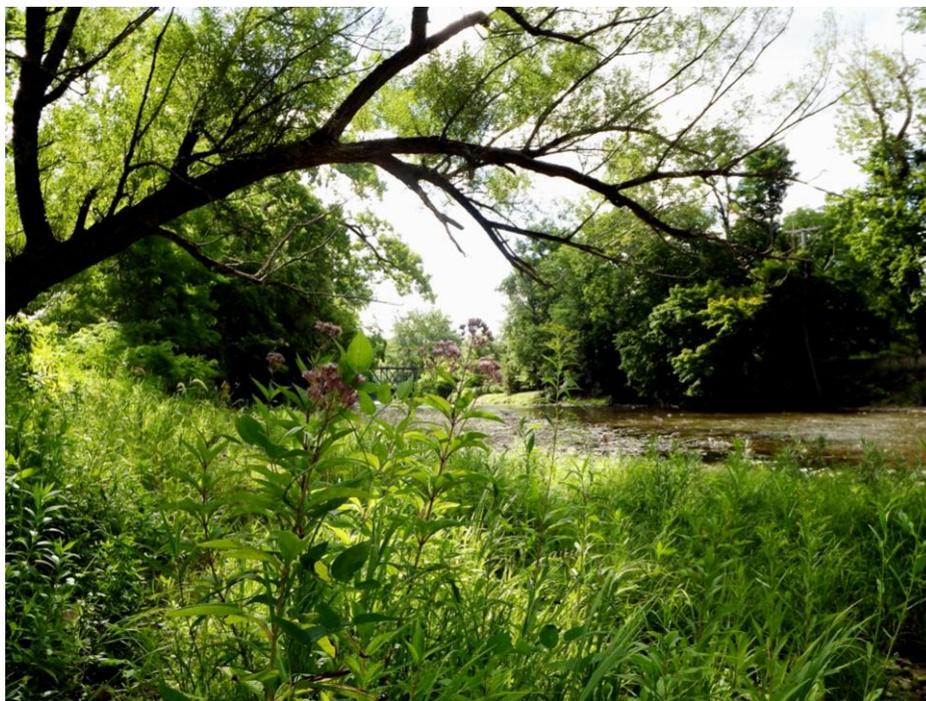


*State of Ohio  
Environmental Protection Agency*

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## **2010 Cuyahoga County GLRI/SWIF Grant FY12 Annual Report**



*Chagrin Scenic River-Village of Gates Mills  
Project #10SWIF-CUY-067  
Cover Photo by R. W. Gibson*

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**September 13, 2012**

Nonpoint Source Program  
Russ Gibson, NPS Manager

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## FY12 Annual Progress Report Cuyahoga County Surface Water Improvement Fund Grant Project

**Grant or IA Number: GL-00E00395-0**

**Reporting Period: October 1<sup>st</sup>, 2011 through September 30<sup>th</sup>, 2012**

**Project Manager: Russell Gibson, Ohio Environmental Protection Agency**

Ohio EPA's Nonpoint Source Program staff was successful in obtaining a 2010 grant from US EPA's Great Lakes Program Office under provisions of the Great Lakes Restoration Initiative. Using \$1.5 million in Surface Water Improvement Fund money as a matching share, Ohio's GLRI grant for 2010 was \$1 million in federal funding. Funds were for stormwater demonstration projects and other nonpoint source management activities within Cuyahoga County in northeast Ohio. 13 projects were able to be funded with subgrants with an aggregate total exceeding \$2.2 million.

Following is the most up-to-date listing of project status for the Cuyahoga County SWIF grant funded projects and the amount funding that has been drawn down for each.

