

FFY2012 Project Summaries



Compilation of Results

The majority of Section 319(h) sub-grants awarded under the FFY2012 grant cycle are still in the engineering and design phase and have yet to report substantial progress. However, projects funded under the FFY2012 grant cycle have successfully achieved the following thus far:

- Restored 2,195 linear feet of stream channel and restored/stabilized 1,300 linear feet of streambank using bioengineering, recontouring and/or regrading
- Removed/treated 1.6 acres of invasive species
- Planted 5.4 acres of trees/shrubs/livestakes and 2.0 acres of native grasses in riparian areas
- Installed 500 linear feet of limestone channel and reclaimed 0.5 acre of mine pit impoundments
- Installed 5,230 square feet of permeable pavement
- Installed 1,915 square feet of bioretention cells
- Conducted public education/outreach by developing press releases, conducting on-site tours and creating/maintain project-specific websites
- Acquired four (4) conservation easements

Estimated NPS Load Reductions Resulting from Projects

| Pollutant | Estimated Loading Reduction |
|------------|-----------------------------|
| Nitrogen | 6.017 pounds/year |
| Phosphorus | 2,944.6 pounds/year |
| Sediments | 2,671.2 tons/year |
| Acid | 1,478 pounds/year |



FY 2012 Section 319(h) Nonpoint Source Project Summary

Project Number **12(h)EPA-10**

Est. Project Completion December 2015

SubGrantee **City of Wadsworth**
120 Maple Street
Wadsworth, Ohio 44281

Project Contact: **Harry Stark**
City of Wadsworth
120 Maple Street
Wadsworth, Ohio 44281
330-335-2707
hstark@wadsworthcity.org

Federal Amount: **\$134,280**
Local Match: **\$ 36,269**

Project Title: **Southwest Parking Lot Project**

Project Location: Medina County

Watershed: River Styx

Project Summary: \$134,280 in FY 2012 Section 319(h) Nonpoint Source grant funding is recommended to reduce urban runoff with the retrofitting of the existing parking lot at the City of Wadsworth southwest parking lot, located in the heart of downtown Wadsworth, with a combination of traditional pavement, porous pavement, and a water quality best management practice to address a multitude of nonpoint source pollutants. This project is being implemented consistent with recommendations in the Chippewa Creek Balanced Growth Plan and Tuscarawas Total Maximum Daily Load study approved by U.S. EPA in 2009.

Project Deliverables:

- Installation of approximately 4,916 square feet of permeable pavement
- Construction of approximately 1,080 square feet of bio-filtration islands
- Installation of approximately 4,146 square feet of vegetated infiltration areas
- Conduct public education and outreach by developing fact sheets and press releases, conducting public meetings, creating/maintaining a project-specific website, installing project signs and conducting field days

Progress to Date:

- Design approximately 80% complete. Acquired 3 out of the 7 easements to date and currently working on others. One owner lives in North Carolina so trying to work with that person at this time.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to River Styx.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|------------|-----------------------------|
| Nitrogen | 19 pounds/year |
| Phosphorus | 1 pound/year |
| Sediments | 0.65 ton/year |



FY 2012 Section 319(h) Nonpoint Source Project Summary

| | |
|--------------------------------|--|
| Project Number | 12(h)EPA-18 |
| Est. Project Completion | December 31, 2015 |
| SubGrantee | Greene County Park District 575 Ledbetter Road Xenia, Ohio 45385 |
| Project Contact: | Chrisbell Bednar Greene County Park District 575 Ledbetter Road Xenia, Ohio 45385 937-562-6440 cbednar@co.greene.oh.us |
| Federal Amount: | \$226,962 |
| Local Match: | \$ 64,336 |
| Project Title: | Glady Run Stream Restoration & Preservation Project |
| Project Location: | Greene County |
| Watershed: | Glady Run, 050902020504 (direct trib. Of Little Miami River) |

Project Summary: \$226,962 in FY 2012 Section 319(h) Nonpoint Source grant funding is requested to restore and stabilize approximately 3,525 linear feet of stream channel and adjacent riparian zone (30.09 acres) along Glady Run. The project will stabilize and restore the Glady Run stream banks, which are rapidly eroding, especially along an abandoned railroad grade which has been converted to the Little Miami Scenic Trail, by installing rock-toe, replanting native vegetation on the stream banks, installation of erosion controls materials, and installation of live shrub cuttings. In addition to restoration and stabilization activities, the project proposes to protect an additional 39.3 acres of high quality stream, riparian and wetland acres with conservation easements. Implementation of this project is consistent with findings and recommendations in the Upper Little Miami River Total Maximum Daily Load study completed by Ohio EPA and approved by U.S. EPA in 2002.

