowhead dams at Wolf Creek and Nelson Parks



- Restored ½ acre of riparian vernal pools
- Stabilized 750 linear feet of eroding stream bank.
- Restored 4,800 linear feet of riparian corridor and planted more than 2,400 linear feet with native vegetation.
- Completed invasive species control measures on 3.5 acres of riparian areas.
- Planted 265 native trees and shrubs in riparian areas.
- Restored 240 linear feet of in-stream habitat features

Pollutant	Total Estimated Load Reductions
Sediment	126 tons/year



The photos show the Wolf Creek Park lowhead dam on the Alum Creek before , during and after demolition and removal.





## FFY05 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #05(h) EPA-13  
**Project Completion** Grant Closed—January, 2009

**SubGrantee** Highland County SWCD  
514 Harry Saunder Road  
Hillsboro, OH 45133

**Project Contact:** Chuck Williams  
Highland County SWCD  
514 Harry Saunder Road  
Hillsboro, OH 45133

**Grant Amount:** \$233,367  
**Total Federal Expended:** \$125,546

**Project Title:** Highland County East Fork Watershed Water Quality Improvement Project

**Project Location:** Highland County  
**Watershed:** East Fork Little Miami River

**Project Summary:** \$233,367 in federal section 319(h) funding is awarded to the Highland County Soil & Water Conservation District to implement a combination of cost-share funding for failing home sewage treatment system replacement, homeowner education, enhanced site development guidelines and general oversight to significantly improve HSTS performance within the watershed. This project will provide cost-share for replacement of up to 24 failing HSTS units and reduce untreated home sewage loadings to the river by 8,640 gallons per day.

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

- Conduct water chemistry monitoring at 8 sites within the project area(s)
- 2 workshops to educate homeowners within the watershed about operation and maintenance of on-site HSTS systems
- Development and distribution of a HSTS brochure
- Repair and/replace 24 failing discharging HSTS units

**Environmental Results:** Completion of this project will reduce untreated home sewage loads to the East Fork of the Little Miami River by 6,480 gallons per day by cost-share assistance to repair and/or replace 18 failing HSTS units.

### Final Project Results:

- Completed and submitted Quality Assurance Project Plan
- Conducted pre-construction monitoring activity at 8 sites within project area
- Conducted 2 homeowner HSTS workshops
- Distributed 2,400 HSTS operation and maintenance brochures to watershed landowners
- Developed and distributed HSTS siting and design guidance document.
- Replaced 18 HSTS units using cost-share funding

#### Final NPS Load Reductions Resulting from Project

Load Reduction This Period	Estimated Load Reduction upon Project Completion
Nitrogen	1,040 pounds/year
Phosphorus	394 pounds/year
Untreated Home Sewage	8,640 gallons /day



## FFY05 Section 319(h) Nonpoint Source Project Summary

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**Project Number** #05(h) EPA-14  
**Project Completion** Grant Closed October, 2008

**SubGrantee** Toledo Metropolitan Area Council of Governments  
300 Martin Luther King Jr. Drive  
Toledo, OH 43602

**Project Contact:** Kurt Erichsen  
Toledo Metropolitan Area Council of Governments  
300 Martin Luther King Jr. Drive  
Toledo, OH 43602

**Grant Amount:** \$389,138  
**Total Federal Expended:** \$389,138

**Project Title:** Portage River Watershed Home Sewage Treatment Systems Replacement Program

**Project Location:** Lucas County  
**Watershed:** Portage River

**Project Summary:** \$389,138 in federal section 319(h) funding was awarded to the Toledo Metropolitan Area Council of Governments to identify and repair or replace failing discharging home sewage treatment systems within the Portage River system. Successful completion of the project will reduce 26,250 gallons per day of untreated home sewage from being discharged into the Portage River. This project is being implemented consistent with completed HSTS Plans identifying critical areas of nutrient and bacterial impairment within the watershed.

**Environmental Results:** Completion of this project reduced untreated home sewage loads to the Portage River by 26,250 gallons per day by cost-share assistance to repair and/or replace 72 conventional and 3 alternative HSTS units.

**Final Project Results:**

- Completed and submitted Quality Assurance Project Plan
- Conducted pre and post construction monitoring activity at 75 sites within project area
- Conducted 2 workshops for septic installers and area contractors
- Completed HSTS care and maintenance information packets for watershed landowners
- Replaced 75 conventional failing HSTS units using cost-share funding



### Final NPS Load Reductions Resulting from Project

Pollutant	Estimated Load Reduction upon Project Completion
Nitrogen	3,161pounds/year
Phosphorus	1,1971 pounds/year
Untreated Home Sewage	26,250 gallons/day