Project #	Subgrant Sponsor/Recipient	Status	Amount Awarded	Invoiced to Date
10GLRI-CUY-039	City of Cleveland Dept. of Public Utilities	Complete	\$260,157	\$260,157
10GLRI-CUY-068	Village of Hunting Valley	Complete	\$137,500	\$0
<del>10GLRI-CUY-075</del>	<del>ParkWorks (Terminated due to lack of progress)</del>	<del>N/A</del>	<del>\$0</del>	<del>\$0</del>
10GLRI-CUY-123	Cuyahoga County SWCD	Ongoing	\$147,270	\$45,484
10GLRI-CUY-082	Village of Glenwillow	Complete	\$63,050	\$63,046
10SWIF-CUY-027	City of Broadview Heights	Complete	\$219,727	\$212,786
10SWIF-CUY-34	City of Mayfield Heights	Complete	\$231,900	\$217,300
10SWIF-CUY-047	Nature Center at Shaker Lakes	Complete	\$78,664	\$61,689
10SWIF-CUY-049	City of North Olmsted	Complete	\$196,028	\$196,028
10SWIF-CUY-061	Cleveland Metroparks Zoo	Complete	\$181,000	\$181,000
10SWIF-CUY-067	Village of Gates Mills	Complete	\$87,525	\$4,895
10SWIF-CUY-083	City of Seven Hills	Complete	\$265,530	\$250,173
10SWIF-CUY-102	City of Cleveland Heights	Complete	\$238,726	\$231,583
<del>10SWIF-CUY-042</del>	<del>City of Brecksville (terminated by sponsor)</del>	<del>N/A</del>	<del>\$0</del>	<del>\$0</del>
10GLRI-CUY-073	City of North Olmsted-Supplemental Project	Ongoing	\$161,659	\$0
<b>Total Subgrant Amount Awarded</b>			<b>\$2,268,736</b>	<b>\$1,724,141</b>

During the reporting period Ohio EPA continued to implement provisions of federal grant number #GL-00E00395 and continued to monitor, manage and administer subgrants awarded under this grant. Detailed project summaries for all FY10 Cuyahoga County being implemented under provisions of this grant are available at <http://www.epa.state.oh.us/dsw/nps/swif.aspx> and fact sheets for completed GLRI-SWIF projects are included in later sections of this report.

Other GLRI-SWIF project specific activities conducted by NPS Program staff during the reporting period include:

- Ohio EPA continued to successfully administer subgrant agreements that were awarded under this grant during previous reporting periods. Currently there are six (6) subgrants that are active. To date, nine projects (9) have been completed and closed out, including four projects that were closed out during this reporting period.



Surface Water Improvement Fund (SWIF) grants are excellent tools to help local governments solve water quality problems caused by nonpoint source pollution. This previously severely eroded stream bank on the Chagrin State Scenic River in the village of Hunting Valley was stabilized using funding under project #10GLRI-CUY-068.

Vegetated “rip-rap” and other bioengineering methods will reduce sediment and nutrient loadings to the Chagrin River as well as prevent further degradation of the riparian area.

- Prepared and executed one additional FY2010 SWIF GLRI Cuyahoga County grant work plan, grant agreement and other supporting documents necessary to re-program previously unspent FY10 SWIF grant funds. Ohio NPS Program Staff terminated Project #10GLRI-CUY-075 the Land Studio (formerly ParkWorks) due to lack of progress. The unspent funds from this project were re-programmed to city of North Olmsted to enhance stormwater demonstration practices that they are implementing on city facilities.
- The third semi-annual report for GL-00E00395 was completed and submitted to US EPA on 4/15/12. All necessary data updates were completed in the GLNPO-GLAS database by Grants Administrator Martha Spurbeck.
- NPS Program Staff completed site visits with the following subgrant recipients during the reporting period. These site visits included:
  - Village of Hunting Valley #10GLRI-CUY-068
  - ParkWorks #10GLRI-CUY075 (Project terminated by OEPA)
  - Cleveland Metroparks Zoo #10SWIF-CUY-061
  - Village of Gates Mills #10WIF-CUY-067
  - City of Cleveland Heights #10SWIF-CUY-102
  - City of Mayfield Heights #10SWIF-CUY-034
  - City of Seven Hills #10SWIF-CUY-083
  - City of Broadview Heights #10SWIF-CUY-027
  - City of North Olmsted #10GLRI-CUY-173
  - Village of Glenwillow #10GLRI-CUY-082

Ohio Environmental Protection Agency  
 Cuyahoga County SWIF-GLRI Grants  
**Subgrants Closed Out during FFY 2012**

Project Number	Project Sponsor	Total SWIF Amount Awarded	Total SWIF Expenditures	% Spent	Date Closed
#10GLRI-CUY-039	City of Cleveland	\$260,157	\$260,157	100%	06/20/11
#10SWIF-CUY-083	City of Seven Hills	\$256,530	\$250,173	97.5%	09/30/11
#10SWIF-CUY-049	City of North Olmsted	\$196,028	\$196,028	100%	07/05/12
#10SWIF-CUY-061	Cleveland Metroparks	\$181,000	\$181,000	100%	08/23/12
#10SWIF-CUY-102	City of Cleveland Heights	\$238,726	\$231,583	97%	05/15/12
<b>TOTALS</b>		<b>\$1,100,925</b>	<b>\$1,055,605</b>	<b>95.8%</b>	



This large vegetated bioswale at the Cleveland Metroparks Zoo will passively treat stormwater runoff from a very large impervious parking area. This feature demonstrates that green infrastructure can be effective and attractive. This project was completed by Cleveland Metroparks under GLRI-SWIF project #10SWIF-CUY-061.