Project Deliverables:

- Installation of erosion control blankets
- Restoration and stabilization of approximately 3,525 linear feet of streambank using bio-engineering, re-contouring and/or re-grading

- Planting approximately 1.1 acres of native grasses/trees/shrubs and/or live stakes in riparian areas and removal/treatment of invasive species
- Acquire conservation easements for approximately 69.39 acres
- Conduct public education and outreach by developing press releases, creating/maintaining a project-specific website, and installing project sign(s)

Project Results to Date:

- Assessment and design work is slated to begin soon.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Glady Run, a direct tributary of the Little Miami River, by restoring and stabilizing approximately 3,525 linear feet of streambank and planting approximately 1.1 acres of riparian areas with native grasses/trees/shrubs and/or live stakes.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|------------|-----------------------------|
| Nitrogen | 2,043 pounds/year |
| Phosphorus | 1,086 pounds/year |
| Sediments | 705 tons/year |



FY 2012 Section 319(h) Nonpoint Source Project Summary

Project Number **12(h)EPA-19**

Est. Project Completion December 2015

SubGrantee **City of Elyria**
131 Court Street
Elyria, Ohio 44035

Project Contact: **Kathryn McKillips**
City of Elyria
131 Court Street
Elyria, Ohio 44035
440-326-1435
kmckillips@cityofelyria.org

Federal Amount: **\$260,586**
Local Match: **\$ 65,380**

Project Title: **Black River Restoration in Cascade Park**

Project Location: Lorain County

Watershed: Black River

Project Summary: \$260,586 in FY 2012 Section 319(h) Nonpoint Source grant funding is recommended to restore 1,300 linear feet of stream channel and to protect 1.6 acres of forested riparian buffer on the mainstem of the Black River in order to stabilize and restore the stream bank to reduce erosion and its contribution to the sediment load. The project will include the installation of in-stream structure(s) and flow control, stream bank stabilization and bio-engineering, and establishment/enhancement of vegetated riparian buffers. This project is consistent with findings and recommendations within the Black River Total Maximum Daily Load study approved by U.S. EPA in 2008.

Project Deliverables:

- Restore 1,300 linear feet of stream channel
- Restore and stabilize 1,300 linear feet of streambank using bio-engineering, recontouring and/or regarding
- Remove/treat 1.6 acres of invasive species in riparian area
- Plant 1.6 acres of trees, shrubs and/or live stakes in riparian area
- Acquire 1.6 acres of conservation easements

- Conduct public education and outreach by developing press releases, creating/maintaining a project-specific website, and installing project sign(s)

Project Results to Date:

- Restored 1,300 linear feet of stream channel
- Restored and stabilized 1,300 linear feet of streambank using bio-engineering, recontouring and/or regarding
- Removed/treated 1.6 acres of invasive species in riparian area
- Planted 1.6 acres of trees, shrubs and/or live stakes in riparian area
- Planted 2.0 acres of native grasses in riparian area.
- Developed and issued a press release.
- Installed one project sign.
- Posted information on the City’s website. For more information please visit www.cityofelyria.org

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Black River and result in the stabilization and restoration of more than 1,300 linear feet of stream bank.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|------------------|------------------------------------|
| Nitrogen | 1,965 pounds/year |
| Phosphorus | 980 pounds/year |
| Sediments | 1,155 tons/year |



Left descending bank of the Black River in Cascade Park after high water. Massive bank failures are occurring in the park due to shear stresses on the bank that are too much for the thin row of trees to hold.





FY 2012 Section 319(h) Nonpoint Source Project Summary

Project Number **12(h)EPA-20**

Est. Project Completion December 31, 2015

SubGrantee **City of New Franklin**
5611 Manchester Road
New Franklin, Ohio 44319-4200

Project Contact: **Al Bollas**
City of New Franklin
5611 Manchester Road
New Franklin, Ohio 44319-4200
330-882-4324
admin@newfranklin.org

Federal Amount: **\$186,800**
Local Match: **\$ 50,000**

Project Title: **New Franklin Innovative Stormwater Demonstration**

Project Location: Summit County

Watershed: Upper Tuscarawas River

Project Summary: \$186,800 in FY 2012 Section 319(h) Nonpoint Source grant funding is recommended to install multiple stormwater BMPs to demonstrate the value of green infrastructure to the community, contractors and developers at the City Hall. The multiple BMPs are planned as part of a treatment train approach that will include a pervious asphalt parking area with an under drain to a grassy bio-swale followed by a treatment wetland. The wetland will slow and store stormwater to reduce impacts of flooding and riparian erosion and likewise reduce pollutants that would otherwise be directed toward the Portage Lakes system. A rain garden and bio-filtration swale (provided by others) will also drain toward the treatment wetland on City property. This project is consistent with findings and recommendations within the Upper Tuscarawas River Total Maximum Daily Load study completed by Ohio EPA and approved by U.S. EPA in 2009.

