Ohio EPA Program Summary

Nonpoint Source Program

FY2014 Annual Report

Clear Fork of the Mohican River

Photo by Russ Gibson

John Kasich, Governor
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FY14 Nonpoint Source Management Program
Ohio Environmental Protection Agency
Division of Surface Water

Introduction: The framework guiding Ohio's Nonpoint Source (NPS) Program is the recently updated NPS Management Plan that was approved by US EPA in June 2014. Provisions of the updated plan effectively guide Ohio's implementation of state and local NPS management measures and activities through 2019. Ohio's updated NPS Management Plan may be found by visiting: **http://epa.ohio.gov/Portals/35/nps/NPS_Mgmt_Plan.pdf**.

In Ohio, the four (4) most common NPS causes of water quality impairment are hydromodification, habitat alteration, nutrients and silt/sediments. Ohio's updated plan tackles these high magnitude causes of impairment with cause-specific strategies. These four discrete strategies include:

- **Urban Sediment and Nutrient Reduction Strategies**
- **Altered Stream and Habitat Restoration Strategies**
- **NPS Reduction Strategies**
- **High Quality Waters Protection Strategies**

These strategies include goals which are further refined to include objectives and milestones designed to provide meaningful evaluation points as well as more finely honed focus for program activities. An important tool for focusing limited resources on a problem as ubiquitous as NPS pollution is the establishment of measurable milestones—those specific achievements and/or deliverables that we are striving to attain. Like a long journey, each success starts with first one step then another and another until we are able to look back and see not only from where we've been but also more clearly identify measurable improvements.

Progress toward achieving the environmental measures of Ohio's NPS Program will continue to be part of Ohio's NPS Monitoring and Assessment Initiative. During each of the past five (5) years, Ohio EPA staff conducted all monitoring (physical, chemical, and biological), beginning with baseline monitoring through project completion to determine the effectiveness of Section 319(h) grant and Surface Water Improvement Fund (SWIF) funded NPS projects. This initiative not only provides cost savings and improved data quality, but also relieves grant recipients of a task which was often difficult for them to do properly. This initiative also serves as a very important tool for measuring the environmental effectiveness of Ohio's NPS Management Program. Are NPS-funded projects improving water quality or not? For example, one environmental program measure that Ohio EPA will be using is the number of SP-12 watersheds that have shown improvement during the reporting period.

In addition to the above referenced environmental measures, Ohio's NPS Program also tracks a variety of administrative Measures that are designed to measure the effectiveness of Ohio's NPS Program administration and management including:

1. Timeliness and quality of report submittals to US EPA
2. Timeliness of federal fund obligation with state program partners and sub-grantees
3. Grantee interest and competition – to be measured by:
   - Number of applicants per grant cycle
   - Number of projects completed on time

4. Federal Grants Administration
    - Submittal of draft subgrant work plans to Region 5 US EPA
    - Timely submittal of Section 319(h) grant application and annual work plan
    - Percentage of grant funds expended effectively
    - Grant Reporting and Tracking System (GRTS) data entry status
    - Timely drawdown of federal funds
5. Participation at all required meetings, conferences and other events outlined in the Programmatic Conditions section of Ohio's grant agreement with US EPA.
6. Ohio EPA Core Programming will comply with FY2012 National Program Guidelines.

Grants Management and Administration: During FY14 Ohio EPA received $4,615,000 in federal Section 319(h) grant funds under provisions of US EPA Grant # C9-97550014 to implement components of Ohio's updated NPS Management Plan. Ohio EPA's Division of Surface Water provides primary coordination and implementation of Ohio's NPS program with assistance from the Ohio Department of Natural Resources and others. Under provisions of the program guidance, at least 50% of these funds ($2,307,500) are to be awarded as subgrants to provide critical funding for local NPS implementation projects.

To date, Ohio EPA has awarded $1,898,323 (or 41.1%) of its FY14 allocation. FY14subgrant allocations would have totaled 49.8% however we elected to use unspent FY10 funds for a shovel-ready restoration project that was submitted during the FY14 Section 319(h) grant cycle by the Downtown Columbus Development Corporation. Construction activity on this project (#10(h)EPA-26S) started immediately upon receiving funds. Accelerating implementation of this important restoration project in downtown Columbus allowed Ohio EPA to earmark $409,177 of unobligated FY14 grant funds for subgrants to local partners to implement regional watershed assistance centers. We are currently in the process of preparing the Request for Proposals for these projects and expect to award these subgrants during the winter and/or early spring of 2015. Doing so will insure that Ohio meets its 50% obligation as required under the guidance.

Perhaps the most critical component of Ohio's NPS program is the effective management of the subgrants awarded each year by Ohio EPA to local implementers. At any given time, Ohio EPA's NPS program is administering approximately 150 Section 319(h) and/or SWIF subgrant funded projects totaling more than $15 million. For example, during this reporting period, NPS and Lake Erie Program staff administered five (5) Section 319(h) program grants, one (1) supplemental 319(h) grant, five (5) Great Lakes Restoration Initiative (GLRI) grants, and 97 SWIF subgrants and 55 Section 319(h) subgrants.

Wetland areas such as this one in the city of Delaware, Ohio act as important passive treatment areas for stormwater runoff.

All grant management activities are designed to insure compliance with all state and federal grant guidelines and conditions as well as aligning all NPS grant funding (regardless of source) with implementation of TMDLs, endorsed 9-element watershed action plans, and other watershed restoration

plans such as Remedial Action Plans (RAPs), Acid Mine Drainage Abatement and Treatment Plans (AMDAT). All NPS program subgrants are aligned to insure that implementation of Ohio's NPS Management and Lake Erie Programs are having the maximum effect in reducing impairments to Ohio's streams from NPS pollution.

- In response to the FY14 Section 319(h) Requests for Proposals (RFP), Ohio EPA received 26 grant applications requesting nearly $4 million. Ohio NPS and other program staff participated in the review of these applications and we were fortunate to be able to provide funding to the 15 highest scoring and well defined projects. A table identifying successful FY14 subgrantees follows:

Table 1-1
Ohio EPA FY14 Section 319(h) Subgrants Awarded during FFY 2014

Project Number	Project Sponsor	Watershed	Type of Project	Awarded
14(h)EPA-06	City of Springfield	Buck Creek	Stormwater Demo	$ 100,000
14(h)EPA-10	City of Delaware Public Utilities Dept.	Olentangy River	Riparian Restoration	$ 186,534
14(h)EPA-12	City of Stow	Lower Cuyahoga River	Stream Restoration	$ 248,787
14(h)EPA-13	City of Lancaster	Baldwin Run	Riparian Restoration	$ 125,000
14(h)EPA-14	Rural Action, Inc.	Monday Creek	Acid Mine Drainage	$ 99,270
14(h)EPA-18	Village of Reminderville	Tinkers Creek	Stream Restoration	$ 59,820
14(h)EPA-19	Madison Village	Arcola Creek	Stream Restoration	$ 95,107
14(h)EPA-20	City of Huron	Huron River	Stream Restoration	$ 53,820
14(h)EPA-23	Liberty Township	Olentangy River	Streambank Stabilization	$ 24,000
14(h)EPA-24	Ottawa SWCD	Portage River	Agricultural BMPs	$ 146,325
14(h)EPA-25	City of Solon	Tinkers Creek	Stream Restoration	$ 105,660
14(h)EPA-26	Cleveland Metroparks	Chagrin River	Stream Restoration	$ 144,000
14(h)EPA-27	City of Rocky River	Rocky River	Stormwater Demo	$ 126,000
14(h)EPA-28	City of Broadview Heights	Chippewa Creek	Stormwater Demo	$ 300,000
14(h)EPA-30	City of Fairview Park	Rocky River	Stormwater Demo	$ 84,000
14(h)EPA-31	Mill Creek Council of Governments	Mill Creek – Ohio River	Regional Watershed Ctr.	$ 299,905
			Total Federal 319(h) Implementation Funds Awarded	$ 2,198,228

Clean Water Act Section 319(h) Grants:

The cornerstone of Ohio's NPS Program is the administration and implementation of the Section 319(h) grants administered by Ohio EPA's NPS Program. During the reporting period of October 1, 2013 through September 30, 2014, Ohio EPA administered sub-grants awarded under provisions of six different Section 319(h) grants awarded to Ohio EPA by US EPA. Following is a list of active Section 319(h) grants that were active during this reporting period:

- FY09 Federal Grant #C9975500009—Grant closes 12/31/14
- FY10 Federal Grant #C9975500010—Grant closes 4/15/15
- FY11 Federal Grant #C9975500011—Grant closes 6/15/15
- FY12 Federal Grant #C9975500012—Grant closes 10/15/16
- FY13 Federal Grant #C9975500013—Grant closes 06/30/16
- FY14 Federal Grant #C9975500014—Grant closes 06/30/17

Ohio EPA received $4,615,000 in FY14 Section 319(h) grant funds under provisions of US EPA Grant # C9-97550014 to implement components of Ohio's updated NPS Management Plan. A summary of activities completed during the reporting period follows:

- Ohio EPA's NPS Program is currently managing 55 active Section 319(h) subgrants under provisions of the six different 319(h) grants listed above. Active subgrants under each of the above are listed below:
  - FY09 Federal Grant #C9975500009 1 funded project currently active
  - FY10 Federal Grant #C9975500010 3 funded projects currently active
  - FY11 Federal Grant #C9975500011 7 funded projects currently active
  - BUCK11 Federal Grant #C900E00782 1 funded project currently active
  - FY12 Federal Grant #C9975500012 10 funded projects currently active
  - FY13 Federal Grant #C9975500013 18 funded projects currently active
  - FY14 Federal Grant #C9975500014 15 funded projects currently active

- NPS Grants staff continues to close-out Section 319(h) subgrants in a timely manner. The following table identifies those 319(h) subgrants that were closed out during the reporting period:

Table 1-2
Section 319(h) **Subgrants Closed Out during FFY 2014**

Project	Sponsor	Federal Awarded	Federal Expenditures	% Spent	Date Closed
09(h)EPA-19	City of Reynoldsburg	$ 133,009	$ 133,009	100%	12/31/2013
09(h)EPA-20	University of Toledo	$ 220,952	$ 220,952	100%	3/31/2014
09(h)EPA-21	Olander Park System	$ 185,112	$ 100,781	54%	10/31/2013
09(h)EPA-22	Mill Creek MetroParks	$ 55,353	$ 55,353	100%	11/30/2013
09(h)EPA-29	OSU Chadwick Arboretum	$ 102,930	$ 102,930	100%	6/30/2014
09(h)EPA-30S	Akron Zoo	$ 71,293	$ 71,293	100%	4/30/2014
09(h)EPA-31S	Lake County Stormwater Mgmt. Dept.	$ 100,000	$ 100,000	100%	7/31/2014
10(h)EPA-11	Ohio University	$ 393,875	$ 393,875	100%	1/31/2014
10(h)EPA-14	City of Mason	$ 258,000	$ 258,000	100%	4/30/2014
10(h)EPA-17	City of Akron	$ 400,000	$ 400,000	100%	1/31/2014
10(h)EPA-18	West Creek Preservation Committee	$ 394,000	$ 394,000	100%	8/31/2014
10(h)EPA-21	City of Pickerington	$ 139,537	$ 139,537	100%	1/31/2014
10(h)EPA-26S	Columbus Downtown Development Corp	$ 300,000	$ 300,000	100%	8/31/2014
11(h)EPA-07	Bath Township Trustees	$ 57,536	$ 57,536	100%	8/31/2014
11(h)EPA-14	City of Aurora	$ 478,075	$ 478,075	100%	2/28/2014
11(h)EPA-18	City of Columbus	$ 498,933	$ 498,933	100%	9/15/2014
11(h)EPA-20	Westerville Parks & Recreation	$ 131,328	$ 123,400	94%	12/31/2013

Project	Sponsor	Federal Awarded	Federal Expenditures	% Spent	Date Closed
11(h)EPA-35S	Village of Brooklyn Heights	$ 18,452	$ 18,452	100%	9/15/2014
12(h)EPA-22	TMACOG - **Discontinued**	$ 80,741	$ 12,568	16%	12/31/2013
12(h)EPA-28	Columbus & Franklin County MetroParks	$ 308,220	$ 308,220	100%	8/31/2014
12(h)EPA-38	Ruffing Montessori School	$ 217,283	$ 217,283	100%	11/30/2013
13(h)EPA-12	City of Barberton – **TERMINATED**	$ 112,500	$ 0	0%	4/30/2014
TOTALS		**$4,657,129**	**$4,384,197**	**89%**	

- During the reporting period NPS Program staff conducted site visits for projects for the following Section 319(h) subgrantees:

  - 09(h)EPA-13: City of Marysville
  - 09(h)EPA-20: University of Toledo
  - 09(h)EPA-27: Liberty Township
  - 09(h)EPA-29: Ohio State University-Chadwick Arboretum
  - 09(h)EPA-30: Akron Zoo
  - 10(h)EPA-20: Mercer County Commissioners
  - 10(h)EPA-22S: City of Ravenna
  - 10(h)EPA-24S: Holden Arboretum
  - 10(h)EPA-26S: Columbus Downtown Development Corporation
  - 11(h)EPA-07: Bath Township Trustees
  - 11(h)EPA-12: City of Toledo
  - 11(h)EPA-11: City of Aurora
  - 11(h)EPA-18: City of Columbus
  - 11(h)EPA-21: Toledo Botanical Garden
  - 11(h)EPA-31: Medina County Park District
  - 11(h)EPA-33S: City of Pepper Pike
  - 11(h)EPA-34S: City of Reynoldsburg
  - 11(h)EPA-35S: Village of Brooklyn Heights
  - BUCK11-01: ODNR-Buckeye Lake State Park
  - BUCK11-02: Buckeye Lake for Tomorrow
  - BUCK11-03: Fairfield County SWCD
  - BUCK11-04: Village of Buckeye Lake
  - 12(h)EPA-10: City of Wadsworth
  - 12(h)EPA-19: City of Elyria
  - 12(h)EPA-20: Village of New Franklin
  - 12(h)EPA-27: City of New Albany
  - 12(h)EPA-28: Columbus and Franklin County Metroparks
  - 12(h)EPA-31: Medina County Park District
  - 12(h)EPA-36: Holden Arboretum
  - 12(h)EPA-37: Franklin County SWCD
  - 12(h)EPA-38: Ruffing Montessori School

- 13(h) EPA-14: Waterloo Neighborhood-NE Shores Development Corp.
- 13(h)EPA-20: Mercer County Commissioners
- 13(h)EPA-22: Mill Creek Watershed Council of Governments
- 14(h)EPA-23: Liberty Township

- Pollutant load reductions for all Section 319(h) subgrant projects were calculated and updated in the national grants tracking system "GRTS." Please refer to tables 2-1 through 2-11 for updated load reductions.
- NPS Program and Division of Surface Water Fiscal staff reviewed and processed 75 Section 319(h) subgrant payment requests, 255 quarterly financial status reports, and 80 subgrant semi-annual technical reports (SATRs) from six different grant cycles. Breakdown follows:

Table 1-3
Ohio EPA Section 319(h) Subgrant Administrative Activity

	FY2009 Sec 319 C9975500009	FY2010 Sec 319 C9975500010	FY2011 Sec 319 C9975500011	FY2012 Sec 319 C9975500012	FY2013 Sec 319 C9975500013	BUCK-11 C9-00E00782-0
Payment Requests	10	14	18	17	7	12
Quarterly FSR's	12	22	44	32	36	9
SATRs	6	11	20	21	18	4

Stabilizing seriously eroded stream banks along urban streams is a valuable tool for reducing sediment loadings and improving urban stream quality. This project along Blacklick Creek was completed by Franklin County Metroparks under provisions of project 12(h)EPA-25.

- FY15 Section 319(h) RFP, grant application forms, program guidelines and grant review score sheets and criteria were updated and revised. The RFP was released on May 23, 2014 with applications due July 25, 2014. In response to the RFP, Ohio EPA received 28 applications requesting more than $5.2 million. Grant applications were submitted and received from the following entities:

- 17 local government organizations
- 6 soil & water conservation districts
- 1 park district
- 4 nonprofit conservation groups

- FY15 Section 319(h) subgrant applications were submitted to restore 10 stream sites and one (1) wetland area; install 11 innovative stormwater demonstration projects; conduct five (5) targeted agricultural BMP projects; and one (1) inland lake management project.

- Ohio EPA NPS Program staff completed their review and evaluations of submitted proposals. Recommended applications were forwarded to US EPA Region 5 NPS staff for federal review and concurrence in December 2014.

- During the reporting period NPS Program grant staff Jo Hodanbosi and Martha Spurbeck prepared contract language, deliverable sheets and budgets and executed grant contracts for eight (8) FY13 Lake Erie Watershed and 15 FY14 Section 319(h) subgrants.

Supplemental Section 319(h) Grants

- Following consultation with US EPA Region 5, Ohio EPA elected to use previously unspent FY13 Section 319(h) subgrant funds to accelerate funding to eight (8) NPS and stormwater projects in the Lake Erie Watershed that were submitted under the FY14 SWIF grant cycle. These projects met all of the required elements for funding under Section 319(h).

Table 1-4
Supplemental FY13 Lake Erie Watershed Subgrants

Project	Sponsor	Watershed	Type of Project	Grant Amount
13(h)EPA-LEW-09	City of South Euclid	Euclid Creek	Stormwater BMPs	$144,665
13(h)EPA-LEW-10	City of Vermillion	Rocky River	Stormwater BMPs	$80,828
13(h)EPA-LEW-11	Village of Orwell	Upper Grand River	Stormwater BMPs	$41,500
13(h)EPA-LEW-12	Village of Richfield	Furnace Run	Stormwater BMPs	$150,000
13(h)EPA-LEW-13	City of Fairview Park	Rocky River	Stormwater BMPs	$66,600
13(h)EPA-LEW-14	Toledo Area Metroparks	Maumee River	Stormwater BMPs	$98,258
13(h)EPA-LEW-15	Olander Park System	Ten Mile Creek	Stream Restoration	$145,760
13(h)EPA-LEW-16	City of Macedonia	Brandywine Creek	Stormwater BMPs	$28,040
				$755,651

Statewide Surface Water Improvement Fund (SWIF) Grants Program

Ohio's SWIF was established in 2009 and codified in the Ohio Revised Code in 2012. The SWIF program is an important enhancement to Ohio's NPS program by greatly expanding the number of projects being implemented by providing several million dollars of NPS project funding above Ohio's Section 319(h) annual program allotment. Since 2010, Ohio EPA has issued three cycles of statewide SWIF grants in 2010, 2012 and most recently in July, 2014. 129 individual SWIF grants totaling more than $12 million have been awarded to 121 different local organizations implementing projects in 61 watersheds throughout Ohio.

Nearly $8 million (65%) of SWIF funds were awarded to implement green stormwater management demonstration projects. Eighteen percent (18%) of SWIF funds ($2.2 million) were awarded to conduct local stream restoration projects, and the remaining 17% of SWIF grants were awarded for wetland restoration, nutrient reduction and other NPS projects. Ohio EPA also has successfully used SWIF funding to leverage an additional $2.8 million in federal Great Lakes Restoration Initiative (GLRI) funding for projects in Cuyahoga and Lucas counties.

Ohio EPA's NPS Program is currently managing 40 active SWIF subgrants under provisions of four (4) different SWIF grant cycles. Active subgrants under each of the above are listed below:

- FY12 Statewide SWIF Grants — 6 funded projects currently active
- FY14 Statewide SWIF Grants — 9 funded projects currently active
- FY15 Statewide SWIF Grants — 10 funded projects currently active
- FY14 Lake Erie Watershed SWIF — 7 funded projects currently active
- FY15 Lake Erie Watershed SWIF — 8 funded projects currently active

Ohio EPA's SWIF program is designed to insure that all projects are consistent with recommendations in Ohio's updated NPS Management Plan, approved Total Maximum Daily Load Studies, and state endorsed 9-element watershed action plans. Eligibility, application procedures and grant administration requirements are identical to Ohio's Section 319(h) subgrant process. This consistency insures efficiency and provides enhanced clarity to NPS project implementers.

Single site stream restoration and/or daylighting projects such as this small stream in Forest Park are ideal candidates for SWIF funding. This project was completed under provisions of project #12SWIF39.

SWIF-funded grant projects tend to be single-site projects and include a wide array of innovative stormwater management practices, stream and wetland restoration, inland lake management and other activities. As referenced above, the bulk of SWIF grants are awarded to Ohio municipalities, counties and/or townships and villages. Most SWIF funded projects (65%) are innovative stormwater management demonstration projects including rain gardens, pervious pavements, stormwater wetland treatment areas, biofiltration areas and green roofs. About 18% of SWIF projects are for stream restoration and/or streambank stabilization activities.

SWIF funding is derived from contributions, donations, and supplemental environmental project funds as well as fee in lieu funding for non-jurisdictional wetland impacts. One hundred percent (100%) of SWIF funding is used for local subgrants—Ohio EPA receives no administrative costs from the SWIF.

2012 SWIF Grants: Ohio EPA's NPS Program is currently completing work on the FY12 SWIF grant cycle, which was the second round since the program's inception in 2010. During this cycle, 16 statewide SWIF projects were selected from the 63 applications received. Six (6) of these projects remain active and the other 11 have been completed and the grants closed out.

Table 2-1 lists the 2012 SWIF Statewide grants and their status as of September 30, 2014:

Table 2-1
FY12 STATEWIDE Surface Water Improvement (SWIF) Grants

Project Number	Project Sponsor	Type of Project	Total SWIF Awarded	Grant Status
12SWIF-05	City of Springfield	Stormwater Demonstration	$ 15,000	Project Complete
12SWIF-06	Village of Boston Heights	Stormwater Demonstration	$ 78,900	Project Complete
12SWIF-09	Clermont County Park District	Wetland Restoration	$ 85,800	Active
12SWIF-10	City of Cuyahoga Falls	Stormwater Demonstration	$ 89,897	Project Complete
12SWIF-11	City of Greenville	Stormwater Demonstration	$ 11,830	Project Complete
12SWIF-12	City of Gahanna	Stormwater Demonstration	$ 100,000	Project Complete
12SWIF-16	City of Green	Wetland Restoration	$ 100,000	Project Complete
12SWIF-24	Chardon Township	Stream Restoration	$ 96,070	Active
12SWIF-25	City of Painesville	Stormwater Demonstration	$ 63,600	Active
12SWIF-31	City of Willoughby Hills	Stormwater Demonstration	$ 80,750	Project Complete
12SWIF-36	Hamilton County Commissioners	Stormwater Demonstration	$ 72,000	Active
12SWIF-37	Perkins Township	Stormwater Demonstration	$ 88,480	Project Complete
12SWIF-39	City of Forest Park	Stormwater Demonstration	$ 49,157	Project Complete
12SWIF-42	Hamilton County Park District	Stormwater Demonstration	$ 42,515	Active
12SWIF-48	Village of Kirtland Hills	Stormwater Demonstration	$ 50,000	Active
12SWIF-50	Village of Fairport Harbor	Stormwater Demonstration	$ 44,200	Project Complete
		TOTAL	$ 721,565	

- During the reporting period, Grants Administrator Martha Spurbeck closed out eight (8) statewide SWIF grants. There are six (6) FY12 statewide SWIF projects that remain open.
- During the reporting period, NPS Program grants staff processed 20 statewide SWIF payment requests, received and reviewed 40 financial status reports and 20 SATRs.
- NPS Program staff conducted site visits to the following FY12 statewide SWIF recipients:
    - 12SWIF-05: City of Springfield
    - 12SWIF-06: Village of Boston Heights
    - 12SWIF-09: Clermont County Park District
    - 12SWIF-10: City of Cuyahoga Falls

- 12SWIF-11: City of Greenville
- 12SWIF-16: City of Green
- 12SWIF-25: City of Painesville
- 12SWIF-31: City of Willoughby Hills
- 12SWIF-39: City of Forest Park
- 12SWIF-42: Hamilton County Park District
- 12SWIF-50: Fairport Harbor

2014 and 2015 Statewide SWIF Grants

Ohio EPA released an FY14 SWIF grant RFP on January 23, 2014. In response, we received 55 applications requesting more than $3.7 million for a variety of stream restoration, stormwater demonstration and other types of NPS management projects. In response to such a strong applicant pool, Ohio EPA elected to forego another SWIF grant cycle and provided SWIF grant funds under FY15 to applicants from the FY14 grant cycle. Ohio EPA was able to provide nearly $2 million in statewide SWIF funding for 20 local stormwater demonstration and stream restoration projects.

