Appendix 4

Closed Section 319 Grants – FFY 2010 – 2015

Completed Projects

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FEDERAL FISCAL YEAR 2010

Title: Streambank Cleanup And Lakeshore Enhancement (SCALE)

Purpose: This project provided financial assistance to selected applicants to conduct lakeshore and streambank clean-up events. Local organizations that have previously conducted a lakeshore or streambank clean-up event were eligible to participate. The local sponsor was given up to $3,500 to help conduct their clean-up event. The local sponsor could use the funds for event promotion, event equipment or disposal fees.

Project Location: Statewide

Project Reports and Other Informational Materials:

"Streambank Cleanup And Lakeshore Enhancement (SCALE) Program." January 2013. Illinois Environmental Protection Agency.

10-00 (319)CD

Title: Resource Management Mapping Service

Purpose: This project continued development and maintenance of the best management practice (BMP) database developed by the University of Illinois and Illinois EPA to geographically track BMPs implemented by the Illinois EPA with funding under Section 319 of the Clean Water Act, as well as the new Lakes Program and Watershed-based Plan data layers. In cooperation with the Illinois EPA, the University of Illinois identified and implemented proposed enhancements to the interface, database, and design. To maintain the Illinois EPA databases and enable new analytic geo-processing functions of the data, funding was also used to update and expand Resource Management Mapping Service (RMMS). This website, maintained at the University of Illinois, is useful in aiding public stakeholders in watershed management. This project updated and expanded the databases and resources provided through RMMS. The project included the enhancement of the capability of the Illinois EPA databases, and upgrade of RMMS to new standards and security provisions, research and development of new tools and databases, and update of critical data layers, and improvements based on consultation with Illinois EPA and instructional and research users.

Project Location: Statewide

Subgrantee: University of Illinois
1901 South First Street, Suite A
Champaign, Illinois 61820

10-01(319)SR

Title: Babbling Brook and Lost Lake Stabilization Project

Purpose: This project stabilized 1,650 feet of eroding streambank along a segment of Babbling Brook, which discharges into Lost Nation Lake (ILRPZF) and is part of the Clear Creek (ILPZU) watershed. Streambank stabilization techniques included gabion retaining walls, graded slope with filter fabric and slope mattresses, stone rip rap, coir fiber log toe with turf reinforcement mats, articulated block revetment, and native vegetation. The project also stabilized 2,296 feet of eroding shoreline with rip rap, coir log breakwater, and concrete block retaining wall. An Educational video and photographic educational tool illustrating the installation of the stabilization techniques was developed and a public education event held.

Project Location: Counties of Ogle and Lee

Subgrantee: Lost Nation / New Landing River Conservancy District (RCD) of Illinois
205 Cuyahoga Drive
Dixon, Illinois 61021

Project Reports and Other Informational Materials:

"Babbling Brook and Lost Lake Stabilization Project." July 12, 2012. Olson Ecological Solutions, LLC.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	3,946 ft.	245	214	-	427

Babbling Brook bank stabilization post-construction.

Lost Nation Lake shoreline stabilization post-construction.

10-03 (319)SR

Title: Jelkes Creek Watershed Plan and Nonpoint Source Education

Purpose: This project developed a watershed-based plan for Jelkes Creek (ILDTZQ01), a tributary of the Fox River (ILDT18 and ILDT20), designed to improve water quality by

controlling nonpoint source pollution. The plan is consistent with USEPA watershed based plan guidance dated October 23, 2003 (as revised), Chicago Metropolitan Agency for Planning's "Guidance for Developing Watershed Action Plans in Illinois" dated June 2007, total maximum daily load (TMDL) implementation plan requirements, and current watershed planning principles. This project also educated the public about water quality and the impacts of nonpoint source pollution.

Project Location: Counties of McHenry, Kane, and Cook

Subgrantee: Kane-DuPage Soil and Water Conservation District
2315 Dean Street, Suite 100
St. Charles, Illinois 60542

Project Reports and Other Informational Materials:

"Jelkes Creek- Fox River Watershed Action Plan." December 2012. Kane-DuPage Soil and Water Conservation District.

10-04(319)ST

Title: Conservation Reserve Enhancement Program (CREP) Staffing

Purpose: This project provided well trained, effective staff "CREP Assistants" to promote and to work with landowners enrolling or currently enrolled in CREP to 1) extend to a 35 year or permanent State conservation easement and/or, 2) enhance the retired land with water quality BMPs. The staff geographically covered the present CREP designated area (Illinois River Basin) and other areas that were negotiated to become designated CREP areas (Kaskaskia River Basin). The distribution of staff was strategically placed to insure the highest level of effectiveness giving priority to acres in close proximity to the lakes and stream segments identified on the 303 (d) and impaired waters that have a TMDL.