Project Deliverables:

- Installation of 0.5 acre of treatment wetland.
- Installation of 13,000 square feet of permeable pavement.
- Installation of 15,000 square feet of vegetated infiltration area (bio-swale)

- Conduct public education and outreach by developing fact sheets, a weblink, newsletters and press releases, hold a public meeting, install project signs and displays, and provide a tour and a workshop.

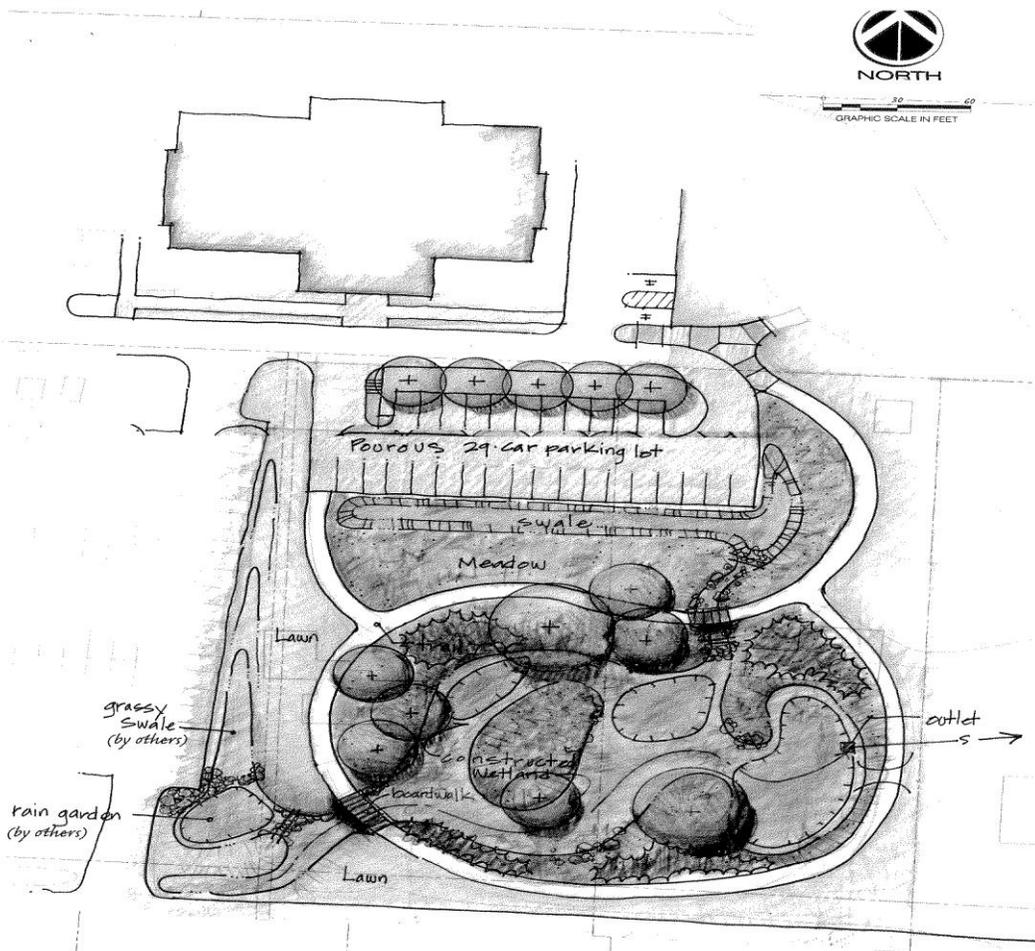
Project Results to Date:

- Final project design expected and site prep work and construction begun.
- In construction.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to the Catalina Ditch and Turkeyfoot Lake and provide an important community education component that highlights importance of ecologically minded development and green infrastructure.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|------------|-----------------------------|
| Nitrogen | 38.5 pounds/year |
| Phosphorus | 15.4 pounds/year |
| Sediments | 3.4 tons/year |