Table 2-2
FY14 and FY15 STATEWIDE Surface Water Improvement (SWIF) Grants

Project Number	Project Sponsor	Type of Project	Total SWIF Amount Awarded
14SWIF-05	Bellbrook Sugarcreek Park District	Stormwater Mgmt.	$ 148,612
14SWIF-07	The Ohio State University & Ohio Sea Grant	Lake Mgmt. & Restoration	$ 29,785
14SWIF-11	Preble County Historical Society, Inc.	Stream Restoration	$ 107,818
14SWIF-31	City of Athens	Stormwater Mgmt.	$ 104,715
14SWIF-33	City of Westerville Parks & Recreation	Stream Restoration	$ 75,000
14SWIF-37	City of North Canton	Stormwater Mgmt.	$ 115,000
14SWIF-43	Mill Creek MetroParks	Stormwater Mgmt.	$ 123,360
14SWIF-76	City of Wyoming	Stream Restoration	$ 112,580
14SWIF-83	Coventry Township	Stormwater Mgmt.	$ 143,160
14SWIF-SEP-86	City of Delaware	Dam Removal	$ 60,224
15SWIF-06	City of Columbus Department of Public Utilities	Stormwater Mgmt.	$ 67,860
15SWIF-13	Village of Amelia	Stormwater Mgmt.	$ 95,000
15SWIF-19	Village of Greenhills	Stormwater Mgmt.	$ 129,763
15SWIF-20	Butler County SWCD	Riparian Restoration	$ 123,450
15SWIF-23	City of Reading	Stormwater Mgmt.	$ 62,463
15SWIF-30	City of Mount Vernon	Stormwater Mgmt.	$ 82,987
15SWIF-40	City of Fairlawn	Stream Restoration	$ 150,000
15SWIF-52	Jefferson County SWCD	Stream Restoration	$ 149,500
15SWIF-59	City of Grove City	Stormwater Mgmt.	$ 15,200
15SWIF-67	Stark County Park District	Wetland Restoration	$ 99,856
		TOTAL	$ 1,996,333

These grants provide local governments and other NPS and stormwater project implementers with important match-free resources to encourage the installation of innovative green stormwater

infrastructure, the restoration of impaired and modified streams and the renaturalization of impaired and modified wetland areas. SWIF guidelines and eligibility mirror Ohio's Section 319(h) NPS grants—as a result, NPS efforts in Ohio during FY14 and FY15 are nearly double what they would be if NPS implementation funding was limited strictly to federal Section 319(h) funds.

2014 and 2015 Lake Erie Watershed SWIF Grants

On August 2, 2014, a harmful algal bloom in Lake Erie during the summer months of 2014 caused microcystin levels in the city of Toledo's public drinking water to exceed levels established by the World Health Organization. For two and one-half days, residents of Ohio's fourth largest city of more than 400,000 went without a public drinking water supply. In response to this incident, Ohio EPA elected to fund a Lake Erie specific cycle of 2014-15 SWIF grants that focused activities on innovative stormwater management and NPS project implementation.

Drawn from the pool of FY14 SWIF applicants, 15 projects were selected for funding within the Lake Erie watershed. Seven (7) of these projects were funded using FY14 SWIF grant money, and the remaining eight (8) were funded beginning July 1, 2014 using FY15 SWIF grant funds. More than $1.3 million were awarded for Lake Erie watershed based projects, building on the more than 40 previous Lake Erie SWIF projects. Following is a table of FY14-15 Lake Erie Watershed SWIF grants:

Table 2-3
FY14 and FY15 LAKE ERIE WATERSHED Surface Water Improvement (SWIF) Grants

Project Number	Project Sponsor	Type of Project	Total SWIF Amount Awarded
14SWIF-LEW-14	City of Bay Village	Stormwater Mgmt.	$ 120,000
14SWIF-LEW-26	Mayfield Village	Stormwater Mgmt.	$ 126,500
14SWIF-LEW-36	City of Sandusky	Stormwater Mgmt.	$ 97,723
14SWIF-LEW-45	City of Hudson	Stormwater Mgmt.	$ 86,808
14SWIF-LEW-61	Cuyahoga County SWCD	Stormwater Mgmt.	$ 41,865
14SWIF-LEW-68	City of Cleveland Heights	Stormwater Mgmt.	$ 135,718
15SWIF-LEW-38	Madison Village	Stormwater Mgmt.	$ 98,740
15SWIF-LEW-39	Cuyahoga County Department of Public Works	Stormwater Mgmt.	$ 100,000
15SWIF-LEW-55	Medina County Park District	Stormwater Mgmt.	$ 54,879
15SWIF-LEW-62	City of Defiance	Stormwater Mgmt.	$ 150,000
15SWIF-LEW-65	Madison Township	Stormwater Mgmt.	$ 82,500
15SWIF-LEW-71	Painesville Township	Stormwater Mgmt.	$ 40,000
15SWIF-LEW-78	Village of Woodmere	Stormwater Mgmt.	$ 78,315
15SWIF-LEW-81	City of Mentor	Stormwater Mgmt.	$ 112,000
		TOTAL	$ 1,325,048

USEPA Great Lakes Restoration Initiative Grants

2010 Cuyahoga County GLRI/SWIF Grant

Federal Grant #GL-00E00395-0
State Grant #CUYA10

Ohio EPA's NPS Program staff was successful in obtaining a FY10 Great Lakes Restoration Initiative grant from US EPA's Great Lakes Program Office. Using $1.5 million in SWIF money as a matching share, Ohio EPA was able to leverage an additional $1 million in federal funding for NPS-related projects within Cuyahoga County, Ohio. This grant recently expired and is in the process of being closed out. Fourteen (14) NPS projects were able to be completed as a result of the funding in this grant.

SWIF grants are excellent tools to help local governments solve water quality problems caused by NPS 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.

This rain garden at Mayfield Heights City Hall captures and treats roof runoff. The project was completed under provisions of 10SWIF-CUY-034.

Stormwater treatment wetlands such as the above in the city of Broadview Heights are important tools for reducing the rate and amount of urban stormwater runoff. This project was completed under 10SWIF-CUY-027

During the reporting period, Ohio EPA continued to implement provisions of federal grant #GL-00E00395 and administered close-outs on all subgrants awarded under this grant. Project fact sheets for FY10 Cuyahoga County GLRI subgrants project implemented under provisions of this grant are available at http://www.epa.state.oh.us/dsw/nps/swif.aspx.

The following table is a final listing of all FY10 GLRI-SWIF subgrants that have completed their projects and closed out their subgrants:

Table 3-1
FY10 Cuyahoga County GLRI-SWIF Subgrants

Project Number	Project Sponsor	Type of Project	Total SWIF Amount Awarded
10GLRI-CUY-039	City of Cleveland	Stormwater Mgmt.	$ 260,157
10GLRI-CUY-068	Village of Hunting Valley	Stream Restoration	$ 137,500
10GLRI-CUY-075	Land Studio-formerly Park Works	Stormwater Mgmt.	**Terminated**[1]
10GLRI-CUY-082	Village of Glenwillow	Stormwater Mgmt.	$ 63,050
10GLRI-CUY-123	Cuyahoga County SWCD	Dam Removal	$ 147,270
10GLRI-CUY-173	City of North Olmsted	Stormwater Mgmt.	$ 209,431
10SWIF-CUY-27	City of Broadview Heights	Wetlands Restoration	$ 219,727
10SWIF-CUY-34	City of Mayfield Heights	Stormwater Mgmt.	$ 231,900
10SWIF-CUY-42	City of Brecksville	Stream Restoration	**Never Awarded**[2]
10SWIF-CUY-47	Nature Center at Shaker Lakes	Wetlands Restoration	$ 78,664
10SWIF-CUY-049	City of North Olmsted	Stormwater Mgmt.	$ 196,028
10SWIF-CUY-061	Cleveland Metroparks	Stormwater Mgmt.	$ 181,000
10SWIF-CUY-067	Village of Gates Mill	Stormwater Mgmt.	$ 87,525
10SWIF-CUY-067	City of Seven Hills	Stormwater Mgmt.	$ 256,530
10SWIF-CUY-067	City of Cleveland Heights	Stormwater Mgmt.	$ 238,726
		TOTAL	**$ 2,652.067**

The final report for the FY10 Cuyahoga County GLRI-SWIF grant will be submitted in November 2014. Ohio EPA NPS Program staff is currently in the process of compiling the necessary information.

2012 Cuyahoga County GLRI/SWIF Grants

Federal Grant #GL-00E1137
State Grant #CUYA12

Building upon the success of joining GLRI and SWIF grant funding in 2010, Ohio EPA applied for and received an FY12 GLRI grant #GL-00E01137 in the amount of $996,902 to implement 18 additional local stormwater demonstration and NPS management projects in Cuyahoga County, Ohio. An additional $1.4 million in state SWIF funds were provided to increase the project total to more than $2.3 million.

[1] Funds originally awarded to Park Works under project #10GLRI-CUY-075 were reprogrammed to North Olmsted #10GLRI-CUY-173.
[22] Funds were never awarded to the city of Brecksville #10SWIF-CUY-42 and were instead reprogrammed to the Cleveland Metroparks under provisions of project #10SWIF-CUY-061

Following is a table of the FY12 Cuyahoga County GLRI-SWIF subgrantees and the current status of their projects:

Table 3-2
FY12 Cuyahoga County GLRI-SWIF Subgrants

Project Number	Project Sponsor	Type of Project	Project Status
12GLRI-CUY-06	Ursulines College	Stream Restoration	Complete
12GLRI-CUY-10	City of Euclid	Stormwater Mgmt.	Complete
12GLRI-CUY-11	Village of Glenwillow	Stormwater Mgmt.	Complete
12GLRI-CUY-12	City of Cleveland	Stormwater Mgmt.	Spring 2015
12GLRI-CUY-14	City of Rocky River	Stormwater Mgmt.	Complete
12GLRI-CUY-21	City of Richmond Heights	Stormwater Mgmt.	Complete
12SWIF-CUY-02	City of South Euclid	Stormwater Mgmt.	Complete
12SWIF-CUY-03	Orange Village	Stormwater Mgmt.	Complete
12SWIF-CUY-07	Moreland Hills	Stream Restoration	Complete
12SWIF-CUY-08	Cleveland Metroparks	Stormwater Mgmt.	Spring 2015
12SWIF-CUY-09	City of Parma	Stormwater Mgmt.	Delayed
12SWIF-CUY-16	City of Lakewood	Stormwater Mgmt.	Complete
12SWIF-CUY-17	Olmsted Township	Stormwater Mgmt.	Nearly Complete
12SWIF-CUY-18	Village of Pepper Pike	Stormwater Mgmt.	Complete
12SWIF-CUY-19	City of Independence	Stormwater Mgmt.	Complete
12SWIF-CUY-20	Village of Brooklyn Heights	Stormwater Mgmt.	Complete
12SWIF-CUY-22	City of Westlake	Stream Restoration	Complete
12SWIF-CUY-23	Village of Chagrin Falls	Stormwater Mgmt.	Nearly Complete

During the reporting period, Ohio EPA NPS Program staff completed the following activities associated with this grant:

- Received and processed 6 payment requests, reviewed 18 quarterly financial status reports and received, reviewed and uploaded 12 SATRs.
- All required entries in the US EPA-GLNPO GLAS database have been completed as of October 1, 2014.
- NPS Program Manager completed and submitted two GLRI required SATRs for this grant covering the time period from July 1, 2013 through June 30, 2014. These represent the fourth and fifth SATRs submitted for this grant.
- Ohio EPA's NPS Program Manager submitted a no-cost grant extension to change the expiration date on this grant from June 15, 2015 through June 15, 2016. This extension was approved by US EPA Region 5 in October 2014.
- During the reporting period, Ohio EPA NPS Program staff conducted site visits to the following FY12 Cuyahoga County GLRI-SWIF subgrantees:
    - 12SWIF-CUY-02: City of South Euclid
    - 12SWIF-CUY-03: Orange Village
    - 12SWIF-CUY-07: Moreland Hills

- 12SWIF-CUY-08: Cleveland Metroparks Nature Center
- 12SWIF-CUY-16: City of Lakewood
- 12SWIF-CUY-17: Olmsted Township Trustees
- 12SWIF-CUY-18: City of Pepper Pike
- 12SWIF-CUY-19: City of Independence
- 12SWIF-CUY-22: City of Westlake
- 12SWIF-CUY-GLRI-06: Ursulines College
- 12SWIF-CUY-GLRI-10: City of Euclid
- 12SWIF-CUY-GLRI-14: City of Rocky River
- 12SWIF-CUY-GLRI-21: City of Richmond Heights

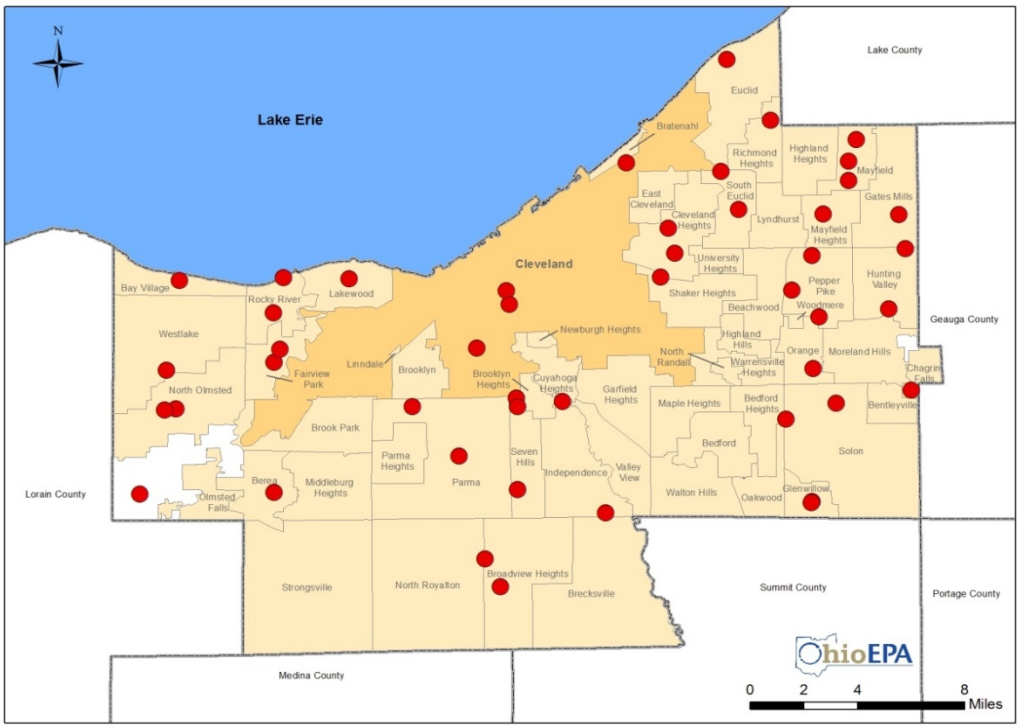
Permeable pavers installed at Pepper Pike City Hall complex under provisions of 12SWIF-CUY-18. This is one of several stormwater projects equipped with special monitoring equipment to evaluate water quality and flow reduction.

This was a straight line concrete ditch prior to being restored to a sinuous naturally flowing stream under provisions of 12SWIF-CUY-22.

The use of pervious pavers such as these installed under project 12SWIF-CUY-07 in the city of Willoughby Hills is an effective tool for reducing stormwater runoff while beautifying an area at the same time.

Education and outreach is a required component of each SWIF grant. This sign provides an attractive tool for informing the public about green infrastructure.

SWIF and Section 319(h) Projects Completed in Cuyahoga County since 2010



Concentrating green stormwater management practices and urban stream restoration projects within a metropolitan area such as Cuyahoga County, is an important strategy for successfully improving water quality in watersheds that are severely impaired by hydromodification and flashy runoff from impervious surfaces. Since 2010, 44 different projects have been implemented using either Section 319(h) subgrants or SWIF and GLRI funding. Community decision makers are more familiar with the benefits of green infrastructure and are beginning to realize the benefits of restoring the natural functions of the streams that run through their communities. Reducing the volume and speed with which stormwater is running into urban waterways is essential for stabilizing more natural flow conditions and reducing erosion that results in increased loads of sediment, silt and nutrients from urban and suburban areas of Ohio.

Expanding public awareness and encouraging local officials to try new best management practices (BMPs) such as these pervious pavers in Richmond Heights are some of the tools in the Cuyahoga County GLRI project. Since FY10, more than 40 projects have been completed in Cuyahoga County.

More photos of more Cuyahoga County FY12 GLRI-SWIF funded projects

This bio-filtration basin installed in the city of Independence under provisions of project 12CUY-GLRI-19 captures stormwater runoff from a neighborhood road thereby reducing the rate and amount of stormwater in the city's storm sewer system.

Educating the public and treating stormwater are the two goals met by the City of Westlake under provisions of project 12SWIF-CUY-22. This storm-water wetland treatment area is at a Park and Ride site where hundreds of people visit each day.

Pervious pavement and pavers provide attractive and effective alternatives to hard space impervious areas. It can be used alone such as above left in the city of Euclid under provisions of project 12GLRI-CUY-10 or with a biofiltration area such as above right in the village of Orange under project 12SWIF-CUY-03.

More photos of more Cuyahoga County FY12 GLRI-SWIF funded projects

Pervious pavers and tree filter areas provided much needed passive treatment and reduce the rate and amount of urban stormwater runoff. This project was completed under 12SWIF-CUY-16 in the city of Lakewood, Ohio.

Monitoring the beneficial effects of GLRI-SWIF projects is important to insure that demonstrations are resulting in water quality improvements. This stormwater biofiltration area project at the Ursulines College in Cuyahoga County was completed under provisions of 12GLRI-CUY-06. Note the monitoring "box" in the lower left.

This monitoring station is measuring rates, amounts, and water quality of stormwater captured by a pervious parking lot installed under provisions of 12SWIF-CUY007 in the city of Willoughby Hills. It is one of several Cuyahoga GLRI-SWIF projects being monitored by the Chagrin River Partners, ODNR and the University of North Carolina.

2012 Lucas County GLRI/SWIF Grants

Federal Grant #GL-00E01132

State Grant ID LUCA12

Ohio EPA was awarded FY12 GLRI grant #GL-00E01132 in the amount of $749,839 to assist local implementers with the design and installation of 9 green stormwater management demonstration projects within Lucas County, Ohio. An additional four (4) projects were funded under a supplemental Request for Proposals using funding that became available when two previously recommended applicants (village of Holland and Monclova Township) elected not to accept their grant. Two projects within the city of Toledo were funded by Ohio EPA using state SWIF funding as match. Table 3-3 below lists all of the successful GLRI/SWIF subgrant recipients under the FY12 Lucas County GLRI/SWIF grant:

Table 3-3
12 GLRI Lucas County Active Grants

Project Number	Project Sponsor	Type of Project	Project Status
12GLRI-LUCA-02	Maumee Bay state Park Nature Center	Stormwater Mgmt.	In Construction
12GLRI-LUCA-05	Lucas County Engineer	Stormwater Mgmt.	Complete
12GLRI-LUCA-06	City of Oregon	Stormwater Mgmt.	Complete
12GLRI-LUCA-08	University of Toledo	Stormwater Mgmt.	Complete
12GLRI-LUCA-10	Metroparks of the Toledo Area	Stormwater Mgmt.	In Construction
12GLRI-LUCA-20S	City of Sylvania	Stormwater Mgmt.	Delayed
12GLRI-LUCA-21S	University of Toledo	Stormwater Mgmt.	Complete
12GLRI-LUCA-22S	Lucas County Engineer	Stormwater Mgmt.	Complete
12GLRI-LUCA-23S	Boy Scouts of America-Erie Shores Council	Stormwater Mgmt.	Complete
12GLRI-LUCA-24S	Toledo Botanical Garden	Stormwater Mgmt.	Complete
12GLRI-LUCA-25	Metroparks of the Toledo Area	Stormwater Mgmt.	Delayed Award
12-LUCA-03	City of Toledo Public Utilities Dept.	Stormwater Mgmt.	Complete
12-LUCA-12	Toledo Division of Environmental Services	Stormwater Mgmt.	Complete
		TOTAL	

During the reporting period, Ohio EPA NPS Program staff completed the following activities:

- NPS Program grant staff processed four (4) payment requests, 34 quarterly fiscal status reports and 17 semi-annual technical reports.
- All Lucas County GLRI/SWIF project data was entered into and/or updated in the GLAS federal database as of October 1, 2014.
- Completed and submitted two Lucas County GLRI/SWIF grant semi-annual progress reports to US EPA.
- Ohio EPA's NPS Program Manager submitted a no-cost grant extension to change the expiration date on this grant from June 30, 2015 through June 30, 2016. This extension was approved by US EPA Region 5 in October 2014.

- During the reporting period, NPS Program staff conducted site visits and reviews at the following projects:
    - 12GLRI-LUCA-02: ODNR Maumee Bay State Park
    - 12GLRI-LUCA-05: Lucas County Engineer
    - 12GLRI-LUCA-06: City of Oregon
    - 12GLRI-LUCA-08: University of Toledo
    - 12GLRI-LUCA-10: Toledo Metroparks
    - 12GLRI-LUCA-21S: University of Toledo
    - 12GLRI-LUCA-22S: Lucas County Engineer
    - 12GLRI-LUCA-23S: Boy Scouts of America
    - 12GLRI-LUCA-24S: Toledo Botanical Garden

(L) Vegetated bioswale-City of Oregon 12GLRI-LUCA-06
(A) Permeable pavers-Boys Scouts of America 12GLRI-LUCA-23S

Pervious pavers and rain gardens installed under provisions of 12GLRI-LUCA-24S in the Artist's Village at the Toledo Botanical Gardens village offices are excellent demonstrations of green stormwater

Other Ohio EPA GLRI Grants

Upper Blanchard Watershed Phosphorus Reduction Initiative
Federal Grant #GL-00E01020-1
State Grant ID# EPAFBLAN12

The Upper Blanchard Watershed Phosphorus Reduction Initiative commented in June 2012 and includes collaboration among multiple partners such as Ohio EPA, Hancock County Soil & Water Conservation District (SWCD), the city of Findlay, US EPA's Great Lakes National Program Office and the Blanchard River Watershed Partnership (BRWP). The project is designed to help demonstrate the effectiveness of targeting agricultural nutrient reduction (and other) practices at a scale where effectiveness may be enhanced and water quality improved.

Ohio EPA received the master grant agreement and Administrative Conditions for this grant in the amount of $631,572 on October 10, 2012. Subgrants were awarded, contracts, budgets and deliverable packages prepared and executed for the City of Findlay, University of Findlay, Hancock County SWCD and the Hancock County Health Department. Ohio EPA's NPS Program is responsible for administering subgrants awarded under this initiative and monitoring and assessment activities. During the reporting period, Ohio EPA NPS Program staff completed the following activities:

- Managed and administered four subgrants that were awarded to project partners to implement a variety of nutrient reduction activities. The subgrant project partners and a brief summary of their grants are listed in Table 3-4:

Table 3-4
12 GLRI Upper Blanchard Watershed Phosphorus Reduction Initiative Grants

Project Number	Project Sponsor	Type of Project	Total Awarded
12GLRI-BLAN-01	Hancock County SWCD	Agricultural BMPs	$ 336,574
12GLRI-BLAN-02	Hancock County Health Department	Home Septic Replacement	$ 53,995
12GLRI-BLAN-03	City of Findlay	Riparian Restoration	$ 35,741
12GLRI-BLAN-04	University of Findlay	Wetland Restoration	$ 93,316
		TOTAL	**$ 519,626**

- NPS Program grant staff processed four (4) payment requests, six (6) quarterly fiscal status reports and four (4) semi-annual technical reports.
- Terminated the subgrant with the Hancock County Health Department. This was a minor component to the overall Blanchard project. Unfortunately the project coordinator for the health department was never really able to convince the Board of Health to be more assertive with this project. As a result, it was agreed by both the Health Department and Ohio EPA that the best course of action would be to terminate the agreement. This grant was terminated and closed on February 26, 2014.
- On March 31, 2014, Rick Wilson made a presentation at the "Conservation Improvements Workshop," sponsored by the Hancock County SWCD. Rick spoke about the benefits of innovative drainage water controls----blind inlets and saturated buffers and discussed cost-share opportunities for land-owners as part of the sub-grant to Hancock SWCD.