- FY10 GLRI-SWIF project summaries have been updated to include most recent information provided in semi-annual progress reports. Where applicable, photographs have been included to update and document progress.

- On 10/5/11 Ohio EPA's NPS Program hosted Region 5 Water Director Tinka Hyde, Assistant Director Tim Henry, and National NPS Expert Tom Davenport for tours of completed GLRI-SWIF innovative stormwater demonstration projects. Host sponsor communities included the city of Cleveland Heights, Mayfield Heights, Seven Hills and North Olmsted.
- On 2/27/12 Ohio EPA's NPS Program hosted a green stormwater BMP tour with staff from the Ohio State Parks, ODNR Chief Engineer's Office, and representatives from the Buckeye Lake for Tomorrow nonprofit organization. We visited GLRI-SWIF project sites in Glenwillow, Mayfield Heights, Cleveland Heights as well as a FY10 Section 319 project site in the village of Mayfield. We also visited a statewide SWIF project site at Bath Township in Summit County. Participants were enthusiastic and local hosts were highly effective at conveying their project's attributes and challenges. Amy Holtshouse Brennan from the Chagrin River Watershed Partners served as a most enthusiastic and helpful local tour guide.
- All required updates to the GLAS database system were completed by Ohio EPA grants staff. As of our most recent entry all project files within GLAS are complete and up to date.



Region 5 Water Director Tinka Hyde, North Olmsted Mayor Kevin Kennedy and Ohio EPA Surface Water Chief George Elmaraghy discuss features of the project completed under GLRI-

### **FY2012 Cuyahoga County GLRI-SWIF Grant Project**

In response to the highly successful FY10 GLRI-SWIF Cuyahoga County projects, Ohio EPA released a Cuyahoga County SWIF Request for Proposal (RFP) on 1/09/12. Applications were due on 3/31/12 and in response to this RFP Ohio EPA received 23 project proposals requesting more than \$2.9 million in grant assistance. Ohio EPA currently has about \$1.4 million in Surface Water Improvement Funds available for Cuyahoga County project grants. However, we have again applied for FY12 GLRI funds to enhance this program as we did in FY10. We are currently awaiting the results of the FY12 GLRI process.

We received notice on 9/12/12 that we were successful and will be receiving FY12 GLRI funding to enable Ohio EPA to enhance and continue the Cuyahoga County Surface Water Improvement Fund Grants Project. As a result of this additional funding, more than \$2 million will be available to provide grant funding assistance to each of the projects listed in the table below:

Ohio Environmental Protection Agency  
**FY12 RECOMMENDED Cuyahoga County GLRI-SWIF Grant Projects**

Project Number	Project Sponsor	Type of Project	Total GLRI- SWIF Amount Recommended
#12SWIF-CUY-02	City of South Euclid	Stormwater Demonstration	\$166,015
#12SWIF-CUY-03	Orange Village	Stormwater Demonstration	\$162,270
#12SWIF-CUY-07	Moreland Hills	Stream Restoration	\$144,500
#12SWIF-CUY-08	Cleveland Metroparks	Stormwater Demonstration	\$85,000
#12SWIF-CUY-09	City of Parma	Stormwater Demonstration	\$149,164
#12SWIF-CUY-16	City of Lakewood	Stormwater Demonstration	\$150,000
#12SWIF-CUY-17	Olmsted Township	Stormwater Demonstration	\$45,807
#12SWIF-CUY-18	Village of Pepper Pike	Stormwater Demonstration	\$84,354
#12SWIF-CUY-19	City of Independence	Stormwater Demonstration	\$72,850
#12SWIF-CUY-20	Village of Brooklyn Heights	Stormwater Demonstration	\$84,300
#12SWIF-CUY-22	City of Westlake	Stormwater Demonstration	\$200,000
#12SWIF-CUY-23	Chagrin Falls	Stormwater Demonstration	\$73,000
#12GLRI-CUY-06	Ursulines College	Stream Restoration	\$100,810
#12GLRI-CUY-10	City of Euclid	Stormwater Demonstration	\$122,000
#12GLRI-CUY-11	Village of Glenwillow	Stormwater Demonstration	\$53,358
#12GLRI-CUY-14	City of Rocky River	Stormwater Demonstration	\$170,354
#12GLRI-CUY-21	City of Richmond Heights	Stormwater Demonstration	\$187,500
<b>TOTALS</b>			<b>\$2,051,282</b>