FY 2012 Section 319(h) Nonpoint Source Project Summary

Project Number **12(h)EPA-24**

Est. Project Completion October 29, 2012

SubGrantee **Huff Run Watershed Restoration Partnership**
P.O. Box 55
Mineral City, Ohio 44656

Project Contact **Edward Taggart**
Huff Run Watershed Restoration Partnership
P.O. Box 55
Mineral City, Ohio 44656
(330) 859-1050
edward67@msn.com

Federal Amount: **\$326,900**
Local Match: **\$163,500**

Project Title: **Hilltop Restoration Project**

Project Location: Tuscarawas County

Watershed: Huff Run

Project Summary: \$326,900 in FY 2012 Section 319(h) Nonpoint Source grant funding is recommended to eliminate acid mine water associated with exposure of 10 acres of coal waste gob piles. The 10 acres of coal refuse will be re-graded and covered with one foot of soil that will be borrowed from same site. In addition, a ½ acre impoundment will be dewatered after treatment (increasing pH and removal of iron), and the area re-graded to facilitate positive drainage. A limestone channel will be constructed to further treat site runoff and minimize site erosion from the site to Huff Run, and 15 acres will be treated with lime material. The entire site will be replanted with a mix of legumes and quick-cover annuals. This project is being implemented consistent with recommendations in the state endorsed Huff Run watershed action plan. Huff Run is also one of Ohio EPA's Measure SP-12 Targeted Watersheds.

Project Deliverables:

- Install 600 linear feet of limestone channel
- Reclaim 0.5 acre of mine pit impoundment
- Cover and reclaim 10 acres of mining spoil piles

- Restore positive drainage and replant 15 acres with quick growing vegetation
- Conduct public education and outreach by: developing 3 press releases, developing website, installing an educational sign, writing 3 newsletter articles about the project, conducting 3 tours, and by promoting the watershed and watershed organization at 3 community festivals.

Project Results to Date:

- Installed 500 linear feet of limestone channel
- Reclaimed 0.5 acre of mine pit impoundment
- Covered and reclaimed 10 acres of mining spoil piles
- Restored positive drainage and replanted 11 acres with quick growing vegetation
- Conduct public education and outreach by: developing 1 press release, developing website, writing 1 newsletter articles about the project, conducting 1 tour, and by promoting the watershed and watershed organization at 1 community festivals.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Huff Run by covering 10 acres of acidic coal refuse (gob piles), installing a limestone drainage channel, and by regrading and replanting the site to improve positive drainage, to further treat runoff (i.e., increase pH) and reduce erosion.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|---------------|-----------------------------|
| Metals | 361 pounds/year |
| Acid | 1,478 pounds/year |
| Iron Loadings | 58 pounds/year |



Hilltop Pre-Construction

Hilltop Post-Construction





FY 2012 Section 319(h) Nonpoint Source Project Summary

Project Number **12(h)EPA-27**
Est. Project Completion October 2012
SubGrantee **City of New Albany**
 99 West Main Street
 New Albany, Ohio 43054
Project Contact: **Adrienne Joly**
 City of New Albany
 99 West Main Street
 New Albany, Ohio 43054
 614-855-0076
 ajoly@newalbanyohio.org

Federal Amount: **\$230,885**
Local Match: **\$ 78,115**

Project Title: **Rose Run Stormwater and Riparian Enhancements**
Project Location: Franklin County
Watershed: Rocky Fork Creek

Project Summary: \$230,885 in FY 2012 Section 319(h) Nonpoint Source grant funding is recommended to facilitate storm water improvements at New Albany High School and to restore riparian enhancements along Rose Run (downstream from high school). At the high school, an existing storm water detention basin will be retrofitted into a treatment wetland including varying water elevations and micro pools. The existing stormwater conveyance ditch will be retrofitted into a linear high marsh and function as the initial treatment area, prior to discharge to the larger wetland complex within the pond. This proposed approach will provide two discreet stages of stormwater treatment prior to discharge into Rose Run. The project will also be integrated into New Albany's environmental science curriculum. Riparian enhancements on Rose Run include restoration and stabilization of 291 feet of Rose Run. Bank stabilization will consist of live branch plantings and coir rolls and matting which will replace riprap which is in use currently on the existing meander. This project also includes the removal of invasive species in the riparian area and subsequent restoration of the area with a planting approximately 4 acres native trees and grasses according to a professionally developed riparian planting plan. The project is being implemented consistent with recommendations included in the Big Walnut Creek Total Maximum Daily Load study approved by US EPA in 2005.