March 31, 2014: Conservation Improvements Workshop, Findlay, OH. (Photos courtesy of Hancock SWCD)

Conservation Improvements Workshop Display

Workshop Presenter, Rick Wilson, Ohio EPA

Workshop Attendees

Workshop Presenter, Dr. Larry Brown

- Continued working with the BWRP to develop a Riparian Restoration project within the city of Findlay to plant a forested riparian buffer at the mouth of Lye Creek. The project proposal received final approval by the Findlay City Council, and the sub-grant was executed in April 2014. This project is currently under construction and likely to be completed by spring 2015.
- Ohio EPA's Ecological Assessment Unit completed a report and study plan titled, "Biological and Water Quality Study Plan of the Lye Creek (Blanchard River) Watershed" on June 30, 2014. This plan outlines the monitoring and assessment activities that Ohio EPA biologists and water quality staff will use to evaluate the effectiveness of conservation practices installed in the Lye Creek subwatershed as a result of this project. The report also includes all of the pre-implementation (baseline) monitoring data for Lye Creek.

  This plan may be reviewed at: www.epa.ohio.gov/Portals/35/documents/2013_Lye_Creek_GLRI_Project.pdf.

Progress during the Reporting Period by the Hancock County SWCD Project 12GLRI-BLAN-01

The Upper Blanchard Watershed Phosphorus Reduction Initiative is focused on the important conservation measures being implemented by local agricultural producers in cooperation with the Hancock County SWCD. Project funding was sub-granted to the Hancock County SWCD shortly after Ohio EPA received this grant. Since then, the Hancock County SWCD has been very busy successfully engaging local farmers

through a series of news releases, conducting project specific informational meetings attended by more than 70 producers, participating in three radio programs promoting the program and one television program. As a result of these efforts, the following conservation practices have been installed in the Lye Creek subwatershed of the Blanchard River:

- Planted a total of 1,019 acres of winter cover crops on seven (7) different farms
- Installed one (1) controlled drainage structure
- Repaired 20 tile main blowouts on seven (7) different farms
- Implemented conservation tillage (including vertical tillage) on 1,367 acres
- Installed 15 acres of grassed waterway and 15 acres of filter strips
- Completed and distributed three (3) project-specific fact sheets
- Conducted four (4) public meetings
- Issued three (3) press releases announcing availability of program
- Completed one (1) project specific display for use at public events
- Conducted two (2) Field Days attended by 40 landowners
- Conducted a Conservation Improvements Workshop attended by 31 local producers

Progress during the Reporting Period by the Hancock Co. Health Department Project 12GLRI-BLAN-02

The grant to the Hancock County Health Department under provisions of Project 12GLRI-BLAN-02 was terminated on February 26, 2014 due to lack of progress and little landowner interest in cost-share funding to replace failing home sewage treatment systems.

Progress during the Reporting Period by the city of Findlay Project 12GLRI-BLAN-03

The city of Findlay is restoring nearly 1.6 acres of riparian areas of publicly owned land on the west side of Lye Creek. Restoration activities will consist of planting 45 trees with a 2" caliper, 260 native trees with a 1" caliper and more than 250 native shrubs. All plantings will have a 2-year survival guarantee.

- This project only recently went to contract and planting progress is underway. No figures have been provided thus far. Progress reports will be updated during the next reporting period.

Progress during the Reporting Period by the Findlay University Project 12GLRI-BLAN-04

A subgrant to the University of Findlay was awarded to assist with the restoration of 8 acres of wetlands adjacent to Lye Creek in the Blanchard watershed. Activities will include the removal of a streamside levee and installation of water control devices. During the reporting period the University reported:

- Project is in the final design phase and construction/excavation has been put out to bid. The first bid submitted was $30,000 over budget so it was rebid.
- An open house to explain the project to interested parties was conducted and attended by 20 people. Attendees were informed about the plans for the wetland transformation and went on a hike through the area. Participants included neighbors of the property and community leaders.

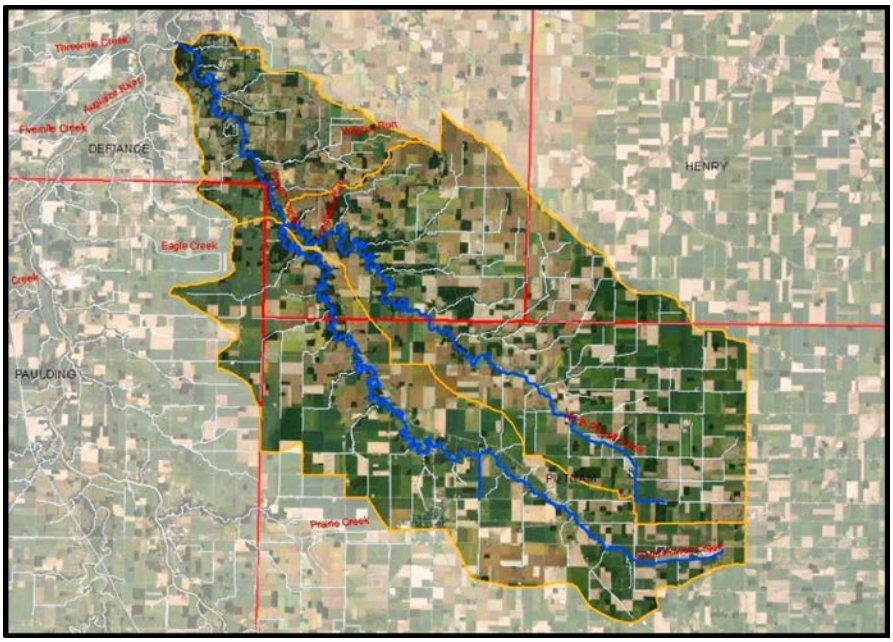
With the exception of the Hancock County Health Department component of this project (which was terminated), all other deliverables are current and project results are as expected. We are particularly pleased with the response to the project from the Hancock County farmers within the Lye Creek sub-watershed and look forward to a more robust and productive relationships with the City of Findlay and Findlay University as their projects come to fruition.

Powell Creek Nutrient Reduction Project
Federal Grant #GL-00E01131
State Grant ID# POWL12

The Powell Creek Nutrient Reduction Project is a joint effort between Ohio EPA, Defiance and Putnam Counties Soil & Water Conservation Districts and the Defiance County Health Department to demonstrate the value of addressing nonpoint sources of nutrients in a highly focused manner. A variety of conservation practices that are identified in the Powell Creek Total Maximum Daily Load study (TMDL) are being implemented including the establishment of saturated buffer systems, wetlands, controlled drainage systems, winter cover crops and others.

The project provides cost-share assistance to agricultural producers within the watershed. There are also funds provided to assist 10 homeowners with replacing failing home sewage treatment systems (HSTS) within the HUC-10 Powell Creek watershed area. Additionally, Ohio EPA is providing ecological assessment and project effectiveness monitoring to measure water quality improvements that may result from this project.

Map 3-1
Powell Creek HUC-10 Watershed Map
Nutrient Reduction Project Area



Powell Creek is a tributary to the Auglaize River which in turn is a significant tributary to the Maumee River in northwestern Ohio. The land use is predominately agriculture and in recent studies by the International Joint Commission (IJC) the Maumee River has been identified as contributing disproportionately large

amounts of dissolved reactive phosphorus (DRP) that are generating harmful algae blooms (HAB) in western Lake Erie. This project is specifically designed to address nutrient loadings into Powell Creek and ultimately the Maumee River.

During the reporting period, Ohio EPA NPS Program staff completed the following activities:

- Martha Spurbeck and Jo Hodanbosi (NPS Grant Staff) processed six (6) payment requests, received and reviewed eight (8) quarterly fiscal status reports and four (4) semi-annual technical reports from subgrant recipients working under provisions of this project.
- NPS Program staff conducted site visits with Jason Roehrig of the Defiance County SWCD (Project 12GLRI-POWL01). The visit included three sites planned for wetland/runoff detention areas, the installation of Ohio's first saturated buffer and several locations where controlled drainage structures were installed.
- Ohio EPA NPS Agricultural Specialist Rick Wilson completed and submitted two GLRI project SATRs covering the periods July 2013 through December 2013 and a second report covering January 2014 through June 2014.

Table 3-5
12 GLRI Powell Creek (Defiance County) Active Projects

Project Number	Project Sponsor	Type of Project	Total
12GLRI-POWL-01	Defiance County SWCD	Nutrient Reduction	$ 350,000
12GLRI-POWL-02	Defiance County Health Department	Home Septic project	$ 95,000
		TOTAL	**$ 445,000**

Progress during the Reporting Period by Defiance and Putnam County SWCDs Project 12GLRI-POWL-01

- 17 acres of drainage runoff wetlands have been installed on three different farms within the Powell Creek watershed as a result of this project.
- 2421 acres of cover crops have been planted on 28 different farms within Defiance County and Putnam Counties.
- Four (4) nutrient management plans have been completed covering nearly 800 acres of cropland.
- 28 controlled drainage structures have been installed on participating farms within Defiance and Putnam counties.
- A saturated buffer (the first in Ohio) system was installed that controls and treats drainage water from 25 acres of crop field and drain tile was installed. More demonstration projects and outreach are currently being considered by the Defiance County SWCD.
- Public meetings/information sessions with area landowners and producers have been conducted to expand awareness and solicit additional participants. Defiance SWCD is also expanding the number of project signs throughout the community to expand participation and public awareness of the project.

Defiance County SWCD Administrator Jason Roehrig (R) and Ohio EPA NPS and Lake Erie Program Manager Russ Gibson (L) discuss the challenges and benefits of the first saturated buffer system installed in Ohio. This saturated buffer passively treats stormwater runoff and tile drainage from approximately 25 acres. Saturated buffers hold promise for providing important treatment of nutrient runoff from Ohio croplands. Nutrients and sediment loads should be reduced in receiving streams. It is hoped that this demonstration will result in farmer interest throughout the watershed.

Progress during the Reporting Period by Defiance County Health Department Project 12GLRI-POWL-02

- Continued promoting the cost-share availability and eligibility requirements of the HSTS repair and replacement component of this project.
- Completed a project specific fact sheet, conducted two (2) public information meetings, one (1) press release and updated and maintained one (1) project web page.
- Completed full inspections and assessment on seven (7) home sewage treatment systems and successfully repaired one (1) failing HSTS unit and replaced four (4) failing HSTS units.

Lake Erie Nutrient Reduction Demonstration Project
Federal Grant #GL-00E0836-0
State Grant ID# NUTR11

The Lake Erie Nutrient Reduction Demonstration Project is one of the first projects of its kind, focusing on performance based agricultural assistance and nutrient loss risk reduction. This collaboration between Ohio EPA, Crawford County SWCD, Crawford County Park District, Ohio State University Extension and the Sandusky River Coalition is innovative test of agricultural programming in a small HUC-12 subwatershed of the Sandusky River.

In addition to agricultural programming, this project also includes green stormwater demonstration practices at the Crawford County Park District's main office and nature center. The project also engages the Sandusky River Coalition in educational and public outreach activities and OSU Extension performing social indicator survey work. Pre and post project environmental monitoring is being conducted by Ohio EPA's Ecological Assessment Unit and water quality staff from Ohio EPA's northwest district office. In a true partnership, this project engages a wide array of persons and practices concentrating on reducing nutrient loadings to Loss Creek, the Sandusky River and ultimately to Lake Erie.

Table 3-6
FY11 GLRI Lake Erie Nutrient Reduction Demonstration Project Subgrants

Project Number	Project Sponsor	Type of Project	Total
NUTR11-GLRI-01	Crawford County SWCD	Agricultural BMPs	$ 319,530
NUTR11-GLRI-02	Sandusky River Coalition	Education & Outreach	$ 64,189
NUTR11-GLRI-03	Ohio State University Extension	Education & Outreach	$ 30,000
NUTR11-GLRI-04	Crawford County Park District	Stormwater BMPs	$65,030
		TOTAL	$ 478,749

The response by agricultural producers throughout the Loss Creek subwatershed has been very strong and the results that are appearing in the agricultural landscape reflect this strong interest.

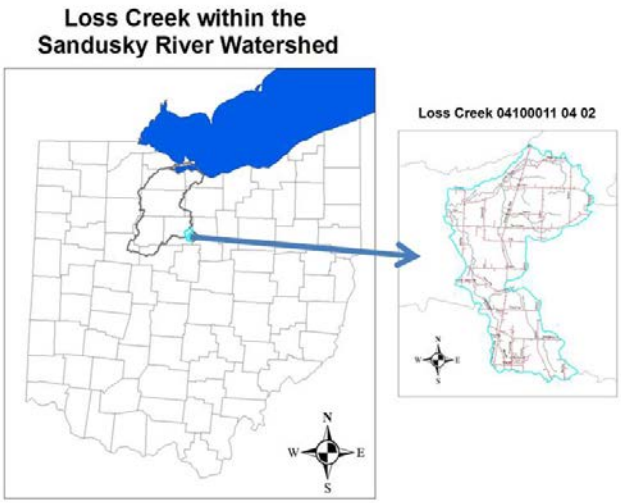
Progress through this reporting period by the Crawford County SWCD under Project NUTR11-GLRI-01

The Crawford County SWCD has demonstrated from the first day of this project to make it a success. District Administrator Mike Hall and his staff have been champions of the innovative performance-based nutrient loss risk reduction approach that is the foundation of this project. During the reporting period, more than 46% of the 11,145 farmed acres within the Loss Creek watershed have some form of conservation practice as a result of this project. These include:

- Installation of 1,739 acres of cover crops
- 555 acres of cropland are using drainage water management practices
- Installed 12 tile control structures
- 2,000 acres put under Conservation Tillage
- 2,000 linear feet of livestock exclusion fencing installed
- One (1) manure storage facility has been constructed
- Converted 728 acres to Variable Rate Technology (VRT) Nutrient Management
- 110 acres under sediment reduction = 147 tons sediment/year reduced

- 10 acres of permanent conversion to hay land
- Converted 10 acres of grass/legume rotation

The success of any agricultural based nonpoint source project is voluntary participation of the farmers within a project area. Directly related to the participation rate is the relationship that is shared between the Soil & Water Conservation District staff and the agricultural producers. This has been clearly evidenced in the Lake Erie Nutrient Reduction Project as the SWCD staff has been instrumental in promoting the availability of this project and enlisting active participants. We are very pleased with the progress that has been made with the Lake Erie Nutrient Reduction Demonstration Project. So much so, that we worked with the USDA-NRCS to include another subwatershed within Crawford County (Brokensword Creek) in the National Water Quality Initiative (NWQI).



Source: OSU Extension

Loss Creek Watershed Characteristics

15,520 acres – 24 square miles

72% of the land use is Agriculture

60% of the creek is non-attaining

46 farm landowners

Progress through this reporting period by the Sandusky Watershed Coalition NUTR11-GLRI-02

The Sandusky Watershed Coalition housed in the WSOS Community Action Organization's offices in Fremont, Ohio received a subgrant totaling $64,189 to coordinate the development and delivery of public information and outreach activities in support of the Lake Erie Nutrient Reduction Demonstration Project.

Throughout the implementation period, the Sandusky Watershed Coalition completed the following activities in support of the Lake Erie Nutrient Reduction Demonstration Project:

- Completed two (2) Fact Sheets informing landowners and the general public about the availability of funding to participate in this project
- Conducted two (2) public meetings for landowners within the project area
- Developed and maintained one (1) project specific website
- Conducted two (2) field days
- Drafted and published six (6) newsletter articles about the project

Progress through this report period by the Ohio State University (OSU) Extension NUTR11-GLRI-03

The primary role of the OSU Extension in this project is to conduct pre and post- project social indicator surveys of all agricultural producers within the project area. These surveys are designed to provide a measure of progress based upon an evaluation of changes in farmer's attitudes during the project period. Project deliverables completed by the OSU Extension during the project period include:

- Phone calls were made to all farmers in the project area and a follow up letter was sent as a follow up invitation to participate in one of three focus groups for the project.
- Following this outreach, it was determined that there was insufficient interest in holding winter focus group meetings. However, there appeared to be sufficient interest in conducting a phone survey. These were scheduled for August 2013. At the time of preparation of this report, it was not known whether these phone interviews occurred as planned.
- Data from returned farm surveys was entered into the Social Indicators Data Management and Analysis (SIDMA) System. Preliminary analysis of pre-surveys was completed and a written report summarizing the findings was also prepared.
- Project meetings were conducted with project team members in January, May and June 2013 to discuss pre-survey data and preliminary implications for programming and other logistics.
- By changing their survey study procedures, OSU Extension was able to significantly improve survey response rate by 30%. Surveyors switched to a drop off/pick up method rather than simply asking farmers to return the survey by mail.
- Following completion and analysis of the initial responses indicates gaps in landowner awareness of impairments within the watershed. For example, 37% of respondents indicated that they "did not know" when asked if phosphorus was a problem in the Loss Creek subwatershed. Similar gaps of awareness and knowledge were identified for other NPS causes of impairment such as hydromodification, habitat alteration, atrazine and others.
- OSU Extension also identified that while 42% of farmers in the watershed are using cover crops as part of their conservation practices. The survey also identified that 53% of farmers in the watershed are "willing to us" cover crops. The survey also identified that nearly half of the farmers responding use fertilizer experts and/or dealers when making fertility related decisions.

Progress through this reporting period by the Crawford County Park District NUTR11-GLRI-04

The subgrant awarded to the Crawford County Park District was successfully completed and closed out. As a result of this project, the following deliverables were completed:

- Installed 375 square feet of demonstration rain garden at the nature center in Lowe Park
- Installed 1,250 square feet of permeable pavers in the nature center parking lot
- Installed rainwater reuse system including two (2) rain barrels at the nature center parking lot
- Installed a press release highlighting the improvements that were installed
- Developed a project specific website at www.crawfordparkdistrict.org

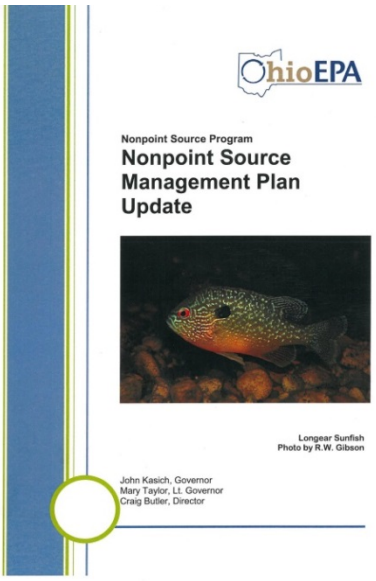
Photos of Project NUTR11-GLRI-04 Crawford County Park District

These green stormwater practices at the front entrance of the Lowe Park Nature Center were installed under provisions of NUTR11-GLRI-04.

A sandpiper wading in the biofiltration area at the Lowe Park Nature center. Green BMPs can also result in improved wildlife habitat.

This biofiltration area is located immediately adjacent to the pervious pavers in the Crawford County Park Districts Lowe Park area. This highly visible location provides important public awareness of nutrient reduction practices needed in Loss Creek area.

NPS Management Plan Update



Ohio's NPS Management Plan was updated during the fall and winter of 2013 and approved by US EPA-Region 5 in June 2014. The NPS Management Plan identifies strategies and objectives needed for the period covering 2014-2019 and is consistent with the FY12 revised guidance in the national Clean Water Act Section 319(h) program released by US EPA Headquarter NPS Bureau staff.

Fundamental to Ohio's NPS Management Plan is our commitment to continue to focus NPS project implementation in those watersheds throughout the state have either completed a state endorsed watershed action plan or have had TMDL study complete and approved. Although we may also fund projects in watershed with other comprehensive plans such as AMDAT plans or, in some cases a Balanced Growth Plan, nearly all of Ohio's Section 319(h) funding is focused in watersheds that are included on Ohio's 303(d) list of impaired waters and are covered by a 9-element equivalent watershed action plan and/or a TMDL.

Following a comprehensive evaluation and analysis of our NPS programming in 2006 Ohio EPA shifted priorities from past practices of almost exclusively funding NPS source reduction projects that resulted in little or no measurable water quality improvement and began to implement projects based on the following hierarchy of priorities:

1. Projects that eliminate impairments in critical areas
2. Projects that restore impaired waters in critical areas
3. Projects that reduce NPS pollution
4. Projects that prevent NPS pollution – or projects that protect high quality waters

Using the guidance provided by the above priorities, Ohio's NPS program funded increasing numbers of stream restoration projects including dam removals, natural channel design restoration, streambank stabilization, riparian and floodplain restorations and other projects that are designed to eliminate impairments such as hydromodification, habitat alteration and actions that physically improve a stream's ability to assimilate NPS pollutants and reduce nutrients and silt and sediments.

Ohio's approved NPS Management Plan includes specific strategies and program goals and objectives for each of the following areas

- 1.0 – Urban Sediment and Nutrient Reduction Strategies
- 2.0 – Altered Stream and Habitat Strategies
- 3.0 – NPS Reduction Strategies
- 4.0 – High Quality Waters Protection Strategies

Each strategy includes goals and measurable objectives that are designed to provide meaningful evaluation points as well as a sharply honed program focus. **Examples** of how each of these strategies is fleshed out and how programming activities are targeted and tracked are as follow:

NPS Strategy 1.0 – Urban Sediment and Nutrient Reduction Strategies

1.01 - Reduce stormwater runoff: Ohio EPA continues to encourage local government entities, park districts and other land-managing organizations to measurably reduce the amount of stormwater

runoff. Objectives include providing technical and financial assistance to local governments and other land managing entities. Ohio's NPS Program has long been at the forefront of advocating the adoption of green stormwater management practices that trap and infiltrate stormwater runoff rather than flushing it through storm sewer systems. For example since 2010 Ohio's NPS Program has facilitated the installation of more than 206,000 square feet of pervious pavers and pavement, 24,000 square feet of rain gardens, 99,000 square of biofiltration islands, 27 acres of stormwater wetlands and nine (9) passive treatment trains. Activities within the reporting period that are helping Ohio to edge closer to realizing the goal to reduce stormwater runoff include the following:

- During this reporting period Ohio's NPS Program awarded 15 SWIF grants for green stormwater projects to reduce stormwater runoff totaling more than $1.6 million. ***Ohio's target for the five year period covering 2014 through 2019 is a total of 40 SWIF funded stormwater projects.***
- During this reporting period Ohio's NPS Program awarded more than $610,000 in FY14 Section 319(h) funding to facilitate the completion of five (5) green stormwater demonstration projects. ***This exceeds the target identified in 1.01.01(B) of funding four (4) 319(h) stormwater demonstration projects per year.***
- SWIF and Section 319(h) subgrant funding assistance was provided to 15 local organizations for the installation of more than 122,000 square feet of pervious pavement during the reporting period. ***Ohio's target of funding five (5) such projects annually has been exceeded by 200%.***
- Section 319(h) funding was provided to the city of Green to install 1.5 acres of stormwater management treatment wetland and an outdoor learning lab at the Green middle school. ***Ohio's target for the 5-year period covering 2014 through 2019 is four wetland learning labs.***
- Ohio State University's Chadwick Arboretum installed a green roof on their horticulture building using reprogrammed FY09 Section 319(h) subgrant funding from Ohio EPA. The green roof was installed during this reporting period and totaled more than 12,000 square feet. ***Ohio's target for the five year programming period is to provide funding for three (3) green roof projects.***

This large (12,000 square feet) green roof on Ohio State University's Howlett Hall was completed under provisions of project 09(h)EPA-29 that was funded with re-programmed FY09 Section 319(h) grant funds.

NPS Strategy 2.0 – Altered Stream and Habitat Restoration Strategies

2.01 – Restore streams using natural channel methods: Since 2008 Ohio EPA's NPS Program has facilitated the use of natural channel design methodology to restore more than 24 miles of impaired streams. Some project sites, such as the Olentangy River in Delaware Ohio have resulted in areas that have been impaired prior to the restoration to scoring among the top 3% of sites in the state for macroinvertebrate communities. Ten (10) dams have been removed, which in virtually every instance resulted in non-attaining stream segments being restored to full or partial attainment. Examples of stream restoration activities during the reporting period that are helping Ohio to reach its stream restoration goals include:

- Provided FY14 Section 319(h) subgrant funding totaling more than $707,000 to five (5) local governments and one (1) county park district to use natural channel design methods to complete nearly 25,000 linear feet of stream restoration in five (5) different watersheds. Ohio EPA's NPS Program also awarded an additional $750,000 in FY14 SWIF subgrant funding to five (5) local governments, one (1) park district and one (1) county SWCD to complete an additional seven (7) stream restoration projects. ***During the 2014 reporting period Ohio's NPS program has awarded subgrants totaling more than $1.5 million for the completion of 12 stream restoration projects using natural channel methods. Ohio's target is to provide funding for five (5) stream restoration projects per year for a total of 25 throughout the 5-year program period covering 2014 through 2019.***

- Provided SWIF subgrant funding for the removal/treatment of 23 acres of invasive species. ***The program target is to facilitate the removal and/or treatment of 350 acres of invasive species annually. This is a program area in which we need to improve.***

- During the past six (6) years, Ohio's Section 319(h) and SWIF programs have facilitated the acquisition (either through cost-share or provided as match) of more than 1,775 acres of conservation easements. ***The program's target for the programming period covering 2014 through 2019 are to help facilitate the acquisition of at least 50 acres year for a total during of at least 250 acres of lands protected with conservation easements. This is one of several strategic priorities for the NPS program during FY2015.***

- Ohio EPA's NPS Program funded one (1) dam removal project during the reporting period. ***The program target is to provide funding for two (2) dam removal projects during the 5-year programming period***.