- NPS Program Manager prepared an FY12 GLRI-SWIF application for Cuyahoga County GLRI-SWIF project. This application was prepared following receipt of applications for the FY12 Cuyahoga County GLRI-SWIF project and submitted to US EPA GLNPO through the Grants.gov website on 05/23/12.
- Russ Gibson also prepared an FY12 GLRI-SWIF application for a special Lucas County Stormwater Demonstration Project. This project was prepared following receipt of project concept proposals and submitted to the US EPA GLNPO through the Grants.gov website on 5/23/12. Should we be successful with this grant, we will be implementing a project similar to the Cuyahoga County GLRI-SWIF in Toledo and throughout the general Lucas county area.
- Russ Gibson and Martha Spurbeck conducted a Cuyahoga GLRI-SWIF Information Session at the Ohio EPA Northeast District Office in Twinsburg Ohio on 2/9/12. 68 participants from a number of local municipalities, park districts and others attended.
- Revised and prepared application review administrative and technical criteria for reviewing and scoring the Cuyahoga SWIF applications. Of the 23 proposals, we are able to provide

grant funding for 17 of the applicants (if we are successful receiving FY12 GLRI funding) or 12 applicants if we are not successful with FY12 GLRI funding.

- Prepared seventeen 2012 Cuyahoga County GLRI-SWIF grant work plans, grant agreements and other supporting documents with project funding totaling \$2,051,282.



Innovation, information and affordable solutions characterize the stormwater demonstration projects funded under provisions of the FY10 Cuyahoga County GLRI-SWIF Grant Project. From left to right above: bio-retention rain garden in Gates Mills, educational sign in Broadview Heights and pervious pavers and bio-retention areas at North Olmsted City Hall. The photo below features the city of Mayfield Heights City Service Center Rain Garden.



Included on the following pages are one-page project fact sheets for each of the FY10 GLRI-SWIF subgrant funded projects that have been completed. For the two projects that are still ongoing, two page project summaries are included that described what will be completed as a result of those projects. Additional information may be found at the Ohio Environmental Protection Agency's-Division of Surface Water website at: [www.epa.oh.gov](http://www.epa.oh.gov).

# FY10 GLRI-SWIF Funded Project Fact Sheets



Environmental  
Protection Agency



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# #10GLRI-CUY-39

## Cleveland WPC Stormwater Mgmt. Improvements

### Project Sponsor

City of Cleveland  
Surface Water Improvement  
\$260,158 SWIF-GLRI Funds

### Local Project Contact

Rachid Zoghaib  
City of Cleveland  
12302 Kirby Avenue  
Cleveland, OH 44108

### Environmental Results

Installed more than 7,700 sq.  
ft. of pervious asphalt  
Installed 3,020 sq. ft. of  
pervious concrete  
Constructed 650 sq. ft. of  
vegetated bioswale  
Installed 2 rain gardens  
totaling 960 sq. ft  
Constructed 5,000 gallon  
rainwater reuse station



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# #10GLRI-CUY-82

## Village of Glenwillow Green Infrastructure Demonstration Project

### Project Sponsor

Village of Glenwillow  
Surface Water Improvement  
\$63,050 GLRI-SWIF Funds

### Local Project Contact

Katherine Holmok  
Village of Glenwillow  
29555 Pettibone Road  
Glenwillow, OH 44139

### Environmental Results

Installed more than 1000  
square feet of vegetated bio-  
filtration islands in village  
owned parking areas

Restored ¼ acre of riparian  
area along Tinkers Creek via  
native plantings and live  
stakes



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614-644-2020





# #10SWIF-CUY-034

## Mayfield Heights Green Infrastructure Demonstration

### Project Sponsor

City of Mayfield Heights  
Surface Water Improvement  
\$231,900 SWIF Funds

### Local Project Contact

David McCallops, City Engineer  
City of Mayfield Heights  
6154 Mayfield Road  
Mayfield Heights, OH 44124

### Environmental Results

2,215 ft<sup>2</sup> of pervious concrete parking bays were installed at city hall visitor parking areas.

415 ft<sup>2</sup> of community scale rain garden demonstrations installed in front of city hall.

1,475 ft<sup>2</sup> of vegetated and shaded island bio-swales were installed in conjunction with 1,620 ft<sup>2</sup> pervious pavement strip in service garage area.