Project Deliverables:

- Construct 1 acre of treatment wetland

- Restoration and stabilization of 291 linear feet of streambank
- Installation of 1 sediment and erosion control structure
- Removal of 3.5 acres of invasive plant species in riparian area
- Plant 4 acres of trees and shrubs and 0.5 acre of native grasses in riparian area
- Conduct public outreach by developing a fact sheet, press releases and newsletter articles, and conducting 1 public meeting, 2 presentations and 2 tours, and by installing informational signage.

Project Results to Date:

- Project in planning/design phase.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Rose Run by stabilizing providing sufficient streamside habitat via stream restoration and stabilization and riparian plantings; and by retrofitting the stormwater drainage and detention pond into treatment wetlands.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|------------|-----------------------------|
| Nitrogen | 73 pounds/year |
| Phosphorus | 22 pounds/year |
| Sediments | 6.3 tons/year |





FY 2012 Section 319(h) Nonpoint Source Project Summary

| | |
|---------------------------|---|
| Project Number | 12(h)EPA-28 |
| Project Completion | September 2014 |
| SubGrantee | Columbus & Franklin County Metropolitan Park District 1069 West Main Street Westerville, Ohio 43081-1181 |
| Project Contact: | John O'Meara, Executive Director Columbus & Franklin County Metropolitan Park District 1069 West Main Street Westerville, Ohio 43081-1181 614-891-0700 O'meara@MetroParks.net |
| Federal Amount: | \$308,220 |
| Local Match: | \$108,700 |
| Project Title: | Blacklick Creek Stream Restoration |
| Project Location: | Columbus, Franklin County |
| Watershed: | Blacklick Creek |

Project Summary: \$308,220 in FY 2012 Section 319(h) Nonpoint Source grant funding is recommended to stabilize severely eroding banks and implement significant in-stream habitat improvements along the main-stem of Blacklick Creek between U.S. Route 33 and Winchester Pike. This project will restore natural flow to the permanent channel of Blacklick Creek that is currently impacted due to a breach between Blacklick Creek and an adjacent stormwater detention basin. Approximately 895 linear feet of stream channel will be restored through a combination of natural channel design techniques, including in-stream habitat and grade control features and riparian plantings. Additionally The 23.76 acre area is inside designated parkland that contains the Blacklick Greenway Trail, and will be permanently protected by a conservation easement.

Project Deliverables:

- Restoration of 895 linear feet of stream channel and 4,850 l.f. of natural flow
- Installation of 4 in-stream erosion and sediment control structures
- Installation of 4 in-stream habitat structures and 4 grade structures
- Plant 475 container shrubs and trees and 6,900 bare root shrubs and trees
- Plant 3.8 acres of trees, shrubs and native grasses in riparian area
- Acquisition of 22 acres of conservation easement

- Conduct public outreach by developing a fact sheet, a website, and a press release (Parkscope), an abstract and publication in periodical, installing 2 project signs and 1 educational session

Project Results to Date:

- Restored of 950 linear feet of stream channel and 4,850 l.f. of natural flow
- Installed 4 in-stream erosion and sediment control structures
- Installed 4 in-stream habitat structures and 4 grade structures
- Planted 4 acres of trees, shrubs and native grasses in riparian area
- Currently working on getting conservation easement finalized and recorded.
- Developed one press release, posted information on Metro Parks Facebook page and conducted one educational session.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Blacklick Creek by stabilizing two severely eroded stream banks, and providing sufficient streamside (riparian plantings and bank stabilization and in-stream structures to minimize future problems. Further, this location will be permanently protected by conservation easement.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|------------|-----------------------------|
| Nitrogen | 229 pounds/year |
| Phosphorus | 114 pounds/year |
| Sediments | 114 tons/year |





FY 2012 Section 319(h) Nonpoint Source Project Summary

Project Number **12(h)EPA-33**

Est. Project Completion June 30, 2013

SubGrantee **Metro Parks Serving Summit County**
975 Treaty Line Road
Akron, Ohio 44313

Project Contact: **Michael Johnson**
Metro Parks Serving Summit County
975 Treaty Line Road
Akron, Ohio 44313
330-867-8040
mjohnson@summitmetroparks.org

Federal Amount: **\$326,900**
Local Match: **\$125,000**

Project Title: **Pond Brook Restoration**

Project Location: Summit County

Watershed: Tinkers Creek

Project Summary: \$326,900 in FY 2012 Section 319(h) Nonpoint Source grant funding is recommended to restore 1,150 linear feet of floodplain and stream channel in Pond Brook (which is currently channelized and entrenched through the project length). Natural flow will be restored by reducing stream channel width, and establishing meanders through a restored 120 foot wide floodplain. In-stream habitat will be restored, including coarse sand substrates, root-wads, boulders, and over-hanging vegetation, and significant riparian re-vegetation. Although not the primary goal of the project, some wetlands will be installed in the newly modified floodplain. This project is being implemented consistent with recommendations in the Tinkers Creek TMDL.