2.02 – Daylight culverted streams: Many urban headwater streams throughout Ohio have been culverted to facilitate stormwater runoff. Restoring these streams using "daylighting" techniques and natural stream channel design methods not only improves habitat but also helps to increase the assimilative capacity of these streams. During the reporting period, the following activities have been completed:

- Include daylighting of culverted streams as eligible activities on RFPs for Section 319(h) and SWIF grants. ***Ohio's Section 319(h) and Surface Water Improvement grant RFP's identify daylighting of culverted streams as a funding eligible activity under these grants. Performance in this area is consistent with annual program targets.***

- Identify two (2) candidate streams (and implementers) for daylighting in Ohio's scenic river watershed or other high quality waters based on impairment identified in approved TMDLs and/or

9-element endorsed watershed action plans. ***Ohio EPA will be completing this activity during the 2015 program year.***

NPS Strategy 3.0 – NPS Pollution Reduction Strategies

3.0 – Encourage whole farm conservation planning: Traditional whole farm conservation planning has given way to more specialized plans such as nutrient management or grazing management plans which look at only one component of a farm's operation. Whole farm conservation plans look at a farm more holistically – that is, identifying critical locations where nutrient losses are occurring or where soil and sediment losses are resulting from erosion. The identification of these "critical areas" or "vulnerable areas" is important for locating agricultural conservation practices where they will provide the most benefit. Whole farm conservation planning activities that have occurred during the reporting period include:

- Ohio EPA's NPS Program provided subgrant funding to the Defiance County SWCD resulting in the completion of 160 whole farm conservation plans. ***Program annual target is to facilitate the completion of 150 whole farm plans annually. During the FY14 reporting period, Ohio EPA surpassed the annual target by 10 plans.***
- Provided subgrant funding to implement nutrient reduction projects that will result in the reduction of more than 17,000 pounds/year of nitrogen; 5,479 pounds/year of phosphorus; and nearly 2,000 tons/year of sediment. ***Annual program target is to fund projects that will result in >10,000 pounds/year of nitrogen and 5,000 pounds/year of phosphorus. Results from this reporting period exceed the annual goals.***

3.03 – Reduce the Rate and Amount of runoff: Nutrient loading to Lake Erie has resulted in the return of harmful algal blooms (HABs). Much of this load is suspected of coming from subsurface drain tile and runoff from the northwestern Ohio agricultural landscape. Ohio's NPS program is an active participant in efforts to reduce phosphorus loading to Lake Erie, having successfully applied for and being awarded seven (7) GLRI grants since 2010. As a result, nearly 60 projects have been completed and/or are currently active in the Lake Erie watershed and many more throughout the state. Examples of nutrient reduction projects and activities that are focused on nutrient reduction include:

Controlled drainage structures such as this one installed under provisions of GLRI-NUTR11-01

- Provided funding assistance to implement drainage water management practices on more than 550 acres of cropland in the Sandusky River watershed. ***Annual program target is to provide funding for the implementation of drainage water management practices on 500 acres annually. Results during the reporting period surpass the annual program target.***

NPS Strategy 4.0 – High Quality Waters Protection Strategies

Ohio is a very populated state teeming with natural resources and a diverse group of people who call it "home." Early in the state's history many of its major rivers were dammed, diked and otherwise tamed to provide power, water for drinking or bathing and in recent years, reservoirs for boating, fishing, hunting and other outdoor activities. Despite these types of land use pressures Ohio still has some very high quality rivers and streams. Ohio EPA's NPS Program has specifically identified protecting high quality streams as equally important as restoring impaired water bodies.

4.01 – Restore and Protect High Quality In-stream Habitat: Restoring and protecting high quality in-stream habitat is one of the cornerstones of Ohio's high quality waters initiative. Ohio EPA's Section 319(h) and SWIF grant programs may provide valuable assistance for restoring impaired waters but one specific strategy for protecting high quality waters is through fee simple land acquisition. Ohio EPA's Division of Environmental and Financial Assistance (DEFA) administer the Water Resources Restoration Sponsorship Program (WRRSP) which provides up to $15 million for the acquisition of high quality stream habitat and wetland areas.

- During the reporting period Ohio EPA awarded four Section 319(h) subgrants totaling more than $370,000 to stabilize nearly 1,400 linear feet of severely eroding streambanks on high quality rivers including the Olentangy State Scenic River, Chagrin State Scenic River and a tributary to the Big Darby Creek State and National Scenic River. ***Annual program target is to provide funding for one (1) streambank stabilization project addressing 200 linear feet of eroding streambank on high quality waters per year. Results during the reporting period surpass the annual program target.***

- Provide funding assistance to local governments, park districts and other local implementers to restore impaired segments of high quality streams within identified critical areas. ***This program target is expected to be a higher priority in the next two or three years.***

- Fund one (1) project annually that uses bioengineering methods to stabilize at least 200 linear feet of eroding stream banks in high quality waters. ***Project 14(h)EPA-23 will enable Liberty Township to stabilize more than 200 linear feet of currently eroding stream bank on the Olentangy State Scenic River. Results during the reporting period surpass program targets.***

Inland Lakes Program – Goals, Objectives and Milestones

Goal #IL-01: Assess water quality and habitat conditions within Ohio's inland lakes

1.0 Conduct comprehensive water quality monitoring on Ohio's Inland Lakes: Ohio's Inland Lakes Program is designed to assess, evaluate and protect our inland lakes. Many inland lakes are impacted by NPSs of pollution. In many watersheds, an inland lake is the final repository for sediments and nutrients contained in stormwater runoff. Nutrients can accumulate in lake sediments and may contribute to algal blooms and other nuisances when sediment bound nutrients such as nitrogen and phosphorus are released into the water column. In response to these concerns the Inland Lake Program was linked with Ohio's NPS Program in July 2013. Doing so allows considerably more involvement and access to various sources of restoration and NPS management funding such as the SWIF and Section 319(h) subgrant programs. Inland lake activities completed during the reporting period include:

- Inland lake monitoring training was provided by Linda Merchant-Masonbrink during spring 2014 for Ohio EPA district water quality staff and central office modeling staff to insure consistency and coordination in water sample collection, handling and processing. ***Annual program target is to provide inland lake monitoring training once annually. Results during the reporting indicate that this target was met.***

- District water quality staff sampled a total of 19 inland lakes including 11 first-year lakes and eight (8) lakes for the second consecutive year. Results of this sampling will be included in Ohio EPA's next Integrated Report. ***Annual program target is to monitor at least 8 inland lakes per monitoring season. Results during the reporting period surpass annual program target and are proportionate to long-term program target of 40 lakes monitored during the period covering 2014 through 2019.***

- Revised phytoplankton collection protocol by adding an additional sampling event annually. The new protocol results in three (3) phytoplankton samples and analyses annually for each lake sampled.

2.0 Develop and implement a Buckeye Lake Restoration Project Plan: Buckeye Lake is a shallow hyper-eutrophic lake in central Ohio. Under provisions of a special Section 319(h) subgrant (Federal Grant #C9-00E00782-0) awarded to Ohio EPA in 2011 a nutrient reduction planning and outreach project was completed by the nonprofit Buckeye Lake for Tomorrow (BLT) watershed group. During the report period, the following activities were completed:

- BLT completed a Nutrient Reduction plan under provisions of subgrant funded project BUCK11-02. Their subgrant was closed out and a final report submitted.
- Ohio EPA Modeling & Assessment staff (Sarah Becker) completed a Buckeye Lake Mass Balance model in January 2014. The model was used by Tetratech to assist with the development of an implementation plan.
- Tetratech, acting under contract with US EPA Region 5, completed a draft Buckeye Lake Nutrient Reduction and Restoration Plan. Ohio EPA modeling and NPS program staff reviewed the document and provided comments.
- Green stormwater demonstration projects including retrofitting two parking areas with 7,500 square feet of pervious pavers and pavement, two rain gardens and biofiltration trenches were implemented in the Buckeye Lake region by the village of Buckeye Lake (under provisions of project BUCK11-04) and at Buckeye Lake State Park (under provisions of project BUCK11-01). Additionally, more than 200 rain barrels were also distributed to homeowners within the watershed and 200+ acres of cost-shared cover crops were planted under provisions of project BUCK11-03 implemented by the Fairfield County SWCD.

3.0 Manage harmful algal bloom (HAB) information: An important component of Ohio EPA's Inland Lakes Program is the partnership that is shared with Ohio's Department of Health and Natural Resources to implement a responsible harmful alga bloom monitoring and advisory network. During the reporting period the following HAB related activities were completed:

- Following consultation with Ohio EPA's HAB partners, Linda Merchant-Masonbrink updated the state of Ohio Harmful Algal Bloom Response Strategy. This strategy provides the framework for Ohio's posting of public health advisories and HAB advisories at various public recreation lakes where harmful algal blooms are persistent and algal toxins exceed public health and/or WHO standards for exposure. ***Performance in this area is consistent with annual expectations and targets.***
- Ohio EPA's NPS Inland Lakes program staff posted HAB advisories at three (3) Ohio State Park lakes and at the swimming beach at Maumee Bay State Park on western Lake Erie near Toledo. All microcystin data collected by Ohio EPA and analyzed by Ohio EPA's

Jeff Bohne from Ohio EPA's Central District Office preserving water samples for cyanotoxin analysis.

laboratory staff, was posted by Inland Lake Program staff on the Ohio HAB website, located at www.ohioalgaeinfo.com. ***Performance in this area is consistent with annual expectations and targets.***

- Parks and other publicly owned state park recreation areas where HABs were known to have occurred were monitored by staff from Ohio's Department of Natural Resources with lab analysis of the collected samples being analyzed by either Ohio EPA's laboratory or the city of Celina Ohio 's drinking water treatment system in Celina, Ohio.

- Linda Merchant-Masonbrink coordinated and participated as an instructor in a two-day cyanotoxin workshop at Ohio State University's Stone Laboratory during August 2014. ***Performance in this area is consistent with annual expectations and targets.***

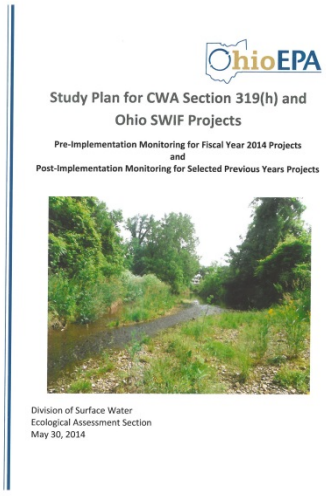
4.0 Provide financial assistance to facilitate inland lake restoration and protection: The rebirth of Ohio's Inland Lakes Program is in its earliest stages, focused more on assessment and monitoring. Logically, identifying needed restoration actions will follow this period of assessment. There are no funding sources specifically available for Inland Lakes Management –as a result, implementation will occur under the umbrella of other programs such as SWIF and/or Section 319(h). During the reporting period the following lake restoration related activities were completed:

- Under provisions of project 09(h)EPA-12 Ohio EPA's NPS Program provided funding for the installation of the Prairie Creek Treatment Train at Grand Lake St. Marys. This treatment system passively improves stream runoff by diverting 1.3 million gallons of nutrient runoff through a series of wetland treatment areas.
- Ohio EPA is evaluating the feasibility of issuing an Inland Lakes Only Request for Proposals. We are however, wanting to progress deliberately in this area. Demand for project assistance funding from public lake managers has been limited.

NPS Project Monitoring – Goals, Objectives and Milestones

GOAL NPS#1.0: Conduct baseline and post-project monitoring for Ohio's Section 319(h) and SWIF funded NPS management projects.

1.01 Prepare a 319-project monitoring study-plan that identifies methods and processes for determining baseline conditions for newly funded projects and post project conditions for those projects that have been completed. ***The FY14 Section 319-project study plan was completed by members of our Ecological Assessment Unit on May 30, 2014. Performance in this area meets annual target for the reporting period.***


OhioEPA

Study Plan for CWA Section 319(h) and Ohio SWIF Projects

Pre-Implementation Monitoring for Fiscal Year 2014 Projects
and
Post-Implementation Monitoring for Selected Previous Years Projects

Division of Surface Water
Ecological Assessment Section
May 30, 2014

1.02 Prepare an annual monitoring report that provides summaries of all collected water quality conducted under this initiative. ***The annual report documenting baseline conditions for FY12 Section 319(h) grants and prior year post-project monitoring was completed by Ohio EPA's Ecological Assessment Unit on August 29, 2014. This report is available online at Ohio EPA's Division of Surface Water website. Performance in this area meets annual target for the reporting period.***

1.03 Provide assistance to NPS Program staff with identifying and writing up project effectiveness summaries for submission to US EPA Region 5 under the SP-10 and SP-12 federal program measures. ***The Ecological Assessment Unit provided direct assistance to NPS staff in analyzing data that helped with the preparation of materials that were submitted to US EPA – Region 5 for the SP-12 Stillwater River Watershed.***

Urban Waters Initiative – Goals, Objectives and Milestones

GOAL Urban#01: Increase funding opportunities for NPS projects in predominately urban watersheds.

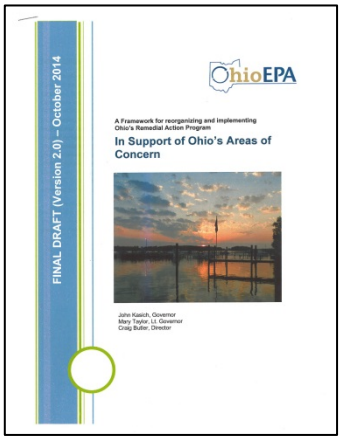
1.01 Issue an urban-waters specific Request for Proposals (RFP) for targeted NPS management, restoration and/or innovative stormwater management demonstration projects. ***We continue to examine the feasibility of issuing an urban-specific RFP versus simply soliciting proposals as part of our routine 319(h) and/or SWIF grant processes. This target has not yet been met.***

1.02 Award six (6) SWIF subgrants for the implementation of targeted NPS projects in predominately urban waters during 2015 and 2016. ***Twenty SWIF grants were awarded during the 2014-15 SWIF grant cycle for NPS projects in predominately urban waters. Performance in this area far exceeds program target.***

1.03 Link urban waters programming in areas where appropriate, that include Ohio's Areas of Concerns (AOC). ***Examples include the FY12 Lucas County and Cuyahoga County GLRI-SWIF stormwater demonstration projects. We anticipate continuing these types of initiatives that bring together AOC watershed communities, local implementers, and state and federal programs.***

Areas of Concern (AOCs) - Goals, Objectives and Milestones

GOAL #LE1.01: Improve state, federal and local coordination, communication and effectiveness



1.01(A): Develop clear guidance outlining roles, responsibilities and core missions among local RAP groups, Ohio EPA District RAP staff and central office Ohio EPA Lake Erie staff. ***A final AOC Program Framework was prepared, vetted and released as final October 2014. Performance meets program target for this objective.***

1.01(B): Review and revise current AOC Support Grants so that grant reporting and administration is more efficient and effective, project activities are focused on watershed specific critical needs and RAP activities and projects are effectively leading towards delisting of BUI's. ***In June 2014 a Master List of Deliverables was developed for AOC Support Grants. This list is similar to the deliverables list that has been successfully implemented for Section 319(h) and SWIF grants. The AOC Master List of Deliverables was first deployed in the development and drafting of the FY15 grant agreement for the Cuyahoga Regional Community Planning Organization (CRCPO). Performance during the reporting period meets program target for this objective.***

1.01(C): Eliminate redundancy among Ohio EPA Lake Erie Program and other state agencies. ***During development of the AOC Framework we evaluated and defined clear roles and responsibilities for the AOC-portion of program and we will move forward on this objective during the next year with an evaluation/audit of our other program areas, including monitoring and lake-wide***

coordination efforts. Performance during the reporting period meets the program target for this objective.

1-01(D): Participate as agency representative on applicable US EPA AOC workgroups and other state, federal or local task forces that are convened to specifically address a critical issues identified in the Lake Erie Program's Management Plan. ***Ohio EPA Lake Erie Program staff has participated on the 2014 and 2015 US AOC Annual Conference Planning workgroup and other AOC-specific discussion groups in 2014 as requested by USEPA GLNPO. Performance during the reporting period meets the program target for this objective.***

Goal LE#1.02: Develop finalized Ohio Delisting Guidance and Restoration Targets for Ohio's AOC's

1-02(A): Develop finalized delisting guidance and restoration targets for each of Ohio's Area of Concerns. Successful implementation will be measured by the following:

- Completion of draft delisting guidance and restoration target report
- Review and comments completed by US EPA and local RAP organizations
- Final delisting guidance and restoration targets report submitted and approved

Ohio EPA worked with technical experts within and outside of the agency to develop targets that are reasonable, measurable and aligned with the AOC program objectives. US EPA and Local AOC groups were also provided an opportunity to review and comment on the final guidance. Ohio's Delisting Guidance and Restoration Targets for Ohio Areas of Concern were finalized in May 2014 and are available online at http://www.epa.state.oh.us/dsw/lakeerie/index.aspx. Performance during the reporting period meets the program targets for this objective.

1.02(B): Provide technical assistance to local RAP organizations with the development and adoption of state restoration targets as indicated in the finalized delisting guidance report. ***Progress toward this objective was delayed while we finalized the AOC Program Framework. As soon as the Local AOC Advisory Committees are re-established, an initial priority in 2015 will be to evaluate the state BUI restoration targets. The groups will then work with Ohio EPA and our federal partners to determine if local targets are needed and if so, identify the process and timeframe for development. This objective needs to be prioritized for completion in FY15.***

Goal LE#1.03: Remove Beneficial Use Impairments and Delist Areas of Concern

1.03(A): Identify baseline status of all current BUI's against finalized revised state restoration targets and the critical project paths needed to attain restoration targets. Successful implementation will be measured by:

- Completing AOC-specific BUI baseline reports for each of Ohio's four (4) Areas of Concern
- Completing habitat restoration plans for the Cuyahoga, Black and Maumee Rivers
- Identify critical path projects and potential implementers needed for AOC restoration
- Develop timeline and funding scenarios for implementing critical paths on each AOC
- Implement monitoring and critical projects implementation tracking system
- Conduct environmental monitoring when completed projects are sufficient to delist BUI's.

We have made significant progress toward completing the BUI status updates and assessment is 100% complete in the Black River AOC and about 80% complete for the Maumee and Cuyahoga River

AOCs. In the Maumee AOC a key tool to manage the data and calculate the BUI status is the newly developed Data Management and Delisting System (DMDS). Development of the database was provided through a GLRI grant with funding passed through Ohio EPA to the Local AOC Facilitating Organization. This tool is available online (http://www.maumeerap.org) and serves as a one-stop-shop for finding an up-to-date status of the Beneficial Use Impairments (BUIs) in the watersheds of the AOC, along with pertinent analytical data and projects underway, completed, and envisioned for the AOC. Much of this critical information is shown geographically and through searchable resources and queries. The contractor is on schedule and the DMDS was officially rolled out to the public in December 2014. Updates to the Black River BUI status were completed by Ohio EPA AOC Program Staff (Conlin) and the Cuyahoga AOC Facilitating Organization (CRCPO) is calculating and tracking BUI status utilizing GIS and Excel database tools. We anticipate completion of all AOC-specific BUI baseline reports during the early part of 2015.

Ohio EPA is working with the AOC Facilitating Organizations to develop the habitat restoration plans. In September 2014, Ohio EPA received a $250,000 GLRI grant from US EPA for a Cuyahoga AOC Strategic Implementation Initiative. A RFP was issued in November 2014 and proposals are due in Mid-December. We anticipate awarding grants in January 2015 with most of the work completed in 2015. Successful completion of this project will result in conceptual and shovel-ready implementation project plans and identify watershed-specific restoration needs to directly feed into the Habitat Restoration Plan for the Cuyahoga AOC.

With the New Framework, energized and focused Local Advisory Committees, revised BUI Restoration Targets and updated BUI status in hand, Ohio EPA and our Local AOC partners are identifying the critical path projects and path toward delisting. These will be program priorities during FY15.

Lake Erie Monitoring Program - Goals, Objectives and Milestones

Goal LE#2.01: Develop and implement long-term monitoring plan for Ohio's waters of Lake Erie

Objective LE#2.01(A): Identify Ohio EPA monitoring objectives and needs to fulfill monitoring and reporting responsibilities, tracking lake water quality response to remediation projects and eliminating redundancy among multiple state, local and federal partners. Successful implementation will be measured by:

- Developing a clearly articulated monitoring strategy that includes processes by which monitoring priorities are identified and how data will be integrated into either lake or land management intervention and investment.
- Continue working in partnership with the Lake Erie charter boat captains in performing volunteer water quality monitoring during monitoring/fishing seasons throughout the five-year programming period.
- Implement a coordinated Lake Erie monitoring plan that includes other Lake Erie states, the Canadian province of Ontario and that includes a standardized data collection and sharing format among all monitoring partners.

  We recently completed the technical report for the three year (2011-2013) monitoring effort that was funded under a GLRI grant. We utilized the results of that study to develop the framework for a long-term monitoring strategy and are currently developing the 2015 Study Plan for Lake Erie. In 2015 we intend to further define the long-term monitoring strategy and will consult with US EPA and other monitoring partners as we move forward to formalize the strategy.

In 2014 we provided a $29,485 SWIF (14SWIF-07) Grant to Ohio Sea Grant/Stone Lab to facilitate the Lake Erie Charter Boat Captain monitoring initiative and conduct event-based HAB monitoring. The captains collected 75 samples in 2014 and Stone Lab also conducted valuable HAB-event and other monitoring near Maumee River dredging.

An important objective for 2015 is to improve coordination with our monitoring counterparts in Ohio and on all sides of the border to promote and facilitate development of a coordinated monitoring strategy for Lake Erie. Ohio EPA will meet with ODNR-Wildlife in January 2015 to initiate this effort.

2.01(B): Participate on related LAMP and Annex 2 workgroups developing a Lake Erie lakewide monitoring framework.

Ohio EPA Lake Erie Coordinator is a member of the Annex 2 Extended Subcommittee and Annex 2 Nearshore Framework Task Team and has participated in numerous conference calls and face-to-face meetings during 2014.

2.01(C): Participate in the 2014 cooperative science and monitoring initiative on Lake Erie. (Part of the 5-year rotational intensive monitoring program across the Great Lakes.

Ohio EPA Lake Erie Coordinator (Klei) is a member of the Lake Erie LAMP Working Group and through this group participated in CMSI planning discussions and plan reviews.

2.01(D): Identify lake monitoring costs and needs and obtain funding to implement the Lake Erie Long-Term Monitoring Strategy developed under Objective LE#2.01(A). Successful implementation will be measured by:

- Identifying appropriate existing and potential sources of funding Lake Erie Monitoring Strategy
- Submitting applications/proposals for funding implementation of the Lake Monitoring Strategy
- Incorporating uncovered costs in the Lake Erie program budget submittal each biennium

Ohio EPA has developed monitoring cost estimates for key components of the annual Lake Erie monitoring program including water quality and biological monitoring at ambient and estuary/coastal sites, mayfly sampling, and anoxia transects. In 2014, we continued our annual monitoring program utilizing our Lake Erie GLRI Program Grant and have secured additional federal funding for 2015 via a 106 supplemental grant. Discussions are currently underway to identify funding for 2016 and beyond.