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614-644-2020



# #10SWIF-CUY-047

## Shaker Lakes Wetland Restoration

### Project Sponsor

Nature Center at Shaker Lakes  
Surface Water Improvement  
\$78,664 SWIF & GLRI Funds

### Local Project Contact

Kay Carlson  
Nature Center at Shaker Lakes  
2600 South Park Blvd.  
Cleveland, OH 44120

### Environmental Results

Removed invasive species  
(narrow leaf cattail) from 5 acres  
of wetland areas.

Replanted native trees, shrubs  
and other wetland plant species.

Recruited and mobilized 75  
volunteers providing more than  
2,000 hours of labor planting  
native wetland plant species and  
removing non-native invasives.



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Nonpoint Source Program  
614-644-2020



# #10SWIF-CUY-049

## North Olmsted City Hall Parking Lot Stormwater Demonstration Project

### Project Sponsor

City of North Olmsted  
GLRI/SWIF Funding  
\$196,028 SWIF Funds

### Local Project Contact

Kimberly Wegner, City Planner  
City of North Olmsted  
5200 Dover Center Road  
North Olmsted, OH 44070

### Environmental Results

6700 ft<sup>2</sup> of pervious pavement parking bays were installed at city hall visitor parking areas.

1281 ft<sup>2</sup> of vegetated and shaded island bio-swales were installed.

Displays, project specific signage were installed and project website completed.



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Nonpoint Source Program  
614-644-2020



# #10SWIF-CUY-083

## Project R.A.I.N. at City Hall

### Project Sponsor

City of Seven Hills  
Surface Water Improvement  
\$256,530 SWIF Funds

### Local Project Contact

Mark Papke, City Engineer  
City of Seven Hills  
7325 Summitview Drive  
Seven Hills, OH 44131

### Environmental Results

Nearly 1,800 square feet of permeable pavers were installed at city hall.

More than 5,600 square feet of bio-retention cells were installed and a rain collection (cistern) system that will be used for irrigation.

Install a project sign highlighting the project and SWIF grant as a funding source



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Nonpoint Source Program  
614-644-2020



# #10SWIF-CUY-102

## Cumberland Park Parking Lot Retrofit

### Project Sponsor

City of Cleveland Heights  
Surface Water Improvement  
\$232,074 SWIF & GLRI Funds

### Local Project Contact

Richard Wong, Planning Director  
City of Cleveland Heights  
40 Severance Circle  
Cleveland Heights, OH 44118

### Environmental Results

Installed 250 ft<sup>2</sup> of permeable  
pavers and reduced impervious  
areas by 13,700 ft<sup>2</sup>

Redesigned drainage and installed  
nearly 6,000 ft<sup>2</sup> of bio-filtration  
islands.

The city conducted a  
comprehensive education and  
outreach program including 3 signs,  
a project specific website and field  
days with area high school nature  
study program.



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**#10SWIF-GLRI-CUY-068**

## **Green Stabilization of Riparian Areas along the Chagrin River**

### **Project Sponsor**

Village of Hunting Valley  
Surface Water Improvement  
\$137,500 SWIF & GLRI Funds

### **Local Project Contact**

Don Cunningham  
Village of Hunting Valley  
38251 Fairmount Boulevard  
Chagrin Falls, OH 44022

### **Environmental Results**

**Stabilized and restored 400 linear feet of severely eroding streambank using vegetative rip-rap practices.**

**Restored 3/10ths of an acre of riparian areas with native species plantings including trees and shrubs**

**Conducted project specific education and outreach activities**



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**#10SWIF-CUY-067**

## **Village of Gates Mills Stormwater Retrofit Demonstration Project**

### **Project Sponsor**

Village of Gates Mills  
Surface Water Improvement  
\$87,525 SWIF & GLRI Funds

### **Local Project Contact**

Dave Biggert  
Village of Gates Mills

### **Environmental Results**

Installed approximately 1000  
square feet of community scale rain  
garden

Restored 3/10ths of an acre of  
riparian areas with native species  
plantings including trees and shrubs

Conducted project specific  
education and outreach activities



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# #10SWIF-CUY-061

## Cleveland Metroparks Zoo Stormwater Project

### Project Sponsor

Cleveland Metroparks Zoo  
Surface Water Improvement  
\$181,000 SWIF Funds

### Local Project Contact

James Kastelic  
Cleveland Metroparks System  
4101 Fulton Pike way  
Cleveland, OH 44144

### Environmental Results

Installed 720 linear feet of  
diversion channel along the  
north and south edges of  
Cleveland Zoo main parking  
areas.

Installed 7400 square feet  
passive treatment system

Install a project sign  
highlighting the project and  
GLRI SWIF grant as a funding  
source



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