Project Deliverables:

- Restoration of 1,150 linear feet of stream channel.
- Restoration of 1,150 linear feet of flood plain.
- Installation of 1,100 tons of stream substrate.
- Plant 475 container shrubs and trees and 6,900 bare root shrubs and trees.
- Remove 5 acres of invasive plant species and replant those 5 acres with native grasses.

- Conduct public education and outreach by developing a fact sheet, a web link, a newsletter and press releases; installing a project sign; and providing tours, a clean-up, field days and workshops.

Project Results to Date:

- Design complete.
- Issued one press release, created a website and conducted 7 tours.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Tinkers Creek from Pond Brook as well as provide additional benefits to water quality in Pond Brook itself. These improvements include natural development of riffle/pool sequences, enhancement of floodplain and riparian connection, and a reduction in thermal impairment.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|------------|-----------------------------|
| Nitrogen | 234 pounds/year |
| Phosphorus | 118 pounds/year |
| Sediments | 118 tons/year |



Pond Brook-proposed restoration length, downstream from previously restored section.



FY 2012 Section 319(h) Nonpoint Source Project Summary

Project Number **12(h)EPA-36**

Est. Project Completion June 2014

SubGrantee **Holden Arboretum**
9500 Sperry Road
Kirtland, Ohio 44094

Project Contact: **Nate Beccue**
Holden Arboretum
9500 Sperry Road
Kirtland, Ohio 44094
440-602-8002
nbeccue@holdenarb.org

Federal Amount: **\$163,450**
Local Match: **\$ 88,878**

Project Title: **East Branch Chagrin River Stream Restoration Project**

Project Location: Geauga County

Watershed: East Branch Chagrin River, Unnamed Trib

Project Summary: \$163,450 in FY 2012 Section 319(h) Nonpoint Source grant funding is recommended to remove 385 linear feet of levee and stabilize the stream bank along the East Branch of the Chagrin River (a State Scenic River) and to restore 330 linear feet of an adjacent unnamed tributary and 3.5 acres of floodplain. The East Branch will be stabilized using bio-engineering principles such as dormant willow posting, root wads and branch layering, while the unnamed headwater tributary restoration will include a meandering stream channel that has connectivity to an ecologically appropriate floodplain of appropriate width and elevation and a riparian corridor plantings. This project is being implemented consistent with recommendations in the State-endorsed Chagrin River watershed action plan.

Project Deliverables:

- Removal of 385 linear feet of levee.
- Restoration and stabilization of 715 linear feet of streambank by regrading and bio-engineering.
- Restore natural flow to 330 linear feet of stream channel and adjacent floodplain.
- Restore natural floodplain on 3 acres
- Plant 3.5 acres of trees and shrubs in riparian area.

- Conduct public outreach by developing a fact sheet, websites, press releases, CRWP Board meeting, and a public meeting; and by conducting 2 tours and writing 2 newsletter articles.