Goal LE#2.02: Share monitoring data in a timely manner and communicate results

2.02(A): Prepare a Lake Erie Program annual report and publish the document online for easy public and partner access to Lake Erie monitoring data collected during that program year. This report will also provide updates on progress made toward attaining the objectives outlined in this revised management plan. Successful implementation will be measured by:

- Completion and submittal of a Lake Erie Program annual report by September 15th each year during the five-year programming period. This report will also be included into Ohio's NPS Program Annual Report each year.
- Participation in the Lake Erie Millennium network and other appropriate data sharing groups

A summary of Lake Erie Program efforts and progress toward objectives identified in the NPS Management Plan are provided in this annual report and a separate Lake Erie Annual Report with additional detail will be developed and posted on Ohio EPA's website in early 2015. Due to the significant amount of binational Annex work and meetings, the Lake Erie Millennium Network has not been as active in 2014, although Ohio EPA remains engaged with the group's leads.

Lake Erie Management Plan - Goals, Objectives and Milestones

Goal 2.01: Provide leadership as an agency representative on the Lake Erie LAMP

3.01(A): Participate as agency representative on all LAMP workgroup conference calls and attendance at annual face-to-face meetings and workshops.

LE3.01(B): Assist with the development and production of an annual LAMP report.

Ohio EPA Lake Erie Coordinator is a member of the Lake Erie LAMP Working Group and assisted with drafting the Annual Lake Erie LAMP report by providing Ohio-specific information and conducting a review. Activity of the Lake Erie LAMP working Group increased in 2014 and Klei attended the annual meeting in February 2014 in Erie, PA.

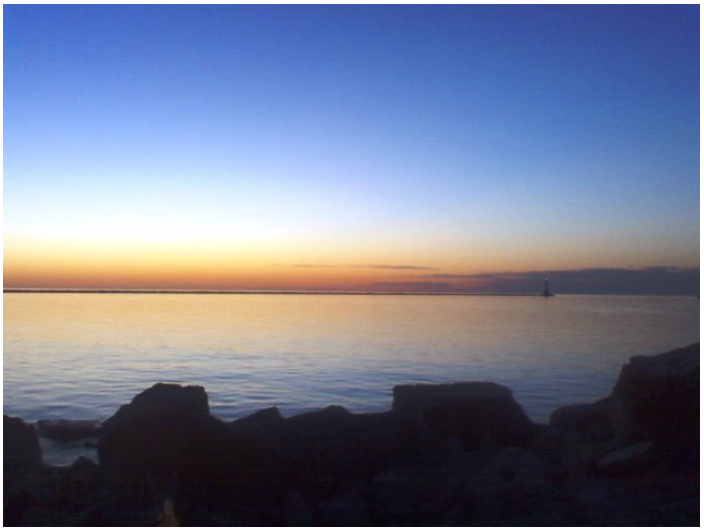
Goal 2.02: Provide input and advice on Lake Erie related management efforts

3.02(A): Assist by providing data that is needed for the Lake Erie Quality Index which is a work product of the Lake Erie Commission.

Dan Glomski, Ohio EPA NWDO Water Quality Supervisor, is participating on the Lake Erie Commission's Lake Erie Quality Index project team and has provided all of the related data and assisted with evaluating metrics. Other Ohio EPA staff provided feedback on Index development and messaging for the report and will be involved in the final review.

3.02(B): Participate in the biannual State of the Lakes Ecosystem Conference (SOLEC).

The last SOLEC conference was in 2013 and may likely be the last as the new GLWQA and Annex discussions are indicating other bi-national efforts may replace the conference.



Sunset on Lake Erie

TMDL Development and Watershed Assessment: A significant component of Ohio EPA's NPS Program activities is the ongoing assessment of watersheds throughout the state and the completion of Total Maximum Daily Load (TMDL) studies. The TMDL process identifies science-based recommendations for addressing identified water quality impairments caused by both point-source and NPSs of pollution. TMDL activities completed during the reporting period include:

- Continue to improve alignment of NPS Program activities with TMDL studies and state endorsed 9-element watershed action plans.
- Ohio EPA TMDL staff continues to use the "master universe of deliverables and units of measurement" in all TMDL reports. This master deliverable list uses many of the same deliverables and units of measure as are used in Ohio's Section 319(h) grants program and provides increased consistency and improved implementation tracking efforts. The follow on "implementation" report for the lower Maumee River and Lake Erie tributaries TMDL examined reasonable assurance in an attempt to better define what an "implementation-ready TMDL" would require. The concept is being further explored through contractor assistance work in the Sandusky and Maumee watersheds. When complete, we expect that the TMDL template will be updated to incorporate the lessons learned through these projects.
- Providing critical Ohio EPA central office and district staff resources for the completion of TMDL studies.
- During FY14, Ohio EPA submitted TMDLs for review and approval in two (2) project areas covering 43 12-digit HUC watershed units and 2 large river assessment units. TMDLs were submitted and approved by U.S. EPA for the Ottawa River (Lima area) and the Sandusky River (lower river and Bay tributaries) watersheds.
- New TMDL initiatives commenced in 107 12-digit HUC watershed units and 2 large river units in five project areas during the reporting period. New assessment areas for 2014 include the following:
    - Rocky River
    - Auglaize River (lower)
    - Big Darby Creek
    - Ohio River Tribs Southwest (Mill, Muddy, Bullskin and Twelvemile Creeks)
    - Wills Creek

  This set of assessment areas continues the full-scale revisits to watersheds that already have a TMDL (Big Darby Creek and Mill Creek) and brings us closer to completing work in the Maumee River watershed which is identified as the major NPS load contributor to the western basin of Lake Erie.

- Participated in the U.S. EPA Headquarters TMDL Visioning exercise, which seeks to harvest the experiences gained in doing TMDLs over the past decade and recast the program to improve environmental outcomes. The six elements proposed include protecting healthy waters, prioritizing TMDLs for the most impaired waters, considering alternatives to TMDLs, assessing both healthy and impaired waters on a site-specific basis, engaging the public in the TMDL planning process, and integrating with other Clean Water Act and Safe Drinking Water Act programs. Ohio EPA is enaged with US EPA to define the specific parameters under new measures 27 and 28.
- Following the agency-wide restructuring of Ohio EPA's web presence, the TMDL pages were reorganized to a major-watershed format to help the public find related projects more easily. The

pages also include an "implementation" tab for each project where we report on post-TMDL projects and progress. This is another way to highlight program integration, the value of Section 319-funded projects, and their relationship to improving water quality. Approximately 80 implementation projects have been added to these pages. The web page may be found at: http://epa.ohio.gov/dsw/tmdl/index.aspx.

Inland Lake Monitoring Program: Ohio EPA renewed inland lake monitoring in 2008. We are currently in the process of updating Ohio's water quality standards and rules for lakes. Once completed, Ohio EPA expects to include an assessment of aquatic life use for lakes as a factor in listing watershed or large river assessment units in future 303(d) lists.

Ohio EPA currently has resources to monitor up to 20 inland lakes per year. Prior is placed on lakes that are used for public drinking water supply or heavily used for recreational activities. The objectives for monitoring inland lakes are to:

1. Track status and trends of lake water quality.
2. Determine the attainment status of beneficial uses
3. Identify the causes and sources of impairments
4. Recommend actions for improving water quality in Ohio inland lakes

Ohio EPA's Section 319(h) program provided substantial financial assistance for completion of the Prairie Creek Treatment Train at Grand Lake St. Marys. More than 1 million gallons of nutrient rich water is drawn from the creek and filtered through this wetland complex before entering the lake. Results thus far are very good.

Ohio EPA is implementing a sampling strategy that focuses on evaluating the water quality conditions in the state's inland lakes. The sampling target consists of a total of ten sampling events divided over a two-year period and collected during the summer months. Key water quality parameters sampled include total phosphorus, total nitrogen, chlorophyll a, Secchi depth, ammonia, dissolved oxygen, pH, total dissolved solids and various metals such as lead, mercury and copper.

In 2012 Ohio EPA's Inland Lakes Program was linked with the NPS and Lake Erie Section. This merger is helpful in identifying NPS causes of impairment in lakes and providing important linkage with funding programs such as Section 319(h) and SWIF grants.

During the reporting period, the following inland lake monitoring activities were completed:

- District office water quality staff completed sampling on 19 inland lakes during 2014, including 11 lakes that were sampled for the first time in recent years and eight (8) lakes that are in the second year of sampling. Data and results will be reported in the next Ohio Integrated Report.
- Phytoplankton samples were processed and sent to a private lab for further assessment. Cyanotoxin analysis for microcystin was conducted by Ohio EPA's laboratory.

- Linda Merchant-Masonbrink delivered a presentation on the status of Ohio's Inland Lakes Monitoring Program at the National NPS Monitoring Workshop conducted in Cleveland on October 29, 2013.
- On February 9, 2014 Linda delivered a presentation to Ohio State University students about the purpose and status of Ohio's Inland Lakes Monitoring Program.

Harmful Algal Bloom Response Initiative: The Ohio EPA in partnership with the Ohio Department of Natural Resources (ODNR) and Ohio Department of Health (ODH) developed the State of Ohio Initiative to Address HABs in Ohio's Inland Lakes and Lake Erie and a state-wide algal toxin sampling program. Ohio EPA began monitoring for algal toxins in 2009, after a high level of microcystin was detected in Grand Lake St. Marys (GLSM) during the National Lake Survey. In response, Ohio EPA and ODNR sampled microcystin at GLSM and other lakes with harmful algal blooms reported at public beaches or drinking water intakes. Algal toxin monitoring continued in 2010 at additional inland lakes and at select state park beaches and drinking water intakes affected by HABs.

In June 2011, Ohio EPA, ODH and ODNR released the *Ohio Harmful Algal Bloom Response Strategy*. The purpose of the strategy, which focuses on publically owned, recreational lakes with public beaches and/or boat ramps, and drinking water source waters, is to protect people from toxins produced by cyanobacteria that may be in recreational or source waters at concentrations that can affect human health. Ohio's HAB Response Strategy outlines the thresholds set for identified algal toxins, establishes monitoring protocols and identifies the revised process for posting and removing surface and drinking water use advisories.

Central District Office water programs manager Mike Gallaway taking a water measurement at a public beach at Buckeye Lake State Park. Notice the green tint to the water – a sure sign of an active algal bloom.

According to the state's strategy, informational signs are placed in areas where HABs have been observed at State Park beaches. These signs encourage beachgoers to be alert for HABs and provide information about their appearance. In addition, the HAB advisory system was changed to a two-level system. A "Public Health Advisory" is posted when toxin levels equal or exceed the established state benchmark criteria. Microcystin is the focus of toxin analysis. When microcystin levels exceed 6 ppb, a Public Health Advisory is posted. When microcystin levels reach 20 ppb or above, and there are confirmed human illness or animal illness or death attributed to the cyanotoxin, then a "No Contact Advisory" is posted.

In 2012, blooms were reported at eight (8) State Park lakes and three (3) Lake Erie State Park beaches. Public Health Advisories based on microcystin concentration were posted at four (4) State Park lakes. Grand Lake St; Marys beaches were posted with this advisory for 100% of the recreational season; Buckeye Lake beaches for 52% of the season; Maumee Bay for 0.11% of the season; and Euclid Beach for 0.11% of the season.

In 2014, Public Health Advisories were posted at all three Grand Lake St. Marys beaches for the entire recreational season. In addition, advisories were posted at Buckeye Lake State Park, Harsha Lake (East Fork State Park), and Maumee Bay State Park beaches.

Ohio EPA continues to work with our state partners to be responsive to HABs at State Park beaches. Ohio EPA also works closely with NOAA to use satellite imagery to track bloom development and concentration in the vicinity of beaches and intakes.

In addition to the HAB responsive sampling program, the Ohio EPA Inland Lakes Monitoring Program continues to collect phytoplankton and microcystin from the lakes sampled each year as part of the routine sampling of lakes in TMDL watersheds. Sampling for microcystin and phytoplankton is incidental to the survey and separate from the HAB responsive program outlined in the State of Ohio Harmful Algal Bloom Response Strategy.

HAB related activities completed during the reporting period include:

- The DSW HAB coordinator (Linda Merchant-Masonbrink) participated as an instructor teaching a two-day cyanotoxin workshop at the Ohio State University's Stone Laboratory in August 2014.
- Linda Merchant-Masonbrink presented HAB information at Ohio EPA's Inland Lakes Training program for DSW water quality staff.
- The DSW HAB coordinator gave six (6) HAB presentations to a variety of audiences. For more details, please refer to the Education and Outreach section of this annual report.
- The DSW HAB coordinator posted advisories for three (3) State Park lakes and one (1) Lake Erie beach on the interactive map on the ohioalgeinfo.com website. All microcystin data reported by the Ohio EPA laboratory and the Celina PWS for ODNR was posted by Ohio EPA DSW staff on the ohioalgaeinfo.com website.
- The DSW HAB coordinator updated the State of Ohio Harmful Algal Bloom Response Strategy in consultation with Ohio DNR and ODH.
- The DSW HAB coordinator monitored the HAB mailbox and followed up with responses and referrals.

Agricultural Assistance: Ohio EPA continues to enhance our capabilities to provide meaningful technical assistance and leadership in the NPS arena. This includes the agricultural community and other agencies working to make positive progress in reducing agriculture's impact on water quality issues and on urban and suburban initiatives that promote installation of green infrastructure and provide important community messaging on the benefits of improved stormwater infrastructure. The following are several initiatives that were undertaken during the FFY 2014 reporting period:

- NPS Program staff routinely participates on the USDA-NRCS State Technical Committee. During the reporting period, Ohio EPA NPS staff (Rick Wilson) attended all four quarterly meetings. Additionally, Rick participates on several STC sub-committees.
- Rick Wilson continues to serve as Ohio EPA's representative on the Boards of the Ohio Certified Crop Advisors (CCA).
- Ohio's NPS Program staff continues to work with ODNR's watershed program to review Watershed Action Plans. Additionally, Ohio is working on a strategy to improve Watershed Action Plans moving forward.
- Ohio EPA continues to conduct grant recipient site visits to document progress with respect to completion of project deliverables, and to discuss obstacles toward project completion. This included numerous visits to urban stormwater demonstration project sites, and visits to Crawford, Defiance and

Hancock County SWCDs to review GLRI project goals and deliverables and visit sites where measures have been implemented.

- Rick Wilson attended the All-Ohio Chapter of the Soil & Water Conservation Society Winter meeting where, again, the focus remains on improving water quality through improved agricultural conservation practice implementation and installation.

- Rick Wilson provided input into the development of Ohio's NPS Management Plan update, approved by U.S. EPA Region 5 in June 2014.

- Continued to collaborate with non-governmental environmental organizations to provide a more effective message for dealing with NPS issues related to agriculture. Ohio EPA's NPS Program staff developed a draft framework of recommendations for inclusion into future versions of Ohio's NPS Management Plan. The following is a summation of the messaging that is consistently used by Ohio EPA NPS staff when discussing agricultural water quality issues:

    - Increase conservation planning
    - Install effective hydraulic buffers
    - Focus on critical areas
    - Reestablish 3-zone riparian areas
    - Eliminate application of manure on frozen or snow-covered ground
    - Control sub-surface drainage discharges and disperse concentrated surface runoff through designed and effective hydraulic buffers for retention and treatment
    - Install upland or in-field hydraulic buffers
    - Eliminate manure application at rates that provide more than 1 year of benefit
    - Plant cover crops as part of long term conservation crop rotation

  We do not expect such recommendations to be widely adopted by the agricultural community and infrastructure; however, we strongly believe that the message is responsible and necessary, and provides a clear path forward for reducing the impacts of NPS pollution from agricultural area. Grant programming, along with education and outreach efforts, will be aligned to support these recommendations when dealing with agricultural NPS issues.

- Continued with technical support to Crawford County SWCD as they work to successfully implement nutrient reduction efforts in cooperative with area farming operations in the Loss Creek Watershed. Also participated in many telephone conference calls with the Ohio State University Extension as they developed and administered the social indicators work under a GLRI grant for the Loss Creek Watershed.

- Continued technical and field support to monitor Buckeye Lake. This included hosting limnologists from TetraTech during their May 2014 visit and providing them with background on the lake and its watershed to help with their evaluation and to provide recommendations. Ohio EPA also continued with the annual installation of water monitoring meters (YSI Sondes) in Buckeye Lake that monitor water quality parameters near the surface and bottom.

- Rick Wilson attended a presentation by an associate professor of Wright State Lake Campus that was focused on discrediting much of the effort made by the State of Ohio to improve water quality at Grand Lake St. Marys. The presentation was refuted by several in attendance and has not been made available.

- <u>New Initiative</u>: Russ Gibson and Rick Wilson spent a considerable amount of time and effort to help plan and participate in the 2013 NPS Monitoring Conference & Workshop that was held in Cleveland, Ohio on October 28-30, 2013. Rick provided a presentation entitled "Performance Based Innovative

Nutrient Reduction: using an Enhanced Ohio P-Index to Increase Conservation Practice Adoption by Practices," which described the innovative nature (i.e., performance based reimbursement) of the Ohio Lake Erie Demonstration Watershed project along with the successes realized thus far in the grants described above.

- New Initiative: Staff consulted with Bruce Cleland of TetraTech on several occasions to help identify critical watersheds and optimal conservation practices as part of an on-going effort to improve the value of the implementation chapter in TMDL reports. These discussions dealt mostly with Maumee River and Lower Sandusky TMDLs.
- New Initiative: Met with Ohio NRCS and Ohio Farm Service Agency to open a dialogue with respect to facilitating the promotion, design and installation of edge-of-field water retention practices.
- New Initiative: Rick Wilson attended the Water Environment Federal (WEF) Green Infrastructure webcast.
- In March, Rick Wilson attended a workshop with stream restoration professionals and others that focused on validating efforts to restore streams to attain water quality. In April, Rick and Russ Gibson attended a Section 401 meeting to discuss program priorities.
- Russ Gibson and Rick Wilson attended the Ohio Federation of Soil & Water Conservation Commission meeting, and then met with the Federation chairperson to discuss objectives and goals in Ohio's Nutrient Strategy and Ohio's NPS Management Plan update.
- Rick Wilson served as Ohio EPA's representative and attended several meetings to develop a USDA Regional Conservation Partnership Program grant. The grant focuses on developing nutrient management plans and installing conservation practices in the Western Lake Erie Watershed.
- In August, Rick Wilson discussed partnering on projects (GLRI or otherwise) with the Ohio State University and others. Rick also met with TetraTech, ODNR, Region 5, and NRCS to discuss the TetraTech tool to identify the best locations for drainage water management and other water retention-type practices.
- Rick Wilson attended a Healthy Soils-Healthy Waters workshop in September, where he presented a case study on the Loss Creek Nutrient Reduction Demonstration program.
- In September, Rick Wilson attended the ODNR Conservation Awards ceremony at the Farm Science Review in London, Ohio. Rick also performed a technical visit to the University of Findlay horse farm and attended a bio-retention construction workshop.

National Water Quality Initiative: The National Water Quality Initiative is a collaboration between the Natural Resources Conservation Service (NRCS) and U.S. EPA to work with farmers in Ohio to improve water quality where this is a critical concern. The goal is to focus financial assistance into selected watersheds (at 12 digit HUC scale) to help farmers implement conservation systems to reduce nitrogen, phosphorous, sediment and pathogen losses into surface waters from agricultural land. This is the second year of the initiative. Ohio EPA was once again very active in working with NRCS to make Ohio's NWQI as successful as possible. Although the first year of NWQI (Ohio EPA was not involved) in 2012 in Ohio was somewhat dismal, the past two years in which we have been working closely with NRCS are showing remarkable increases in participation. Ohio's NWQI watersheds for 2014 are as follows:

- Brandywine Creek-Broken Sword Creek (0410001000301)-Ohio EPA recommended
- East Branch South Fork Sugar Creek (0504000110301)

- Fivemile Creek-East Fork Little Miami River (050902021102)

The goal of the NWQI is to implement as many conservation and management practices with the available funding. Ohio EPA's goal differs only slightly in that we are wanting to document through monitoring, any measurable improvements in water quality that may occur. NWQI funding is limited to only 5% of Ohio's EQIP allocation (though Ohio NRCS has increased this amount when funding in other program areas becomes available) which is roughly $600,000. As we embarked upon this initiative with NRCS, some initial concerns that may challenge documenting success include general funding limitations; the possibility that participating acres are miniscule compared to the agricultural activities and the ongoing installation of subsurface tile drainage systems. We also are concerned that ongoing activities such as ditch maintenance may influence results.

Background on Ohio EPA's NWQI Priority Watershed

The Brandywine Creek-Broken Sword Creek watershed lies within the Sandusky River basin, a direct tributary to the western basin of Lake Erie, and encompasses the headwaters of Broken Sword Creek downstream to and including Brandywine Creek. It is located in north central Ohio in Crawford County and is comprised of approximately 35,392 acres (55 square miles) - of which 82.6% is in agricultural row crop production. Other land uses within the watershed include developed land (6.2%), forest (8.1%) and grass/pasture (2.5%) (Source: National Land Data Set, 2001). The entire watershed is located within the Eastern Corn Belt Plains (ECBP) ecoregion and there are no permitted point source dischargers present.

The current aquatic life use designation of Broken Sword Creek and its primary tributaries in this HUC-12, Brandywine Creek and Red Run, is Warmwater Habitat (WWH). Based on sampling in 2001, portions of Broken Sword Creek and Brandywine Creek were recommended for the Modified Warmwater Habitat (MWH) use due to extensive channel modifications; the headwaters of Brandywine Creek and Red Run were recommended for the Limited Resource Water (LRW) designation. Based on the 2001 sampling survey results, principal causes of impairment in the Brandywine Creek-Broken Sword Creek watershed were identified as nutrients, direct habitat alterations, flow alterations, and excessive sedimentation/ siltation. Primary impairment sources identified were non-irrigated crop production, channelization, flow regulation/modification, and spills.

Progress to Date in Ohio's Priority NWQI Watershed

Since 2013 when Brandywine Creek-Brokensword Creek was selected as Ohio EPA's priority NWQI watershed, landowner participation has been very encouraging. In 2013 there were 26 landowner contracts executed totaling more than $175,000 for a variety of management practices. During 2014, an additional 17 contracts were executed totaling more than $242,600. Participation rates in the Brandywine-Brokensword Creek exceeded initial fund availability so Ohio NRCS increased NWQI contracts in the three targeted watershed to meet increased numbers of landowners wishing to participate.

Some of the practices for which contracts have been executed include the following:

- Cover Crops – 3,812 acres

- Residue and Tillage Management – 2,094 acres
- Livestock Fencing – 2,363 linear feet
- Conservation Crop Rotation – 81 acres
- Waste Facility Cover – 1 unit
- Heavy Use Area Protection – 1 unit
- Grassed Waterway – 1.1 acres

Ohio EPA's Ecological Assessment Unit staff completed baseline water quality and biological monitoring in the Brokensword Creek NWQI area in summer of 2013. This date and summary of baseline conditions will provide an important foundation from which to measure the success of the multitude of NRCS conservation practices within the project area. Upon installation of the majority of contracted practices, Ohio EPA will return to conduct follow up monitoring and draft a final report summarizing results.

OHIO EPA Biological Monitoring Measures

FISH COMMUNITY MEASURES
Index of Biological Integrity (IBI)
Modified Index of Well-Being (MiWB)

MACROINVERTEBRATES
Invertebrate Community Index
ICI

HABITAT MEASURES
Qualitative Habitat Evaluation Index
QHEI

Ohio EPA Monitoring Crew Fish Sampling in Olentangy River

Ohio's NPS Project Monitoring Initiative: Since the FY08 grant cycle Ohio EPA began conducting all Section 319-funded project water quality monitoring activities. Not only has this resulted in a considerable cost-savings (prior to Ohio EPA's assumption of monitoring activities) we have observed substantial improvement in the quality of data that is being collected and significant improvements in how the data is collected and used by other parties including US EPA.

Baseline project monitoring is scheduled directly with local project managers shortly after gran awards are announced. Ohio EPA biologists arrange access to project sites and sampling for fish, bugs, habitat and general water chemistry is completed. Follow-up monitoring is conducted during the third year after each project has been completed. Data is routinely downloaded into appropriate state and federal systems and a report is completed for each Section 319(h) funded project site and stream segment where monitoring was completed.

FY14 Section 319(h) Subgrant Projects Scheduled for Baseline Monitoring

14(h)EPA-10: City of Delaware Public Utilities Dept.
FY 2014 Section 319(h) NPS grant funding is provided to expand the existing conservation buffer adjacent to Delaware Run (an urban tributary to the Olentangy River) to slow down the water, lower water temperature, as well as filter the sediment and other NPS pollutants by installing approximately 30,448 square feet of permeable pavement, constructing stormwater treatment wetlands, and reconstructing/restoring existing wetlands and planting wetland species. .