## FFY05 Section 319(h) Nonpoint Source Project Summary

**Project Number** #05(h) EPA-26  
**Project Completion** Grant Closed September, 2009

**SubGrantee** Rivers Institute  
2905 Klondike Road  
Delaware, OH 43015

**Project Contact:** Dan Binder  
Rivers Institute  
2905 Klondike Road  
Delaware, OH 43015

**Grant Amount:** \$166,822  
**Total Federal Expended:** \$163,189

**Project Title:** Liberty Park Stream Restoration, Channel 25

**Project Location:** Summit County  
**Watershed:** Pond Brook

**Project Summary:** \$166,822 in federal section 319(h) funding is awarded to the Rivers Institute, a 501(c)(3) Ohio non-profit organization to restore 2,300 linear feet of a currently entrenched and impaired segment of the Channel 25 headwater tributary to Pond Brook using natural channel design. The proposed project will enhance ongoing efforts by the Summit County Metroparks to restore priority areas in the 1,400 acre Liberty Park. The project site will be permanently protected by conservation easement upon completion of the restoration work.

**Environmental Results:** Completion of this project will restore 2,300 linear feet of seriously impaired stream to warmwater habitat. Additionally, more than 2,000 linear feet of naturally functioning floodplain will be restored as well as reconnecting 30 acres of wetlands to the stream.

### Final Project Results:

- Completed and submitted Quality Assurance Project Plan
- Executed design/build contract
- Developed final project plans and engineering design documents
- Completed all necessary permitting paperwork and submitted to appropriate regulatory agencies.
- Completed wetland delineation report
- Conducted 1 public tour of Liberty Park restoration site.

- Completed all pre-construction monitoring activities.
- Received all permits for the project. Construction began fall, 2008 and was completed in early summer, 2009.
- Restored 2,137 linear feet of stream using natural channel design methods.
- Installed 2 in-stream habitat structures.
- Reconnected 30 acres of wetlands with the stream and restored 2,137 linear feet of functioning floodplain.
- Re-vegetated riparian areas with more than 4,000 native trees and shrubs.
- Acquired conservation easements on 3.16 acres.
- Established project specific web-page on Summit County Metroparks website. For more information please see:  
[www.summitmetroparks.org/NatureInformation/Stream-Restoration.aspx](http://www.summitmetroparks.org/NatureInformation/Stream-Restoration.aspx)

### NPS Load Reductions Resulting from Project

Pollutant	Total Load Reductions
Nitrogen	1,186 pounds/year
Phosphorus	593 pounds/year
Sediment	516 tons/year





## FFY05 Section 319(h) Nonpoint Source Project Summary

<b>Project Number</b>	<b>#05(h) EPA-27</b>
<b>Project Completion</b>	<b>June 30, 2008—Grant Closed Out</b>
<b>SubGrantee</b>	<b>Summit County Environmental Services</b> 2525 State Road Cuyahoga Falls, OH 44223
<b>Project Contact:</b>	<b>Tim Gott</b> Summit County Environmental Services 2525 State Road Cuyahoga Falls, OH 44223
<b>Grant Amount:</b>	<b>\$100,000</b>
<b>Federal Expenditures:</b>	\$100,000
<b>Project Title:</b>	<b>Middle Cuyahoga River Bank Restoration Phase II</b>
<b>Project Location:</b>	Summit County
<b>Watershed:</b>	Cuyahoga River

**Project Summary:** \$100,000 in federal section 319(h) funding was awarded to the Summit County Department of Environmental Services to support needed complete all stream bank restoration work associated with the removal of the Munroe Falls Dam. Under project **#02(h) EPA-14** Summit County received funds to lower the dam by six feet in height. As the project progressed, the sponsors decided to remove the 12-foot dam in its entirety due to the enhanced water quality benefits that would result. This change exposed substantially more river bottom lands that had previously been inundated by the dam pool. As a result, restoration needs were increased—and were unable to be completed by the expiration date of the FFY02 sub-grant agreement. This project is being implemented consistent with the TMDL for the Middle Cuyahoga River that was completed in 1999.

**Environmental Results:** Completion of this project restored 510 linear feet of seriously impaired stream to warmwater habitat. Additionally, more than 2,000 linear feet of naturally functioning floodplain were be restored as well as reconnecting 30 acres of wetlands to the stream.

### **Project Results to Date:**

- Completed 4 press releases highlighting the project
- Completed 5 website updates
- Conducted 1 public meeting
- Conducted 2 volunteer stream clean ups

- Conducted 1 stream restoration workshop.
- Developed and displayed project-specific posters at a River where approximately 500 people attended.
- Developed and published 2 project specific brochures.
- Treated 43 acres of invasive species
- Restored 510 linear feet of streambank by recontouring/regrading.
- Restored 80 linear feet of the floodplain in and around project sites.

### Final NPS Load Reductions Resulting from Project

Pollutant	Estimated Load Reduction upon Project Completion
Nitrogen	1,190 pounds/year
Phosphorus	595 pounds/year
Sediment	595 tons/year



**Photos Before (above left) and after (above right) of severely eroding streambank stabilized by work completed under this grant. Previous 319 funds allowed for restoration of exposed floodplains following removal of the Munroe Falls Dam in 2006.**