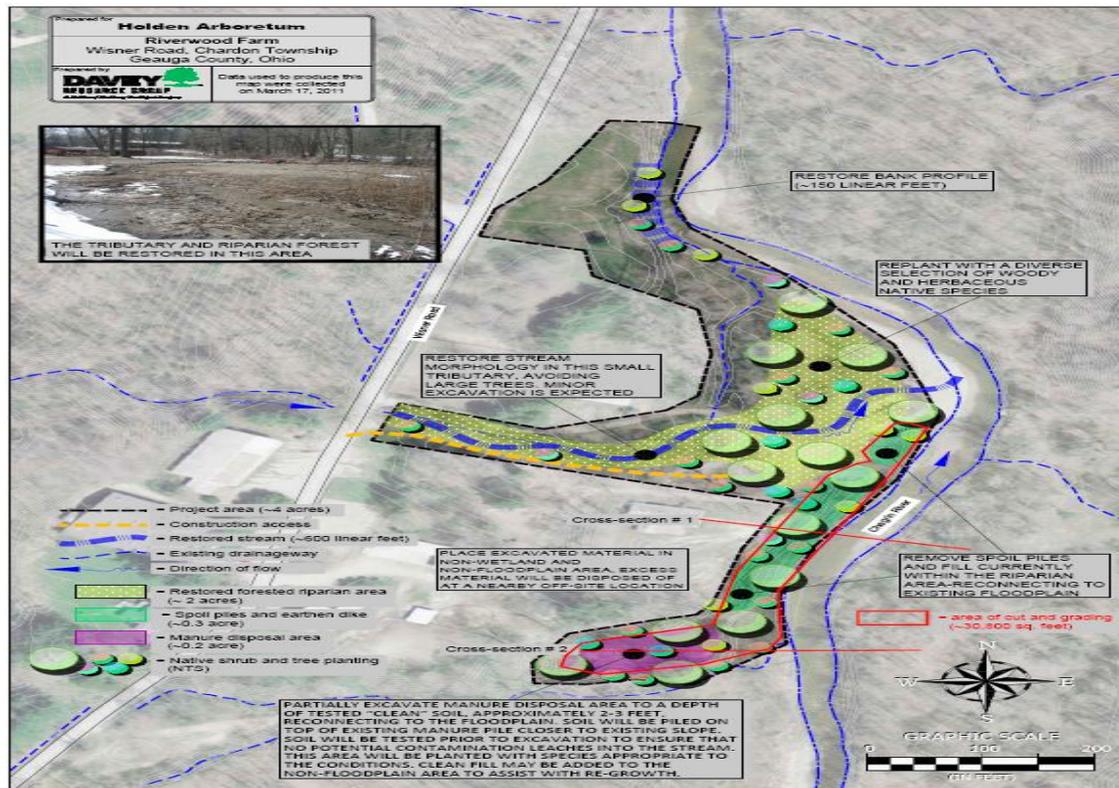
Project Results to Date:

- Published RFP for design and construction.
- Created project website. For more information please visit: http://crwp.org/Projects/holden_riverwood_stream_resto.htm
- Project design complete. Project advertised as design build.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to the East Branch of the Chagrin River by stabilizing providing sufficient streamside via levee removal and riparian plantings; and restoring a channelized headwater tributary using natural channel principles along with reconnection with a forested floodplain.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|------------|-----------------------------|
| Nitrogen | 42 pounds/year |
| Phosphorus | 21 pounds/year |
| Sediments | 24 tons/year |





FY 2012 Section 319(h) Nonpoint Source Project Summary

| | |
|--------------------------------|--|
| Project Number | 12(h)EPA-37 |
| Est. Project Completion | December 31, 2014 |
| SubGrantee | Franklin Soil & Water Conservation District 1404 Goodale Blvd. #100 Columbus, Ohio 43212 |
| Project Contact: | Kurt Keljo Franklin Soil & Water Conservation District 1404 Goodale Blvd. #100 Columbus, Ohio 43212 614-486-9613 kkeljo@franklinswcd.org |
| Federal Amount: | \$56,458 |
| Local Match: | \$37,682 |
| Project Title: | Crawford Farms Park Stormwater Treatment Wetland Design & Retrofit |
| Project Location: | Franklin County |
| Watershed: | Headwaters Blacklick Creek |

Project Summary: \$56,458 in FY 2012 Section 319(h) Nonpoint Source grant funding is requested to retrofit an existing dry stormwater basin to create a demonstration, stormwater treatment wetland complex in order to treat the stormwater runoff, and decrease the rate and volume of runoff discharge, thereby reducing pollutant input to and erosion in the receiving stream by constructing a 1-acre stormwater treatment wetlands using a passive treatment train system and installing 20,000 square feet of vegetated infiltration area. This project is being implemented consistent with the recommendations in the state-endorsed Headwaters Blacklick Creek Watershed Action Plan. It is also generally consistent with findings and recommendations within the Big Walnut Creek Total Maximum Daily Load study completed by Ohio EPA and approved by U.S. EPA in 2005.

Project Deliverables:

- Install one passive treatment train system
- Construct 1 acre of stormwater treatment wetlands
- Install 20,000 square feet of vegetated infiltration areas

Conduct public education and outreach by developing fact sheets, press releases and newsletters, conducting public meetings, creating/maintaining a project-specific website, installing project signs, and conducting tours and workshops

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Headwaters Blacklick Creek and will decrease the rate and volume of runoff discharge.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|------------------|------------------------------------|
| Nitrogen | 573 pounds/year |
| Phosphorus | 190 pounds/year |
| Sediments | 77 tons/year |