14(h)EPA-12: City of Stow
FY 2014 Section 319(h) NPS grants funding is awarded to restore approximately 2,400 linear feet of Mud Brook using a raise-grade approach to place the stream in a historic alignment. The project will also restore approximately 1.75 acres of floodplain by planting native grasses, trees, shrubs and/or live stakes.

14(h)EPA-13: City of Lancaster
FY 2014 Section 319(h) NPS grant funding is awarded to restore approximately 960 linear feet of stream by removing debris, invasive species management, channel enhancements, bank stabilization and riparian corridor plantings. Successful completion of this project will reduce NPS pollutant loadings to Baldwin Run and will improve stream habitat that is currently degraded due to siltation and channelization.

14(h)EPA-14: Rural Action, Inc.
FY 2014 Section 319(h) NPS grant funding is awarded to construct approximately 2.4 acres of passive treatment wetlands to reduce acid mine drainage impacts to Monday Creek. Successful completion of this project will reduce acid mine drainage impacts to Monday Creek and will help with biological recovery in the stream.

14(h)EPA-18: Village of Reminderville
FY 2014 Section 319(h) NPS grant funding is awarded to restore approximately 1,200 linear feet of stream and adjacent wetland/riparian wetland systems and to improve approximately 1,000 linear feet of streambank and riparian habitat. Successful completion of this project will reduce NPS pollutant loadings to Tinkers Creek and restore assimilative functionality to the stream and adjacent wetland/riparian wetland systems.

14(h)EPA-19: Madison Village
FY 2014 Section 319(h) NPS grant funding is awarded to restore approximately 600 linear feet of a Class 1 modified primary headwater habitat stream that flows through Fairview Memorial Park cemetery and re-

forest approximately 0.7 acre of riparian corridor. Successful completion of this project will restore 600 linear feet of channelized and impaired stream channel using natural channel design.

14(h)EPA-20: City of Huron

FY 2014 Section 319(h) NPS grant funding is awarded to restore approximately 400 linear feet of floodplain and streambank using bio-engineering, re-contouring and re-grading. Successful completion of this project will reduce NPS pollutant loadings to Huron River and will help to improve water quality by improving floodplain functions.

14(h)EPA-23: Liberty Township

FY 2014 Section 319(h) NPS grant funding is awarded to restore/stabilize approximately 150 linear feet of stream and streambank on the eastern bank of the Olentangy River using bio-engineering techniques. Successful completion of this project will reduce sediment loadings to Olentangy River and stabilize the severely eroding eastern bank of the Olentangy River.

14(h)EPA-24: Ottawa Soil & Water Conservation District

FY 2014 Section 319(h) NPS grant funding is awarded to offer farmers three options to participate in a cost-share program to reduce nitrogen and phosphorus runoff (western end of Lake Erie). Successful completion will reduce NPS pollutant loadings to the Portage River and offer farmers opportunities to participate in a program to reduce nitrogen and phosphorous laden runoff to Lake Erie.

14(h)EPA-25: City of Solon

FY 2014 Section 319(h) NPS grant funding is awarded to restore approximately 430 linear feet of stream through natural streambank stabilization and the restoration of 1.0 acre of riparian corridor and vegetated floodplain on Hawthorne Creek, a tributary of Tinkers Creek. Successful completion of this project will help to reduce NPS pollutant loadings to Tinkers Creek by reducing erosion and habitat alteration from land development/suburbanization and urban stormwater runoff.

14(h)EPA-26: Cleveland Metroparks

FY 2014 Section 319(h) NPS grant funding is awarded to restore approximately 3 acres of headwater wetlands by removing the existing culvert and tile drainage, and the wetlands will be heavily planted with shrub and tree species adapted to wetland environments. Successful completion of this project will reduce NPS pollutant loadings to Chagrin River and will help to begin addressing the root causes of watershed degradation including habitat alterations, lack of riparian corridor vegetation, and suburbanization causing thermal modification and storm flow alterations.

14(h)EPA-28: City of Broadview Heights

FY 2014 Section 319(h) NPS grant funding is awarded to construct approximately 5.75 acres of stormwater treatment wetlands in order to provide water filtering of runoff before discharging to the creek, to provide new aquatic habitat, to protect existing wetlands and forested habitat in riparian corridor and to halt further streambank erosion. Successful completion of this project will reduce NPS pollutant loadings to Chippewa Creek and provide water filtering of runoff before discharging to the creek, help to protect existing wetlands and halt further streambank erosion by constructing 5.75 acres of stormwater treatment wetlands.

Presentations and Outreach: An expanding component of Ohio's NPS Management Program involves effectively communicating activities that are underway to address NPS impairments within Ohio's watersheds. Outreach activities are also designed to provide Ohioans with information about actions that can be undertaken to help solve NPS impairments. Educational and Outreach activities completed during the reporting period include:

FY14 Presentation Highlights: During the reporting period, NPS Program staff attended numerous meetings/conferences, participated in conference calls, performed site visits, and made presentations about Ohio's NPS Program and other NPS related topics. The following is a summary of these activities during the FY14 reporting period:

10/15/13:	Russ Gibson went on a tour of the Mohican and Kokosing State Scenic Rivers with central Ohio Scenic River Coordinator Natalie Pirvu.
10/15/13:	Russ Gibson and Rick Wilson attended a meeting with BLT to discuss progress on the Buckeye Lake Nutrient Reduction Plan that has since been completed.
10/17/13:	NPS Manager delivered a presentation outlining progress and success of the SWIF grant projects for stormwater staff from ODNR and Ohio EPA's Division of Surface Water.
10/17/13:	Russ Gibson participated in a watershed planning meeting with Amy Brennan from the Nature Conservancy and Jennifer Eismeier from the Mill Creek Council of Governments.
10/23/13:	Met with Scioto Greenways organization to discuss the Main Street Dam Removal and Stream Restoration Project and potential/possibility of Section 319(h) grant funding to assist with the project..
10/28/13:	Coordinated and attended the 2013 National NPS Monitoring Workshop in downtown Cleveland. The conference was a collaborative effort between Ohio EPA, the city of North Olmsted, Cleveland Metroparks, Chagrin River Partnership, Cuyahoga County SWCD, Ohio EPA's Northeast District Office, and others. The Workshop was attended by more than 200 participants from around the country. ***More details about this conference can be found on page 49 of the FY2013 Ohio NPS Program Annual Report.***
10/28-29:	NPS Program staff Rick Wilson, Linda Merchant-Masonbrink, Amy Jo Klei and Russ Gibson all delivered presentations at the National NPS Monitoring Workshop conducted in Cleveland on October 28th through 30th.
11/5/13:	Russ Gibson delivered a presentation on Grand Lake St. Marys at the annual Office of Special Investigations Conference – 28 attendees
11/19/13:	NPS Program staff participated on a conference call with Bruce Cleland of TetraTech to discuss the Sandusky River TMDL implementation planning project
12/5/13:	Met with the Western Reserve Land Conservancy to discuss grant and project opportunities to protect high quality waters in northeast Ohio.
12/9/13:	Attended an Ohio Area of Concern (AOC) coordination meeting with Ohio EPA's Northeast District Office and Northwest District Office management and program staff. This is one of a series of meetings that were undertaken to discuss needed

	improvements to Ohio's AOC Program and to better coordinate pursuit of GLRI grant funding for AOC related projects.
12/9/13:	Meeting with the city of Delaware to discuss the Olentangy River Stratford low head dam removal project and ideas for moving forward with this project. This project will remove the last two low head dam structures in the 26 mile state designated scenic segment of the Olentangy State Scenic River.
12/11/13:	NPS Program staff participated on a conference call with Bruce Cleland of Tetratech to further discuss the Sandusky River TMDL implementation planning project. These calls are scheduled intermittently and conducted to insure adequate consultation with Ohio EPA's NPS Program in developing a Sandusky River TMDL Implementation Plan.
1/8/14:	Rick Wilson and Russ Gibson met with Ohio NRCS program personnel to discuss limitations and opportunities for enhancing funding for local watershed implementation efforts.
1/13/14:	Participated in a two day program review with U.S. EPA staff from Region 5 in Chicago. Following two days of review and discussion we received a favorable rating from US EPA.
1/15/14:	Russ Gibson and Rick Wilson attended the Ohio Soil & Water Commission meeting at ODNR and presented updates to the Commissioners on both the NPS Management Program and Section 319(h) and SWIF grant programs.
1/16/14:	Ohio AOC coordination meeting with NEDO and NWDO district DSW and Division of Emergency Response & Remediation (DERR) staff as well as DSW central office staff. The meeting was conducted at Alum Creek State Park at the Horace Collins Geology Lab facility. This was the third or fourth of an ongoing series of discussions to identify and address programming problems or shortfalls of the AOC Program and local RAP groups.
1/17/14:	Participated on a conference call with Dr. Harry Gibbons and Shannon Brattebo from Tetratech to discuss nutrient enrichment and HAB issues at both Buckeye Lake and Grand Lake St. Marys.
1/17/14:	Russ Gibson participated in a HAB coordination call with ODNR and the US Army Corps of Engineers
1/22/14:	Amy Jo Klei and Russ Gibson participated in an AOC and Lake Erie Program meeting in Ohio EPA's northwest district office.
1/28/14:	Rick Wilson, Sarah Becker and Russ Gibson participated in a water quality monitoring briefing of Ohio State Parks management staff. Sarah delivered a brief presentation summarizing two (2) years of Ohio EPA monitoring at Buckeye Lake.
1/29/14:	Meeting with Amy Brennan of the Chagrin River Watershed Partners to discuss ideas and plans for regional watershed assistance centers.
1/29/14:	NPS Program staff participated in a coordination meeting with USDA Farm Services Agency and NRCS on saturated buffers and other agricultural management practices.
1/30/14:	Met with Dave Anderson Township Administrator for Liberty Township to discuss funding opportunities for streambank stabilization project in the Olentangy River.

1/31/14: Russ Gibson and Amy Jo Klei participated in an AOC Program Coordination Committee meeting

SWIF Grants Information Sessions: Martha Spurbeck, Russ Gibson and Rick Wilson conducted four FY14 SWIF Grants information sessions throughout Ohio to help inform potential SWIF grant applicants of the procedures, preferences and other guidelines for SWIF funding. These sessions are very positive and comfortable venues for applicants to have their application questions answered. Approximately 150 people attended these sessions this year.

District Office SWIF Sessions were conducted as follows:

2/10/14 – Ohio EPA Northeast District Office, Twinsburg, Ohio ~ 60 attendees

2/13/14 – Ohio EPA Southwest District Office, Dayton, Ohio ~30 attendees

2/19/14 – Ohio EPA Northwest District Office, Bowling Green, Ohio ~30 attendees

2/21/14 – Ohio EPA Southeast District Office, Logan, Ohio ~10 attendees

2/25/14 – Ohio EPA Central Office, Columbus, Ohio ~10 attendees

2/24/14: Follow-up regional watershed meeting with Amy Brennan of the Chagrin River Watershed Partners to continue previous discussions.

2/26/14: Meeting with Scudder Mackey and others at ODNR's Coastal Management Program to discuss opportunities for inter-agency coordination and to be briefed on ODNR's path-forward for completing revisions to Ohio's Coastal NPS Program Plan..

3/06/14: NPS Program staff participated in a meeting with Ohio NRCS program staff to discuss progress to date and to coordinate further participation in the National Water Quality Initiative.

3/07/14: Participated in an internal Ohio EPA Buckeye Lake coordination meeting with members of our modeling and assessment unit and central district office water quality staff. The meeting was to be briefed on the results of Ohio EPA's two-years of water quality monitoring and modeling at Buckeye Lake State Park completed under provisions of Federal Grant #C9-00E00782-0 (State Grant ID BUCK11).

3/11/14: Russ Gibson met with representatives from the City of Kent to discuss potential SWIF project ideas.

4/25/14: NPS Program staff met with Ohio EPA's Ecological Assessment Unit in the Groveport field office to discuss and coordinate Section 319(h) and SWIF project monitoring during spring and summer of 2014.

4/28/14: Conference call with Amy Jo Klei, Russ Gibson and Karen Rodriguez of US EPA's Great Lakes Program Office regarding Cuyahoga RAP Strategic Implementation Planning grant.

4/29/14: NPS Program staff met with the Assistant Chief of Ohio EPA's DERR regarding potential coordination and assistance with sediment analysis and dredging within Ohio's four Areas of Concern. Since then Tiffani Kavalec has been appointed Assistant Chief of the Division of Surface Water.

5/5/14: NPS Program staff met with Ohio NRCS staff Barb Baker and Dot Harris to discuss ongoing participation and commitment to the National Water Quality Initiative.

5/7/14:	NPS Program staff and Sarah Becker from Ohio EPA's Modeling and Assessment Unit conducted site visits with Tetratech's Dr. Harry Gibbons and Shannon Brattebow at Buckeye Lake on 5/7 and at Grand Lake St. Marys on 5/8. Dr Gibbons also briefed members from the Buckeye Lake for Tomorrow and Buckeye Lake State Park Manager, Jason Wesley on TetraTech's findings and recommendations.
5/9/14:	Russ Gibson attended a meeting with engineers from the city of Delaware and the Olentangy River watershed coordinator Kristin Piper to discuss issues such as USFWS requirement that a mussel survey be conducted and other items of concern with the Stratford low head dam removal project in the Olentangy River.
5/14/14:	Amy Jo Klei and Russ Gibson attended a meeting with the Jill Lis with the Lorain County Health Department and Ted Conlin to discuss organizational concerns with the Black River Remedial Action Plan (RAP) advisory committee that is facilitated by the Health Department under provisions of a subgrant with Ohio EPA.
5/14/14:	Met with Katherine Hoffman and others from the City of Lorain, the Lorain County Port Authority and Lorain County Commissioners to encourage the city's re-engagement with the Black River AOC Advisory Committee. We also toured the United State Steel slag pile sites, and other previously completed restoration projects within the city of Lorain along the Black River Mainstem.
5/20/14:	NPS Program staff participated in another Sandusky TMDL conference call with Trinka Mount and Bruce Cleland of Tetratech. This is one of a series of coordinating calls dealing with the Sandusky River TMDL Implementation planning project.
5/22/14:	NPS and Lake Erie Program staff as well as Assistant Division Chief Brian Hall met with Jane Goodman of the Cuyahoga River Remedial Action Plan to discuss issues of organizational and programmatic concern with the Cuyahoga Regional Community Planning Organization, the facilitating organization for the Cuyahoga Area of Concern.
5/30/14:	Participated in an AOC coordination meeting with Ohio EPA NWDO and NEDO staffs.
6/3/14:	Russ Gibson met with Cherie Blair from Ohio EPA's northwest district office and Lake Erie Program Coordinator Amy Jo Klei for a briefing on activities within the Maumee Area of Concern and an update on projects such as the project planning database that Partners for Clean Streams and Cherie have been working.
6/4/14:	Follow up meeting with Jennifer Eismeier of the Mill Creek Watershed Council of Governments to continuing planning discussions and ideas for implementing a regional watershed assistance center in southwest Ohio.
7/7/14:	Attended a meeting with Bruce Cleland of Tetratech to continue coordination associated with the Sandusky River TMDL implementation plan.
7/10/14:	NPS Program staff met with the University of Findlay and the City of Findlay to discuss project ideas for the Upper Blanchard watershed initiative
7/24/14:	Conducted a conference call with Ohio EPA NWDO and NEDO staffs to discuss the revised framework for reorganizing Ohio's AOC Program.
7/30/14:	Participated in a conference call with US EPA's Great Lakes National Program Office and NEDO staff regarding the Black River AOC and Ohio EPA's interest in reducing

the size of the Area of Concern to focus efforts on the main stem of the Black River rather than the whole watershed.

8/1/14: Russ Gibson participated as a panelist on a HAB Roundtable with multiple divisions from ODNR, the Nature Conservancy, Fairfield County Commissioners, Licking County representatives and US Senator Rob Portman at Buckeye Lake. Primary focus of the discussion was to update the Senator on progress to date and issues of concern that the federal government may be able to assist state and local organizations with dealing with HABs.

8/4/14: Meeting with Michelle Decker, Rural Action to discuss opportunities and needs for a potential regional watershed center in southeast Ohio.

8/11/14: Meeting with Amy Brennan with the Nature Conservancy to discuss possible project ideas for the FY14 GLRI grant collaboration.

8/12/14: Follow up meeting with Jennifer Eismeier from the Mill Creek Council of Governments to further discussions related to the establishment of a Regional Watershed Assistance Center in southwest Ohio.

8/13/14: Attended a meeting to discuss ideas for the beneficial use of Maumee River dredge material with URS and others from within Ohio EPA.

8/15/14: Traveled to Toledo to meet with the city of Toledo, Toledo Metroparks, Black Swamp Conservancy, Nature Conservancy and others to discuss collaboration on a Maumee Watershed Sediment Reduction GLRI grant project. Detailed information about this project (as proposed) is included below:

8/18/14: NPS Program staff participated in an information program review with US EPA Region 5 which included site visits to Buckeye Lake and others.

8/20/14: Conducted site visit with Hancock County SWCD to discuss progress and receive updates on the Upper Blanchard Watershed GLRI project which is being implemented under provisions of Federal grant project #GL-00E01020-0 (State Grant ID EPAPOWL12).

This green heron was found in the restored stream and wetland area in the city of Westlake.
This project was completed under provisions of Project 12SWIF-CUY-22.

8/27/14: The NPS Program prepared and submitted an FY14 GLRI grant application for the Maumee River Sediment Reduction Demonstration Project. If successful, this grant will provide critical financial assistance that will result in the following nutrient and sediment reduction practices being installed in targeted areas of the Maumee River watershed. Specific provisions of this significant collaboration with Ohio EPA, Toledo Metroparks, Pheasants Forever, The Nature Conservancy, TMACOG, Black Swamp Conservancy, Antioch University and Tillburg Farms (if successfully funded) will result in the following:

Defiance County	11,00 linear feet of 2-stage channel conversions
Putnam County	4,900 linear feet of 2-stage channel conversion
Putnam County	9 linear miles of grassed field surface ditches
Putnam County	10 controlled drainage structures installed
Putnam County	60 blind inlets installed
Putnam County	45 tile main blowouts repaired
Putnam County	2 woodchip bioreactors installed
Putnam County	2 Phosphorus Filters installed
Paulding County	3500 linear feet of stream restored
Paulding County	66 acres of currently farmed crop land permanently retired
Lucas County	Creation of three seasonal CCC type positions for two years
Lucas County	2 linear miles of channelized ditches restored
Lucas County	60 acres of prairie wetlands restored
Lucas County	200 acres of currently farmed land permanently retired
Lucas County	5 “green” stormwater treatment trains installed
Lucas County	14 acres wetlands restored in Irwin Prairie
Lucas County	8 acres of pothole “scrapes” replanted
Mercer/Auglaize	2 agricultural drainwater retention and reuse systems installed
Mercer/Auglaize	1 saturated buffer installed
Mercer/Auglaize	3 acres of wildlife buffer planted
Hardin County	3,000 linear feet of natural stream channel restored
Hardin County	1,000 linear feet of severely eroding streambank stabilized

Successful implementation of the Maumee River Sediment and Nutrient Reduction Initiative will also result in substantial reductions of NPS pollutants such as sediments and nutrients. Following are the load reduction estimates as calculated using the STEPL model:

- 4,843 tons of sediment reduced per year
- 21,952 pounds of nitrogen per year
- 5,268 pounds of phosphorus per year
- 270 acres of marginal cropland permanently retired and restored to wetlands.

9/10/14:	NPS Program staff traveled to Indianapolis to participate in a US EPA Region 5 sponsored meeting to discuss in more detail the types of agricultural management practices R5 NPS Program states should be encouraging USDA-NRCS to fund under provisions of the Great Lakes Restoration Initiative.
9/11/14:	Russ Gibson and Amy Jo Klei attended an AOC planning meeting with Ohio EPA's NWDO and NEDO staff at Highbanks Metroparks to finalize the AOC framework.
09/12/14:	HAB Interagency Steering Committee meeting with the Ohio Departments of Health and Natural Resources and a representative from Ohio EPA's Drinking Water Group.
09/15/14:	Amy Jo Klei and Russ Gibson attended a meeting with representatives of the city of Lorain to discuss path forward for Black River AOC coordination and implementation.
09/18/14:	Russ Gibson gave a grants and green infrastructure presentation to a group of local government officials and other consultants. Approximately 45 attendees participated in this talk.
09/29/14:	Met with the Partners for Clean Stream's Board of Directors to discuss their concerns with the Ohio AOC framework for moving forward.

This stormwater treatment wetland and outdoor learning lab at the City of Green Middle School was completed under provisions of Project 12SWIF-16.

Ohio Department of Natural Resources

FFY 2013 NPS Management Program
Division of Soil and Water Resources

Introduction: During FFY2014, ODNR Division of Soil and Water Resources (DSWR) received $428,100 in Sectoion 319(h) grant funds to assist with implementation of Ohio's NPS Management Program. This grant is active through December 2014. The framework for Ohio's NPS Program is detailed in the NPS Management Plan that was approved by US EPA on August 29, 2006. Provisions of the approved plan effectively guide Ohio's implementation of state and local NPS management measures and activities.

DSWR maintains an important role in implementing Ohio NPS Management Program that is to support an effective network of SWCDs and watershed partnerships in Ohio, and to align and strengthen various implementation programs to meet Ohio's NPS goals. The following comprise the services DSWR provides.

1. NPS Management Program Support
2. Watershed Coordinator Grants Program Management
3. Technical Support Services for Watershed Plan and NPS Implementation with specific focus on Grand Lake Saint Marys and Western Lake Erie Basin watershed nutrient remediation.
4. Administer the Ohio Watershed Action Plan Endorsement Process

Activities successfully implemented during FFY14 to support and/or enhance Ohio EPA's NPS Management Program include:

NPS Management Program Support: DSWR works closely with Ohio EPA Division of Surface Water, OSU Extension, and other partners to administer and continuously seek ways of improving the multi-faceted effort to reduce NPS and improve water quality in Ohio. DSWR supports one employee fully dedicated to the NPS and watershed programs, and a variety of technical staff to enable implementation of NPS management measures.

Inter-agency Coordination / Ohio Water Resources Council:

DSWR Chief, Mike Baily, is a member of the Ohio Water Resources Council (OWRC) State Agency Coordinating Group (SACG). Deputy Chief, Rodney Tornez, and Watershed Program Manager, Greg Nageotte, serve as his alternates. The OWRC is a cabinet level body created in Ohio Revised Code to "serve as a forum for policy development, collaboration and coordination among state agencies, and strategic direction with respect to state water resource programs." The SACG consisting of staff from the member agencies and the Executive Director of the Ohio Lake Erie Commission serves Council members in support and research roles. The SACG members collaborate and form workgroups to implement actions of the OWRC strategic plan, which includes among its seven priorities, "Watershed Management" and "Water Quality."

Ohio Watershed Coordinator Grants Program Management:

Sub-grant Status:

DSWR administers the Ohio Watershed Coordinator Program (OWCP) in cooperation with Ohio EPA Division of Surface Water, and ODNR divisions of Mineral Resources Management and Wildlife, and Office of Coastal Management. For the 2014 calendar year DSWR received $458,000 to administer 17 grants.

The OWCP grants are unique in that they provide funds solely to employ watershed coordinators. Grant funds and associated match may only be utilized for wages and/or fringe. The program requires a 20% cash cost-share acquired by the local grant sponsor. Grants are currently awarded for four years to develop state endorsed watershed action plans, or three years to coordinate implementation of state endorsed watershed action plans. Although grants are awarded on a multi-year basis, agreements are renewed annually.

The program currently supports 17 watershed coordinator grants for the following watersheds:

Watershed	Sponsor	End Date
Arcola Creek	Lake SWCD	12/31/2014
Blanchard River	BRWP	6/30/2015
Captina Creek	Belmont SWCD	12/31/2016
Euclid Creek	Cuyahoga SWCD	2/21/2015
Grand Lake St Marys/Wabash	Mercer SWCD	2/12/2015
Huff Run	Rural Action	2/21/2015
Little Beaver Creek	Columbiana SWCD	12/31/16
Maumee R. (Upper)	Defiance SWCD	12/31/2014
Mill Creek (Ohio River)	MCWCG	2/27/2015
Monday Creek	Rural Action	12/31/2015
Olentangy River (Upper)	City of Delaware	12/31/2014
Portage River	Wood SWCD	9/27/2015
Raccoon Creek	Ohio University	12/31/2015
Sunday Creek	Rural Action	2/11/2015
Tinkers Creek	TCWP	2/27/2015
White Oak Creek	Brown SWCD	12/31/2014
Yellow Creek	Jefferson SWCD	3/25/2016

ODNR maintains an interactive map of Ohio illustrating status of the Ohio Watershed Coordinator Grant Program with watershed coordinator contact information. The map is up to date as of August 22, 2013

https://gis.ohiodnr.gov/website/dsw/Watershed%20Grants/

An Ohio Watershed Program Web page is also maintained by ODNR

http://soilandwater.ohiodnr.gov/water-conservation/watersheds

Annual Reviews and Orientations:

All active watershed grant sponsors (17) received either an "Annual Review" or "New Watershed Coordinator Orientation" in FFY 2013. Greg Nageotte conducted all of the Annual Reviews and Orientations with participation of the watershed coordinator and a sponsor organization representative. Meeting discussion focused on documentation of water quality improvements and interim measures of implementation success for 3-year grants. Information including semi-annual progress reports, annual implementation and funding leveraged reports, will be incorporated into the Ohio Watershed Coordinator Grant Program Report to be completed by the end of 2014 calendar year.

2014 Annual Review Schedule

Watershed	Local Sponsor	Date
Upper Olentangy River	City of Delaware	July 28
Upper Maumee River	Defiance SWCD	July 29
Blanchard River	Blanchard River Watershed Partnership	July 29
Portage River	Wood SWCD	July 31
Huff Run	Rural Action	August 5
Sunday Creek	Rural Action	August 5
Monday Creek	Rural Action	August 5
Mill Creek	MCWCG	August 13
Raccoon Creek	Ohio University	August 18
Wabash-GLSM	Mercer SWCD	August 21
Tinkers Creek	Tinkers Creek Watershed Partners	August 26
Euclid Creek	Cuyahoga SWCD	August 26
Arcola Creek	Lake SWCD	August 26
White Oak	Brown SWCD	September 10
Southern Watershed (Muskingum0	Grant is on hiatus due to WC position vacancy	N/A

New Watershed Coordinator Orientation

Yellow Creek	Jefferson SWCD	March 4
Little Beaver Creek	Columbiana SWCD	August 29

Each new watershed coordinator with a sponsor representative receives an orientation with program manager, Greg Nageotte. A slide presentation is used to communicate program background and objectives. Status and progress of previous watershed coordinator is discussed including review of the grant work plan. Administrative requirements of the program are discussed in detail including:

- Quarterly Fiscal Report
- Semi-annual Progress Report
- Annual Implementation Report
- Annual Implementation Funding Report (if applicable)
- Final Progress Report
- Final Fiscal Report

All watershed program reports, work plans, agreements and other grant related materials are available upon request from Division of Soil and Water Resources. DSWR is no longer able to post reports via the ODNR "ftp" site due to security concerns.

ODNR also produces a comprehensive Ohio Watershed Program Annual Report detailing aggregated data and highlights of each individual sub-grant. The most recent report covering the 2013 Ohio State Fiscal Year and published during FFY 14 is available here:

http://soilandwater.ohiodnr.gov/portals/soilwater/pdf/watersheds/2012-13_Watershed_Coordinator_Annual_Rpt.pdf

Technical Support Services:

During FFY 2014 DSWR staff focused technical assistance on addressing nutrient loading in the Grand Lake St Marys Watershed and Western Lake Erie Basin. Those activities included the following:

Grand Lake St. Marys:

- Contacted five (5) producers that have not demonstrated progress toward development of a Nutrient Management Plan.
- Developed and populated Grand Lake St. Marys facility/Nutrient Management Plan database.
- DSWR adopted the NRCS Inventory and Evaluation process for conducting and completing site visits. Inventory and Evaluation forms are combined with aerial maps. Any resource concerns that are identified are reviewed with the producer and options to address them are discussed with the producer. A schedule is developed to itemize and address the found resource concern(s) 21 Inventory and Evaluations were completed during FFY14.
- Nineteen (19) Nutrient Management Plans were thoroughly reviewed and submitted DSWR Chief's approval. A Nutrient Management Plan Review Form has been developed as a checklist for each plan being submitted to the Chief.
- Contacted 26 producers to review update and maintain nutrient management plans.
- Conducted on-farm site visits with 18 producers to review manure application records.
- Review implementation schedules with 20 producers and verify completion and implementation of scheduled items of NMPs.
- A GLSM Distressed Watershed Producer Update Meeting was held on November 12th. Two repeat sessions were held: one was from 9:30am-12:00pm and the other was held from 7:00pm-9:00pm. A total of 56 producers attended the meetings. The meeting presentation provided an update on the current status of the Distressed Rules implementation and explained key items in meeting the rule

requirements. We provided an update on what producers can expect from ODNR, record keeping components and information needed to complete a nutrient management plan update.

- Attend 41 meetings (Lake Improvement Assn., Ag Solutions, Grand Lake St. Marys Lake Restoration Commission) to provide technical consultation on nutrient reduction initiatives.

Western Lake Erie Basin

All Western Lake Erie Basin activity will be completed in the final quarter of 2014. Engineering, design, and technical assistance services will be provided to install 100 Drainage Management Structures as part of the Lake Erie Nutrient Reduction Program.

Administer the Ohio Watershed Action Plan Endorsement Process:

DSWR accepts watershed action plans developed by local agencies and organizations, and facilitates an inter-agency review process that ensures all Ohio endorsed plans meet state guidance developed by Ohio EPA, and include all "9 Essential Elements" according to U.S. EPA guidance.

The following WAPs were reviewed and received State endorsement FFY 14.

Captina Creek	5/30/2014	http://ohiodnr.gov/portals/soilwater/downloads/wap/Captina Creek.pdf
Southern Watershed (Lower Muskingum River)	12/6/2013	http://muskingumriver.org/pages/projects/southernSubwatershed.html
Portage River	10/25/2013	http://www.tmacog.org/Environment/Portage/2011/Portage_River_Watershed_Plan.pdf

ODNR also maintains an interactive map of Ohio illustrating all watersheds with endorsed WAPs. The map is up to date as of July 1, 2014:

https://gis.ohiodnr.gov/website/dsw/Watershed%20Action%20Plans/

APPENDICES

Table 3-1
Ohio Environmental Protection Agency
NPS Pollution LOAD REDUCTIONS
Annual Load Reductions-by Project Year since FFY2001*

Project Year	Nitrogen (lbs./year)	Phosphorus (lbs./year)	Sediment (tons/year)	HSTS (gallons/day)
FFY 2001	294,422	133,404	106,899	66,520
FFY 2002	184,095	52,667	30,195	19,320
FFY 2003	19,771	7,488	50	164,150
FFY 2004	19,866	5,130	1,039	62,235
FFY 2005	18,679	7,494	3,392	129,960
FFY 2006	5,787	4,778	9,398	0
FFY 2007	5,057	2,580	2,425	0
FFY 2008	10,128	5,091	4,900	0
FFY 2009	36,145	23,875	11,482	0
FFY 2010	2,274	1,193	1,373	0
FFY 2011	4,210	2,424	2,102	0
FFY 2012	229	114	114	0
FFY 2013 est.	3,174	1,134	520	0
FFY 2014 est.	9,828.3	1,722.5	1,812.3	0
TOTAL	613,665	249,095	175,701	442,185

*All load reductions are updated and current through project semi-annual technical reports received through July 2014

FFY2001 through FFY2008 load reductions are FINAL for those grant cycles (final reports have been received for all sub-grant projects for those cycles).

Table 3-2
FINAL – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2001 Projects

Federal Grant #C997550001
Grant Closed 12/31/2004

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
01(h)EPA-16	Rivers Unlimited	85	43	597	0
01(h)EPA-19	Paint Creek Joint SWCD	228,314	106,678	91,593	4,680
01(h)EPA-20	Ohio Valley RC&D	15,826	5,995	0	24,120
01(h)EPA-22	Scioto River Federation	7,956	2,652	1,326	0
01(h)EPA-24	Miami County Health Department	1,471	557	0	23,800
01(h)EPA-25	Seneca County Health Department	959	361	0	7.920
01(h)EPA-28	Paint Creek Joint SWCD	31,696	13,058	9,715	0
01(h)EPA-29	Paint Creek Joint SWCD	8,114	4,060	3,668	6,000
		294,422	**133,404**	**106,899**	**66,520**

Table 3-3
FINAL UPDATED – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2002 Projects

Federal Grant #C997550002
Grant Closed 12/31/2005

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
02(h)EPA-06	Huron County SWCD	1,792	855	4	15,720
02(h)EPA-07	Rural Action, Inc.	433	164	0	3,600
02(h)EPA-08	Seneca County SWCD	56,792	29,113	19,166	0
02(h)EPA-11	OSU Extension Service	48,909	5,185	518	0
02(h)EPA-12	Ducks Unlimited	37,322	6,533	36	0
02(h)EPA-13	Greene County SWCD	22,017	10,493	10,451	0
02(h)EPA-14	Summit County Department of Environmental Services	13,797	0	0	0
02(h)EPA-15	Mill Creek Inc.	3,033	324	20	0
		184,095	**52,667**	**30,195**	**19,320**

Table 3-4
FINAL – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2003 Projects

Federal Grant #C997550003
Grant Closed 06/30/2006

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
03(h)EPA-04	Darke County Health Department	17,748	6,722	0	147,350
03(h)EPA-05	Cuyahoga County Health Department	2,023	766	0	16,800
03(h)EPA-07	City of Kent	0	0	50	0
		19,771	**7,488**	**50**	**164,150**

Table 3-5
FINAL UPDATED – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2004 Projects

Federal Grant #C997550004
Grant Closed 06/30/2007

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
04(h)EPA-06	Clermont County SWCD	797	362	250	2,250
04(h)EPA-07	Washington County SWCD	0	0	48	0
04(h)EPA-08	Ohio Valley RC&D	12,825	2,403	741	7,920
04(h)EPA-12	WSOS Community Action Organization	6,244	2,365	0	51,840
		19,866	**5,130**	**1,039**	**62,235**

Table 3-6
FINAL – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2005 Projects

Federal Grant #C997550005
Grant Closed 09/30/2008

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
05(h)EPA-06	Franklin County Metroparks	0	0	1,680	0
05(h)EPA-07	Delaware County Health Department	10,060	3,810	0	87,120
05(h)EPA-08	Mahoning County SWCD	40	21	21	0
05(h)EPA-11	Miami County Health Department	867	328	0	7,200
05(h)EPA-09	OKI Council of Governments-Mill Creek Watershed Project	1,043	522	454	0
05(h)EPA-12	Friends of Alum Creek & Tributaries	0	0	126	0
05(h)EPA-13	Highland County SWCD	1,040	394	0	8,640
05(h)EPA-14	TMACOG	3,253	1,231	0	27,000
05(h)EPA-26	The River Institute	1,186	593	516	0
05(h)EPA-27	Summit County	1,190	595	595	0
		18,679	7,494	3,392	129,960

Table 3-7
FINAL-09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2006 Projects

Federal Grant #C997550006
Grant Closed 10/31/2009

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
06(h)EPA-06	Miami County Soil & Water Conservation District	75	37	37	0
06(h)EPA-08	Little Beaver Creek Land Foundation	0	0	742	0
06(h)EPA-09	Northeast Ohio Four County Regional Planning & Development Organization	170	85	85	0
06(h)EPA-11	Muskingum County Soil & Water Conservation District	3,689	3,723	7,008	0
06(h)EPA-18	Cuyahoga County Board of Health	500	255	255	0
06(h)EPA-23	Five Rivers MetroParks	135	67	67	0
06(h)EPA-24	Greene County Soil & Water Conservation District	420	210	210	0
06(h)EPA-25	West Creek Preservation Committee	185	91	95	0
06(h)EPA-28	Holden Arboretum	0	0	600	0
06(h)EPA-31	Columbus & Franklin County MetroPark District	13	11	1	0
06(h)EPA-35	Five Rivers MetroParks	135	67	67	0
06(h)EPA-36	The River Institute	382	190	190	0
06(h)EPA-38	St. Marys Township	83	42	41	0
		5,787	4,778	9,398	**0**

Table 3-8
FINAL UPDATED – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2007 Projects

Federal Grant #C997550007
Grant Closed 06/30/2010

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
07(h)EPA-06	Greene County Sanitary Engineer	1,589	838	657	
07(h)EPA-08	The Nature Conservancy	1,480	738	738	0
07(h)EPA-13	The River Institute-Bath Township	230	114	114	0
07(h)EPA-15	The River Institute-Clover Groff	394	196	196	0
07(h)EPA-23	Warren County Soil & Water Conservation District	68	46	92	0
07(h)EPA-24	City of Delaware	1,296	648	628	0
		5,057	**2,580**	**2,425**	**0**

Table 3-9
FINAL UPDATED – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2008 Projects

Federal Grant #C997550008
Grant Closes 12/31/2011

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
08(h)EPA-06	Bainbridge Twp Trustees	556	278	278	0
08(h)EPA-11	Cuyahoga County SWCD	178	89	89	0
08(h)EPA-12	Lake County	100	50	50	0
08(h)EPA-16	Five Rivers MetroParks	135	67	67	0
08(h)EPA-18	City of Columbus/Recreation & Parks	553	277	276	0
08(h)EPA-19	The Nature Conservancy	600	300	300	0
08(h)EPA-22	Greene County Sanitary Eng. Dept.	1,412	734	583	0
08(h)EPA-24	Scioto River Valley Coalition	290	144	144	0
08(h)EPA-26	The River Institute	496	248	248	0
08(h)EPA-29	Village of Chagrin Falls	935	468	468	0
08(h)EPA-33	Holmes County SWCD	4,736	2,368	2,368	0
08(h)EPA-34	City of Oxford	15	8	8	0
08(h)EPA-35	Franklin County SWCD	122	60	21	0
		10,128	5,091	4,900	0

Table 3-10
UPDATED – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2009 Projects

Federal Grant #C997550009
Grant Closes12/30/2014

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
09(h)EPA-07	Cuyahoga County Board of Health	340	170	170	0
09(h)EPA-10	Washington County SWCD	21,390	10,990	9,090	0
09(h)EPA-11	Brown County SWCD	888	7,623	483	0
09(h)EPA-13	City of Marysville	12	5	5	0
09(h)EPA-14	Metro Parks serving Summit County	472	402	804	0
09(h)EPA-16	City of Xenia	250	125	150	0
09(h)EPA-17	Village of New Albany	58	29	25	0
09(h)EPA-15	Mill Creek Watershed Partners	9,153	26	300	0
09(h)EPA-12	Mercer County SWCD	2,215	1,150	0	0
09(h)EPA-19	City of Reynoldsburg	685	349	207	0
09(h)EPA-18	ODNR/Parks & Recreation Division	0	1,500	0	0
09(h)EPA-23	ODNR/Parks & Recreation Division	0	1,259	0	0
09(h)EPA-22	Mill Creek MetroParks	2	0	0	0
09(h)EPA-20	University of Toledo	0	0	80	0
09(h)EPA-21	Olander Park System	300	125	53	0
09(h)EPA-26	Bath Township Trustees	230	114	114	0
09(h)EPA-28	ODNR/Parks & Recreation Division	15	3	1	0
09(h)EPA-27	Liberty Township	134	4	0	0
09(h)EPA-29	Ohio State University Chadwick Arboretum & Learning Gardens	1	1	0	0
		36,145	23,875	11,482	0

Table 3-11
UPDATED – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2010 Projects

Federal Grant #C997550010
Grant Closes 04/15/2015

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
10(h)EPA-07	City of Fremont	1,190	595	595	0
10(h)EPA-08	Geauga County Park District	506	235	235	0
10(h)EPA-10	Lake County Metroparks	150	150	300	0
10(h)EPA-11	Ohio University	0	0	0	0
10(h)EPA-14	City of Mason	3	1	1	0
10(h)EPA-17	City of Akron	9	4	4	0
10(h)EPA-18	West Creek Preservation Committee	39	20	50	0
10(h)EPA-20	Mercer County Commissioners	377	188	188	0
10(h)EPA-21	City of Pickerington	0	0		0
		2,274	**1,193**	**1,373**	**0**

Table 3-12
UPDATED – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2011 Projects

Federal Grant #C997550010
Grant Closes 10/15/2015

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
11(h)EPA-07	Bath Township Trustees	230	114	114	0
11(h)EPA-09	City of Springdale	211	105	105	0
11(h)EPA-10	Mayfield Village	1	0	1	0
11(h)EPA-11	Ursulines of Brown County	0	0	0	0
11(h)EPA-12	Toledo Div of Environmental Services	52	6	0	0
11(h)EPA-14	City of Aurora	475	138	138	0
11(h)EPA-18	Columbus Public Utilities Department	0	0	0	0
11(h)EPA-20	Westerville Parks and Recreation	64	23	7	0
11(h)EPA-21	Toledo Botanical Garden	2,677	1,338	1,338	0
11(h)EPA-31	Medina County Park District	500	300	200	0
11(h)EPA-47	Cuyahoga County SWCD	0	0	0	0
		4,510	**2,024**	**1,903**	**0**

Table 3-13
UPDATED – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FFY2012 Projects

Federal Grant #C997550012
Grant Closes 10/15/2016

Project Number	Project Sponsor	Cumulative Load Reductions to Date			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
12(h)EPA-10	City of Wadsworth	0	0	0	0
12(h)EPA-18	Greene County Park District	0	0	0	0
12(h)EPA-19	City of Elyria	0	0	0	0
12(h)EPA-20	City of New Franklin	0	0	0	0
12(h)EPA-22	TMACOG	0	0	0	0
12(h)EPA-23	The River Institute	0	0	0	0
12(h)EPA-24	Huff Run Watershed Restoration Partnership	0	0	0	0
12(h)EPA-25	Ohio Valley Conservation Coalition	0	0	0	0
12(h)EPA-27	City of New Albany	0	0	0	0
12(h)EPA-28	Franklin County Metroparks	229	114	114	0
12(h)EPA-33	Metroparks Serving Summit County	0	0	0	0
12(h)EPA-36	Holden Arboretum	0	0	0	0
		229	**114**	**114**	**0**

Table 3-14
UPDATED – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FY13 Projects - Estimated

Federal Grant #C997550013
Grant Closes 06/30/2016

Project Number	Project Sponsor	ESTIMATED Load Reductions Expected			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
13(h)EPA-06	Anderson Township Park District	49%	65%		0
13(h)EPA-08	Clermont County Engineer's Office	230	114	17	0
13(h)EPA-09	City of Willoughby	30	14.7	14.7	0
13(h)EPA-14	Waterloo Neighborhood Northeast Shores Development Corp.	2	0	0.2	0
13(h)EPA-16	City of Medina	1561	321	94	0
13(h)EPA-19	City of Gahanna	141	75.6	75.6	0
13(h)EPA-20	Mercer County Commissioners		170		0
13(h)EPA-21	City of Hilliard	158	83	61	0
13(h)EPA-22	Mill Creek Watershed Council of Comms.	19	3	2.1	0
		2,141	781	264.6	0

Supplemental FFY13 Projects

Project Number	Project Sponsor	ESTIMATED Load Reductions Expected			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
13(h)EPA-**S**07	Akron Zoological Park	4	1	0.5	0
13(h)EPA-**S**12	Lake County Stormwater Mgmt. Dept.	15	1	0.5	0
13(h)EPA-**S**05	City of Ravenna	3.0	0	0.2	0
13(h)EPA-**S**11	Holden Arboretum	12	6	6	0
13(h)EPA-**S**16	Butler County Water & Sewer	520	260	227	0
13(h)EPA-**S**09	West Creek Preservation Committee	446	75	17.9	0
13(h)EPA-**S**13	City of Pepper Pike	2.5	0.7	0.9	0
13(h)EPA-**S**17	City of Reynoldsburg	26	8	1.4	0
13(h)EPA-**S**06	Village of Brooklyn Heights	8	1	0.5	0
		1,036.5	1,134	254.9	0

Table 3-15
UPDATED – 09/30/13
Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
NPS Pollution LOAD REDUCTIONS
FY14 Projects - Estimated

Federal Grant #C997550014
Grant Closes 06/30/2017

Project Number	Project Sponsor	ESTIMATED Load Reductions Expected			
		Nitrogen (lbs/year)	Phosphorus (lbs/year)	Sediment (tons/year)	Home Sewage Treated (gallons/day)
14(h)EPA-06	City of Springfield	1.3	0	0.3	0
14(h)EPA-10	City of Delaware Public Utilities Dept.	3.1	0.8	0.3	0
14(h)EPA-12	City of Stow	2,219	1,105	1,269	0
14(h)EPA-13	City of Lancaster	19.2	2.4	1	0
14(h)EPA-14	Rural Action, Inc.	0	0	0	0
14(h)EPA-18	Village of Reminderville	21	4	1	0
14(h)EPA-19	Madison Village	20.7	10.3	12.2	0
14(h)EPA-20	City of Huron	32	5	2	0
14(h)EPA-23	Liberty Township			75	0
14(h)EPA-24	Ottawa Soil & Water Conservation District	7,275	460	352	0
14(h)EPA-25	City of Solon	118	59	59	0
14(h)EPA-26	Cleveland Metroparks	40	12	4	0
14(h)EPA-27	City of Rocky River		31	4	0
14(h)EPA-28	City of Broadview Heights	64	32	32	0
14(h)EPA-30	City of Fairview Park	15	1	0.5	0
		9,828.3	1,722.5	1,812.3	0

Ohio Environmental Protection Agency

Total Maximum Daily Load (TMDL) Status

Updated through 9/30/14

- Cuyahoga River—Approved 2000
- Rocky River—Approved 2001
- Little Miami River—Approved 2002
- Bokes Creek—Approved 2003
- Sugar Creek—Approved 2003
- Raccoon Creek—Approved 2003
- Mill Creek (Scioto Basin)—Approved 2003
- East Fork Duck Creek—Approved 2003
- Cuyahoga River (Tinker's Creek)—Approved 2003
- Stillwater River—Approved 2004
- Auglaize River—Approved 2004
- Sandusky River—Approved 2004
- Mill Creek—Approved 2005
- Lake Erie Tributaries (below Huron to above Vermillion River)—Approved 2005
- Monday Creek—Approved 2005
- Big Walnut Creek—Approved 2005
- Lake Erie Tributaries (east of Cuyahoga to west of Grand River)—Approved 2005
- West Branch Huron River—Approved 2005
- Little Beaver Creek—Approved 2005
- Sunday Creek—Approved 2006
- Big Darby Creek—Approved 2006
- Toussaint Creek—Approved 2006
- Wakatomika Creek—Approved 2006
- Sugar Creek—Approved 2007
- Chagrin River—Approved 2007
- Olentangy River—Approved 2007
- Beaver Creek & Grand Lake St. Mary's— Approved 2007
- Leading Creek—Approved 2008
- Black River—Approved 2008
- Nimishillen Creek—Approved 2008
- Powell Creek—Approved 2008
- Blanchard River—Approved 2009
- Salt Creek—Approved 2009
- Tuscarawas River—Approved 2009
- Stillwater River (revised)—Approved 2009
- Hocking River—Approved 2009
- Swan Creek—Approved 2010
- Mad River—Approved 2010
- White Oak Creek—Approved 2010
- Twin Creek—Approved 2010
- Yellow Creek—Approved 2010
- Walnut Creek—Approved 2010
- Salt Creek—Approved 2011
- Lower Little Miami River—Approved 2011
- Portage River—Approved 2011
- Upper Mahoning River—Approved 2011
- Scioto Brush Creek—Approved 2011
- Lower Grand River—Approved 2012
- Upper Great Miami River—Approved 2012
- Paint Creek—Approved 2012
- Maumee River (lower) Tribs & Lake Erie Tribs—Approved 2012
- Grand (upper)—Approved 2014
- Moxahala Creek—Approved 2014
- Ottawa River (Lima area) –Approved 2014
- Sandusky (Lower) and Bay Tribs—Approved 2014