FY 2012 Section 319(h) Nonpoint Source Project Summary

Project Number **12(h)EPA-38**
Project Completion November 2013

SubGrantee **Ruffing Montessori School**
 3380 Fairmount Blvd
 Cleveland Heights, Ohio 44118

Project Contact: **Debra Mitchell**
 Ruffing Montessori School
 3380 Fairmount Blvd
 Cleveland Heights, Ohio 44118
 216-321-7571
 debram@ruffingmontessori.net

Federal Amount: **\$217,283**
Local Match: **\$144,855**

Project Title: **Ruffing Stormwater Learning Lab**
Project Location: Cuyahoga County
Watershed: Doan Brook Frontal Lake Erie

Project Summary: \$217,283 in FY 2012 Section 319(h) Nonpoint Source grant funding is requested to incorporate sustainable stormwater management technologies and integrate the study of those technologies into a learning lab. The project will include: construction of bioretention cells and interactive interpretive elements; installation of permeable pavement; daylighting of the front roof gutter into the bioretention cells; and diversion of the other roof runoff into cisterns with hand pumps which will be used for classroom gardens.

Project Deliverables:

- Install 5,230 square feet of permeable pavement
- Install one rainwater harvesting/reuse system. Roof runoff from another area will be directed into an underground cistern. The cistern will be accessed by a hand-pump, enabling students to use the rain water in the classroom gardens.
- Install 1,915 square feet of bioretention cells to capture, hold and clean the stormwater runoff before it is directed into the storm sewer.
- Daylight the downspout located adjacent to the main building entry. Stormwater will hit a splash-pad, travel through a trench drain in the sidewalk, under the driveway and into the first bioretention cell.
- Install observation wells in the permeable pavement to allow students to observe and measure water quality and quantity levels, and compare them to runoff from traditional

pavement. The bioretention cells will have a series of monitoring wells that will be set at different elevations within the cell.

- Conduct public education and outreach by developing fact sheets and press releases, creating/maintaining a project-specific website, installing project signs and displays, and conducting tours and workshops, and conduct public meetings.

Environmental Results: Successful completion of this project will reduce nonpoint source pollutant loadings to Doan Brook Frontal Lake Erie and incorporate sustainable stormwater management technologies and integrate the study of those technologies into a learning lab.

NPS Load Reductions Resulting from Project

| Pollutant | Estimated Loading Reduction |
|------------|-----------------------------|
| Nitrogen | 6 pounds/year |
| Phosphorus | 0 pounds/year |
| Sediments | 0.42 tons/year |





FY 2012 Section 319(h) Nonpoint Source Project Summary

Project Number #12 EPA-WRRSP
Est. Project Completion April 30, 2015

SubGrantee **Columbus Public Utilities Department**
910 Dublin Road
Columbus, Ohio 43215

Project Contact: **Michael Griffith**
Columbus Public Utilities Department
910 Dublin Road
Columbus, Ohio 43215
614-645-2416
mpgriffith@columbus.gov

Federal Amount: \$ 0
Local Match: \$1,256,671

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

Project Location: Franklin County
Watershed: Lower Olentangy River

Project Summary: \$1,256,671 in Ohio EPA Water Resources Restoration Sponsorship Program (WRRSP) funding is recommended to assist the City of Columbus with efforts to remove the 5th Avenue Dam on the Olentangy River. Removal of the 5th Avenue Dam has been recommended numerous times in a variety of documents and reports. The impounded area behind this dam is noted in the Olentangy TMDL as one of the most biologically impaired segments of the lower Olentangy. This project will facilitate riparian restoration and installation of in-stream habitat and grade structures designed to stabilize the streambanks and stream channel and to prevent head cutting following dam removal. The project is being supported with extensive outreach and public involvement due to the high profile nature of the project location. This project is being implemented consistent with the recommendations in the state-endorsed Lower Olentangy River Watershed Action Plan. It is also consistent with findings and recommendations within the Lower Olentangy River Total Maximum Daily Load study completed by Ohio EPA and approved by U.S. EPA in 2007. This component of the project is being funded wholly by state funds—as such, this amount will be declared as match to the Ohio FY12 Section 319 grant.

Project Deliverables:

- Removal of one (1) dam.
- In-stream channel and riparian area restoration of 10,560 linear feet of riparian areas including plantings and grading as needed. In-stream restoration will include the installation of grade structures and habitat features as needed to eliminate headcutting and other instability that may occur.
- Disposal of 6,350 cubic yards of dam debris.
- Public outreach including a video, website link, signage, fact sheet, tours, newsletters, a survey and project signage.

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



Olentangy River at 5th Avenue Dam.