Ohio Environmental Protection Agency

State Fully Endorsed Watershed Plans

Updated through 9/30/14

- Arcola Creek
- Black River
- Blacklick Creek
- Bokes Creek
- Captina Creek
- Chagrin River
- Doan Brook
- Duck Creek
- Euclid Creek
- Federal Creek
- Headwaters (East Fork Little Miami River)
- Honey Creek
- Honey Creek (Sandusky)
- Huff Run
- Indian Lake
- Kokosing River
- Lake Tributaries East Fork Little Miami River
- Leading Creek
- Little Beaver
- Lower Alum Creek
- Lower Big Walnut
- Lower East Fork Little Miami River
- Lower Mad River
- Lower Olentangy
- Meigs Creek
- Middle Cuyahoga River
- Middle Fork East Fork Little Miami River
- Mill Creek (Mahoning River)
- Mill Creek (Ohio River)
- Mill Creek (Scioto River)
- Monday Creek
- Nimishillen Creek
- Old Woman Creek
- Outlet / Lye Creek
- Paint Creek
- Portage River
- Raccoon Creek Headwaters
- Riley Creek
- Rocky Fork
- Rocky River
- Salt Creek
- Southern Watershed (Lower Muskingum River)
- Stillwater River
- Stonelick Creek
- Sunday Creek
- Tiffin (Sandusky)
- Tinkers Creek
- Todds Fork
- Twin Creek
- Upper Big Walnut Creek
- Upper Grand River
- Upper Olentangy
- Upper Scioto
- Wabash/Grand Lake St Marys
- West Creek
- White Oak Creek
- Wolf Creek
- Yellow Creek
- Upper Maumee River

Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
State Conditionally Endorsed Watershed Plans
Conditionally endorsed plans do not meet all 9-required elements
Updated through 9/30/14

Lower Grand River

Lower Maumee River

Mentor Marsh

Raccoon Creek

Mad River

Ohio Environmental Protection Agency
Section 319(h) Clean Water Act Grants
Section 319(h) Subgrant Recipients since 2001
Updated through 9/30/14

Akron Zoological Park
Anderson Township Park District
Bainbridge Township Trustees
Bath Township Trustees
Brown County SWCD
Butler County Water & Sewer
Chagrin River Watershed Partners, Inc.
Champaign County Commissioners
City of Akron
City of Ashland
City of Aurora
City of Barberton, Ohio
City of Broadview Heights
City of Byesville
City of Columbus
City of Delaware
City of Elyria
City of Fairview Park
City of Findlay
City of Fremont
City of Gahanna
City of Hilliard
City of Huron
City of Kent
City of Lancaster
City of Lebanon
City of Macedonia
City of Marysville
City of Mason
City of Medina
City of New Albany
City of New Franklin
City of Orrville
City of Oxford
City of Pepper Pike
City of Pickerington
City of Ravenna
City of Reynoldsburg
City of Rocky River
City of Shaker Heights
City of Solon
City of South Euclid
City of Springdale
City of Springfield
City of Stow
City of Vermilion
City of Wadsworth
City of Wapakoneta
City of Willoughby
City of Xenia
Clermont County Engineer's Office
Clermont County SWCD
Cleveland Metroparks
Columbus & Franklin County Metro Parks
Columbus Downtown Development Corporation
Columbus Public Utilities Department
Crossroads Resource Conservation & Development
Cuyahoga County Board of Health
Cuyahoga County SWCD
Darke County General Health District
Delaware General Health District
Doan Brook Watershed Partnership
Ducks Unlimited Inc.
Fairfield County Utilities Department
Five Rivers MetroParks
Franklin County SWCD
Friends of Alum Creek and Tributaries (FACT)
Friends of the Lower Muskingum River
Geauga County Park District
Grand Lake St. Marys Restoration CIC
Grand River Partners, Inc. c/o Lake Erie College
Greene County Board of Commissioners
Greene County Park District
Greene County Sanitary Engineering Dept.
Greene County SWCD
Highland County SWCD
Holden Arboretum
Holmes County SWCD
Honey Creek Watershed Association
Huff Run Watershed Restoration Partnership
Huron County SWCD
Lake County
Lake County Metroparks
Lake County Stormwater Management Dept.
Liberty Township
Little Beaver Creek Land Foundation

Mad River Steering Committee Inc
Mahoning County SWCD
Mayfield Village
Medina County Park District
Mercer County Commissioners
Mercer County SWCD
Metro Parks serving Summit County
Metroparks of Toledo Area
Miami County Health District
Miami County SWCD
Mill Creek MetroParks
Mill Creek Restoration Project
Mill Creek Watershed Council of Communities
Mill Creek Watershed Partners
Morgan County SWCD
Muskingum County SWCD
Northeast Ohio Areawide Coordinating Agency
Northeast Ohio Four County Regional Planning & Development Organization
Northeast Ohio Regional Sewer District
Ohio Department of Natural Resources
Ohio State University
Ohio University
Ohio Valley Conservation Coalition
Ohio Valley Resource Conservation & Development
Ohio-Kentucky-Indiana Regional Council of Governments
Olander Park System
Ottawa SWCD
Paint Creek Joint Board
Ruffing Montessori School
Rural Action, Inc.
Scioto River Valley Federation
Seneca County General Health District
Seneca County SWCD
Shaker Heights Board of Education
St. Marys Township
Summit County Dept. of Environmental Services
The Holden Arboretum
The Little Beaver Creek Land Foundation
The Nature Conservancy
The River Institute
Three Valley Conservation Trust
Toledo Botanical Garden
Toledo Division of Environmental Services
Toledo Metropolitan Area Council of Governments
Trumbull County Health Department
Tuscarawas County Board of Commissioners/MSD
U.S. Geological Survey
University of Akron
University of Cincinnati
University of Toledo
Ursulines of Brown County
Village of Brooklyn Heights
Village of Chagrin Falls
Village of Crooksville
Village of Enon
Village of Fort Loramie
Village of Gnadenhutten
Village of Madison
Village of New Albany
Village of Orwell
Village of Ottawa
Village of Reminderville
Village of Richfield
Village of Spring Valley
Village of West Jefferson
Village of West Liberty
Vinton County SWCD
Warren County SWCD
Washington and Noble Counties Duck Creek Watershed Joint 319 Board
Waterloo Neighborhood Northeast Shores Development Corp.
West Creek Preservation Committee
Western Reserve Land Conservancy
Western Water Company
Westerville Parks & Recreation Department
WMAO/Water Resources Foundation of Ohio
WSOS Community Action Commission Inc.

Request for Proposals

FY2015 Section 319 Grants

Application Deadline July 25, 2014

Dear Nonpoint Source Management Partner:

We are pleased to announce that Ohio EPA, in concert with other state water quality partners, is soliciting proposals for grants awarded under Section 319(h) of the Clean Water Act. Grants up to $400,000 each will be awarded to local governments, park districts and other organizations for the implementation of projects to restore Ohio streams, reduce loadings of nonpoint source pollutants such as nutrients, sediment and/or projects that undo damage caused by hydromodification or the alteration of stream or riparian habitat. Smaller grants (up to $200,000) are available to design and implement green storm water management demonstration projects. These grants provide up to 60% of total project costs and are awarded for three year terms. Local participants must provide 40% of total project costs either through in-kind services and/or cash.

Based on anticipated FY15 federal funding, we anticipate that at least $2 million will be available for Section 319(h) grant funding during Federal Fiscal Year (FY) 2015. The actual amount depends upon the final FY15 U.S. EPA budget approved by Congress and the allocation awarded to Ohio by U.S. EPA.

Background and Funding Priorities: Section 319(h) grant funding is targeted to Ohio waters where NPS pollution is a significant cause of aquatic life use impairments. Projects that eliminate such impairments and/or restore impaired waters will score significantly higher in the review process and receive more favorable consideration than general NPS pollution prevention projects. Projects identified in completed Total Maximum Daily Load (TMDL) reports and State-endorsed watershed plans that eliminate impairments and/or restore impaired waters will receive higher consideration than projects submitted from other watersheds. Consistent with recently revised federal program guidance *we do not anticipate funding any projects from watersheds that do not have an endorsed watershed plan, and/or approved TMDLs*; however, Ohio EPA's director may elect to fund demonstration projects in such watersheds when doing so may result in the elimination of impairments and/or advancement of NPS management capacity. All proposed projects must be implemented consistent with the nine required program elements listed in **Attachment 1** of this RFP.

Projects that propose using all grant funds for on-the-ground construction work (including engineering and design services) will receive significantly higher consideration than projects that include requests for disproportionate amounts of personnel, overhead, grants administration and/or project management costs. Disproportionate = more than 15% of total project costs (which includes match).

Grant Amounts and Local Matching Requirements

Applicants may apply for varying amounts (depending upon activity) up to a maximum of $400,000 in federal Section 319(h) grant funds for a three-year period. **The required local share of project costs is 40%** – in other words, 40 percent of the total project costs MUST be provided as local match. *For example: if*

total *project costs equal $200,000, then no more than $120,000 may be federal 319(h) grant funds. Applicants providing cash match will score higher than those providing in-kind services as match.*

Applicants may apply for more than one type of project within a single grant application; **however, TOTAL** Section 319(h) grant funding requests may not exceed $400,000 in total federal funding. *Grant sponsors may submit only one (1) application per watershed.* As a means of encouraging broad participation, grant criteria are established to provide additional credit to applicants without active subgrants or who have never received a Section 319 grant.

Grant sponsors currently holding two (2) or more active Section 319(h) and/or Surface Water Improvement (SWIF) grants should not apply for additional funding until existing subgrant projects are complete and closed.

Eligible Applicants: The following entities are eligible to apply for and receive grant funding awarded under Section 319(h):

- Local municipalities, counties and townships
- County and municipal park districts
- Soil & water conservation districts
- 501(c)(3) nonprofit conservation and watershed organizations
- Watershed groups with local government sponsorship
- State agencies with land management responsibilities

School districts and private schools are **NOT** eligible to apply for Section 319(h) grants; however a local government may apply to complete projects on publicly accessible school grounds with permission and support from the school. Similarly, municipalities or regional sewer districts operating under a consent decree or other legal orders are **NOT** eligible to apply for stormwater projects. State universities are ONLY eligible to apply for innovative storm water demonstration projects.

Eligible Projects: Water quality improvement and nonpoint source management projects eligible for funding under Section 319(h) are limited to:

- Stream restoration and re-naturalization using natural channel methodology
- Riparian restoration using green methodology
- Wetland restoration
- Innovative stormwater demonstration projects
- Highly targeted (HUC-12 scale) agricultural best management demonstration projects
- Inland lake management and restoration

Additional information about eligible projects is listed below.

Project Specific Educational and Outreach Requirements

All applications for Section 319(h) grants must include project-specific educational and public outreach activities describing how the successes of the project will be communicated throughout the community. ***Costs associated with project-specific educational and outreach activities are eligible for grant funding, but may not exceed 10 percent of total project costs.***

Environmental Monitoring

Ohio EPA will conduct project-appropriate environmental monitoring for all grant funded sub-grant projects using a dedicated crew from the Division of Surface Water's Ecological Assessment Section or by a contract provider. ***No grant (or matching) funds may be used by applicants for water quality monitoring activities.***

Sample Projects

A sample listing of the types of projects that we are seeking to support with Section 319(h) grant funding follows. We also have included general grant guidelines and limitations that may apply to specific types of projects:

1. **Stream Restoration and/or Dam Removal/Modification Projects**

   Stream restoration or re-naturalization projects that re-establish natural ecology, morphology, channel stability and natural flows continue to be **highly** encouraged. Hydromodification and habitat alteration are the two highest magnitude causes of NPS impairment in Ohio's streams.

   Eligible projects include natural stream channel reconstruction; overwide ditch conversion; levee removal or modification; non-armored stream bank stabilization in areas of known impairment; low-head dam removal and/or modification; in-stream habitat restoration; and/or other projects that restore natural stream ecology, morphology and flow. Stream restoration projects will receive a higher score when restored areas are protected with conservation easements and/or other riparian protection measures. Applicants are eligible to apply for up to **$400,000** in federal Section 319(h) funding to implement these projects.

   *Logjam removal is **NOT** eligible for funding or for use as local match under this program. Also, any project that is under enforcement order or required as mitigation under regulatory programs such as Section 401 permits is **NOT** eligible for funding.*

2. **Wetland Restoration and/or Re-naturalization**

   The restoration of wetlands that are hydrologically connected to surface waters is important for the effective filtering of nonpoint source pollutants. Section 319(h) subgrant funding is available for local groups to help restore and protect naturally occurring wetland areas. We are particularly interested in funding projects that restore previously existing wetland areas that are being degraded through existing land uses such as farming, mowing or other activities. Up to **$400,000** is available for wetland restoration projects that will contribute to improvements in surface water quality. Wetlands must be hydrologically connected to the stream in order to qualify for funding. Restoration of isolated wetlands is not eligible. Projects that also propose to protect restored areas with conservation easements or other protective measures will receive additional consideration.

   Section 319 grant funding may not be used to construct wetlands in areas where wetlands did not exist naturally.

3. **Innovative Storm Water Demonstration Projects** - *Please note reduced eligible amount*

Uncontrolled runoff from storm events may be a serious contributor of nonpoint source pollutants to some of Ohio's streams. Many urban areas in Ohio are required to regulate and/or manage storm water flow and do so under storm water permits issued by Ohio EPA. Recent trends in storm water management have identified innovative practices and techniques that are showing increasing promise in the management of storm water. Ohio EPA is interested in promoting these practices by funding local projects that demonstrate these innovative storm water management practices. Applicants may apply for up to **$200,000** in Section 319 grant funding to implement eligible projects and practices such as those listed below:

- Retrofitting public commons or parking areas with permeable pavements.
- Installing small scale green roofs on public buildings.
- Installing bio-filtration islands and/or vegetated retention structures such as large public rain gardens* or large infiltration planting areas.
- Installing passive "treatment trains" that combine multiple BMPs such as pocket wetlands, bio-filtration islands and others to treat storm water flows prior to discharging in a stream.
- Constructing storm water treatment wetland areas and infiltration zones.
- Installing rainwater harvesting and reuse systems on public buildings or facilities.
- Other practices designed to demonstrate innovative management of storm water flows.

Section 319 grant funding **may not be used for projects such as rain gardens, rain barrels or other stormwater demonstration management practices conducted on private lands or lands owned by private for-profit businesses and/or individual homeowners. Section 319(h) funds may only be used for stormwater demonstration n projects on public properties.*

**Section 319 grants may not be used to implement any activities required under stormwater permits or as mitigation for other permits such as those issued under Section 401 of the Clean Water Act.*

4. **Agricultural Best Management Practices and Projects**

When implemented effectively, creative and highly targeted projects using agricultural BMPs are effective at reducing or preventing NPS pollutants from entering surface waters. During the FFY 2015 grant cycle, Ohio EPA is particularly interested in funding two or three intensive agricultural projects employing multiple management practices in concentrated areas of known impairment. The types of projects being encouraged are:

- Nutrient management projects (**must** include more than nutrient management planning);
- Sediment control projects (including installation of filter areas (not strips));
- Controlled drainage projects;
- Livestock exclusion and manure management projects;
- Conservation crop rotation projects with cover crops; and
- Riparian re-vegetation and/or protection projects.

General limitations for the above agricultural BMP projects include:

- Projects must be implemented in a single 12-digit (old 14-digit) HUC subwatershed which is addressed by an endorsed watershed action plan and/or completed TMDL.
- Grant-funded practices must be selected from the Ohio USDA-NRCS list of conservation practices standards.
- Personnel costs may not exceed 15 percent of grant funds requested.
- Cost-share amounts may not exceed 75 percent of actual costs required to install or implement management practices.

Consistent with federal grant guidelines, Section 319(h) grant funds may not be used to replace and/or expand an existing EQIP (or other farm-bill funded) initiative within the same subwatershed for which a grant project is proposed. Neither Section 319(h) grant or matching funds be used as cost-share for tillage and/or other agricultural equipment purchases. **Applicants are eligible to apply for up to $400,000 in federal 319(h) funding to implement these types of projects in only one 12-digit HUC per grant cycle.**

5. Inland Lake Management and Restoration

Ohio lakes that are primary recreational areas often show the effects of nonpoint source pollution entering through tributaries in the watershed. Lake protection and restoration project grants are available to applicants interested in implementing projects that will measurably improve lake water quality in and around recreation areas. ***Grant funding is available ONLY for lakes that are publicly owned and accessible to the public.***

Applicants may apply for up to **$400,000** in Section 319 grant funding to implement eligible projects and practices such as those listed below:

- Phase 1 Diagnostic-Feasibility Clean Lakes Studies (**$100,000 maximum)**
- Lakeshore stabilization BMPs to reduce sediment loadings.
- Channel aeration to address anoxic conditions and eliminate fish kills.
- Alum treatment demonstration projects designed to inactivate nutrients.
- In-stream alum dosing unit demonstration to reduce tributary nutrient loadings.
- Lake water circulators and/or other devices to reduce blue-green algae blooms.
- Upstream fore bays or constructed wetlands designed to capture incoming pollutants and/or sediment.

6. Acid Mine Drainage Abatement and Abandoned Mine Land Reclamation Projects

When conducted consistent with an approved acid mine drainage abatement (AMD) and treatment plan, AMD abatement and reclamation of abandoned mine land (AML) projects may significantly and permanently reduce or eliminate metals, sediment and other NPS pollutant from mining-impaired waterbodies.

Proposals requesting grant funds for a relatively small site-specific project in which Section 319 funds provide the majority of support will receive more favorable consideration than a project in which Section 319 grant funds are a rather small portion of a much larger project.

Construction projects designed to address AMD abatement or AML reclamation must demonstrate the following at the time of application: a completed characterization of the problem, general permission from all applicable landowners, preliminary cost estimates, and a conceptual design for treatment.

Applicants are eligible to apply for up to **$400,000** in Section 319(h) funding to implement these projects.

7. **Riparian Restoration Projects** - *Please note reduced eligible amount*

   Riparian areas play vital roles in preventing pollutants from entering surface waters. Tree planting, stabilizing eroding streambanks using bioengineering methods, levee and dike removal or riparian wetland restoration, and other projects designed to restore previously impacted riparian forests and floodplains are encouraged. If conducted on private lands, a conservation easement MUST be placed on the project sites. Applicants are eligible to apply for no more than **$200,000** to implement riparian restoration projects.

8. **Riparian and Wetland Protection and Conservation Easement Projects on HIGH QUALITY Waters** - *Please note reduced eligible amount*

   Riparian and wetland protection projects, when wetlands are hydrologically connected to surface waters, may be valuable in protecting existing high quality streams from potential NPS pollution threats. Riparian protection projects funded under Section 319(h) must be focused in areas where NPS causes are known to be the primary reason for impairments or threats of impairments. Riparian protection projects also may be focused along high quality streams where the threat of NPS impairments has been identified and localized. To be eligible, watershed must have a TMDL and/or endorsed watershed action plan in which protection is a recommended action and the stream must be in attainment of its designated aquatic life use. ***Applicants have the burden of demonstrating that project sites selected for projection are indeed threatened***. Applicants are eligible to apply for no more than **$200,000** to implement conservation easement and other riparian protection projects **ON HIGH QUALITY STREAMS ONLY. Land purchases are NOT eligible.**

General Section 319(h) Implementation Grants Guidelines

When preparing your application for Section 319(h) implementation grant funding, the following general guidelines apply:

1. In very limited instances, Section 319(h) grants may be awarded to state agencies with land management responsibilities or state universities. Private individuals and/or For-Profit businesses are NOT eligible for Section 319(h) funding under Ohio's program.

2. **Nutrient and/or manure management or agricultural run-off control from regulated livestock feeding operations are NOT eligible** for grant funding. Incentive payments for Conservation Reserve Program (CRP) or Conservation Reserve Enhancement Program (CREP), and/or bonus payments for the adoption

of certain long-term conservation practices under CRP or CREP are **not** eligible for Section 319(h) implementation grant funding.

3. Section 319(h) implementation grant funds may **not** be used to pay for best management practices (BMPs) or "end-of-pipe treatments" which either are required or anticipated to be required under an NPDES permit. Neither FFY 2015 Section 319(h) implementation funds nor local matching funds may be spent on Phase 1 or Phase 2 NPDES storm water compliance efforts.

4. **Land purchases are ineligible** under Section 319(h) implementation program funding. However, this limitation does not apply to the acquisition of conservation easements when the original landowner retains title to the property. Cost-share (and/or matching credit) may **not** exceed the appraised fair market value of the conservation easement or $25,000 per acre, whichever is the lesser amount. Easements must be acquired consistent with provisions of Ohio Revised Code Section 5301.67(A).

5. **Local matching funds are "federalized" upon approval of grant funding**. Matching funds may **not** be used for activities or expenditures that would otherwise not be allowable, allocable, or reasonable for federal grant funds under federal grant regulations or guidelines. *For example, land acquisition is not allowable under Section 319(h) grant guidelines; therefore, local matching funds may **not** be used for land acquisition either*.

6. **Research and monitoring activities are NOT allowable**. However, activities such as sediment studies, hydraulic modeling and other analyses that are required as part of permitting for projects such as dam removal and stream restoration MAY be completed using Section 319(h) grant funds.

7. Costs associated with complying with stormwater permit requirements are **not** eligible for funding under Section 319(h).

8. Grant applicants and implementing agencies must have the proper jurisdiction within a watershed to implement the proposed activities.

9. Project sponsors may subcontract portions of their Section 319(h) or local matching funds for technical or other services associated with implementation of the proposed project.

Application Deadline & Review Procedures

The deadline for submitting Section 319(h) implementation grant applications is **close of business July 25, 2014. Applications must be complete and received and/or postmarked by the above date to be considered for funding.** Applications postmarked (or hand-delivered) after this date will be returned to the applicant without further consideration.

Please submit **three** (3) copies of the complete application with **original** (blue ink) signatures and **one** (1) copy of the application in **Microsoft Word** format on a flash drive or CD. Completed applications may be mailed or delivered to:

Russ Gibson, NPS Program Manager
Ohio EPA / Division of Surface Water
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

Upon receipt, all Section 319(h) implementation grant applications will be reviewed for completeness, technical merit and adherence to the 1987 Amendments to the Clean Water Act, 2014 U.S. EPA Section 319(h) Program Guidance, and FFY 2015 Request for Proposals criteria. Applications found to be administratively complete will undergo a comprehensive review using criteria designed to evaluate and score the following:

1. environmental results likely to be achieved;
2. status of TMDL and/or local watershed planning efforts;
3. applicant's prior performance with Ohio EPA grants;
4. overall effectiveness of the project at solving an identified problem;
5. feasibility of completing the proposed project in a timely manner;
6. local commitment and matching funds;
7. applicant's capability to administer federal grant funds;
8. project specific educational and outreach activities; and
9. existing environmental quality and restorability of the watershed.

In addition to the above general criteria that are applicable to all applicants, projects also will be evaluated using specific technical criteria developed for the specific type of proposed project.

Upon completion of all reviews, applications will be ranked according to their review scores and recommendations for funding will be developed based upon this ranking. Funding decisions will be made by the director of Ohio EPA and recommended to U.S. EPA Region 5. Recommended subgrant applications will be incorporated into the Ohio Section 319(h) grant application submitted to U.S. EPA. We anticipate that formal grant awards will likely be announced in early Spring 2015. Successful applicants will be required to execute a formal grant agreement and adhere to all requirements of the Section 319(h) implementation grants program.

Application Materials and Technical Assistance

Applications are available at the Ohio EPA, Division of Surface Water homepage located at http://epa.ohio.gov/dsw/nps/index.aspx#LiveTabsContent120842. Applications are also available at Ohio EPA's district offices or by contacting Russ Gibson, NPS Program Manager, at (614) 644-2020.

We appreciate your interest in Section 319(h) grants and look forward to working with you to help Ohio meet important water quality goals. If after reviewing this information you require additional assistance or have questions, please do not hesitate to contact us at the numbers listed above.

Attachment 1
Nine Program Elements that All Projects Must Meet

The following information is condensed from 2003 U.S. EPA Guidance for Watershed Action Plans.[3] All Section 319 implementation grant projects are required by federal 319(h) grant guidelines to meet each of the following nine elements:

1. An identification of the causes and sources or groups of similar sources that must be controlled to achieve the load reductions estimated.

2. An estimate of the load reductions expected for the management measures described.

3. A description of the NPS management measures that must be implemented to achieve the load reductions estimates and identification (using a map or a description) of the critical areas in which those measures are required.

4. An estimate of the amount of financial assistance needed.

5. An information/education component that will be used to enhance public understanding of the project and encourage their early and continued participation.

6. A schedule for implementing the NPS management measures that is reasonably expeditious.

7. A description of interim, measurable milestones for determining whether NPS management measures or other control actions are being implemented.

8. A set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made toward attaining water quality standards.

9. A monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the established criteria. (Projects will meet this element by virtue of Ohio EPA performing statewide Section 319 project monitoring during FY15).

[3] For the complete text, please refer to http://www.epa.gov/fedrgstr/EPA-WATER/2003/October/Day-23/w26755.htm. These nine program elements also form the basis of Ohio's watershed plan endorsement criteria.