Project Location: Statewide

Subgrantee: Association of Illinois Soil & Water Conservation Districts
2520 Main Street
Springfield, Illinois 62702

Project Reports and Other Informational Materials:

"Conservation Reserve Enhancement Program (CREP) Staffing." August 2012. Association of Illinois Soil & Water Conservation Districts.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
327	Conservation Cover	33.3 ac.	143	159	-	315
612	Tree Planting	533.18 ac.	995	1,349	-	2,686
880	Permanent Seeding	204.42 ac.	298	465	-	923
657	Wetland Restoration	254.1 ac.	443	737	-	1,471

Title: Spring Lake TMDL Plan Implementation

Purpose: The project installed agricultural best management practices in the Spring Lake (ILRDR) watershed according to the Spring Lake Watershed-based Management Plan, the LaMoine River Ecosystem Partnership Plan and the East Fork LaMoine River TMDL. BMPs implemented under this project included approximately 2,850 feet of terraces, 59 water and sediment control basins, and 5.1 acres of grassed waterways. Additionally, a phosphorous study was completed.

Project Location: McDonough County

Subgrantee: McDonough County Soil & Water Conservation District
1607 West Jackson Street
Macomb, Illinois 61455

Project Reports and Other Informational Materials:

"Spring Lake TMDL Plan Implementation." July 13, 2012. McDonough County Soil & Water Conservation District.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
412	Grassed Waterway	5.1 ac.	32	32	-	60
600	Terrace	2,850 ft.	46	14	-	27
638	Water and Sediment Control Basin	16,400 ft.	833.3	476	-	1,267


Water and sediment control basin pre-construction.


Water and sediment control basin post-construction.

Title: Lake Sara Shoreline Protection Project

Purpose: This project stabilized 2,718 feet of shoreline and bluffs in the Gypsy and Shumway Coves on Lake Sara (ILRCE) in Effingham, Illinois. Stabilization of the shoreline was accomplished using transitional wetland breakwaters. Another 2,307 feet of shoreline was stabilized through the residential shoreline protection program using breakwaters and revetments. The project also included outreach programs to inform the public of the benefits of shoreline stabilization and increase community awareness of water quality.

Project Location: Effingham County

Subgrantee: Effingham Water Authority
P. O. Box 411
Effingham, Illinois 62401

Project Reports and Other Informational Materials:

"Lake Sara Shoreline Protection Project." July 12, 2012. Effingham Water Authority.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	5,025	949	949	-	1,900


Lake Sara shoreline stabilization pre-construction.


Lake Sara shoreline stabilization post-construction.

10-07(319) ST

Title: DuPage River Salt Creek TMDL Implementation Program

Purpose: The project included 1) the removal of a low head dam and implementation of 23.3 acres of wetland restoration and two riffles in the East Branch DuPage River (ILGBL08) where the impoundment was originally located, 2) two chloride reduction workshops, 3) the development of a project prioritization matrix for use by local and county government staff, 4) development of a monitoring data management system, and 5) part of the watershed coordinators salary. Section 319 funds were not used for the dam removal. The DuPage River and Salt Creek were included on Illinois

303(d) list. The TMDL and implementation plan for the DuPage River and Salt Creek were complete.

Project Location: DuPage and Cook Counties

Subgrantee: DuPage River/Salt Creek Workgroup
10S 404 Knoch Knolls Road
Naperville, Illinois 60565

Project Reports and Other Informational Materials:

"Final Report DuPage River and Salt Creek TMDL Implementation Phase III." July 15, 2013. The DuPage River Salt Creek Workgroup.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
016	Dam Removal	1 no.	-	-	-	-
584	Stream Channel Stabilization	3,000 ft.	41	35	-	70
657	Wetland Restoration	23 ac.	46	46	-	92


Dam modification pre-construction.


Dam modification post-construction.

10-08(319) CD

Title: Otter Lake Shoreline Erosion Control & TMDL Implementation

Purpose: This project stabilized 8,949 feet of eroding shoreline on Otter Lake (ILRDF) using rip rap and by planting 300 bald cypress trees at the edge of the water. Other best management practices (BMPs) were also implemented in the Otter Lake watershed, including six sediment retention basins and twenty-two water and sediment control basins (WASCBs). Otter Lake was on Illinois' Section 303(d) list and shoreline stabilization was recommended in the Hodges Creek Watershed TMDL Report (November 2006) for Otter Lake.

Project Location: Macoupin County

Subgrantee: Otter Lake Water Commission
6475 West Montgomery Road, P.O. Box 468
Virden, Illinois 62690

Project Reports and Other Informational Materials:

"Otter Lake Shoreline Erosion Control & TMDL Implementation Project." October 1, 2012. Otter Lake Water Commission.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
350	Sediment Basin	6 no.	655	865	-	2,643
638	Water and Sediment Control Basin	8,234 ft.	878	1,063	-	3,115
580	Streambank and Shoreline Protection	8,949 ft.	961	961	-	1,921


Sediment basin post-construction.


Water & sediment control basin / terrace post-construction.

10-09(319) TK

Title: Rock River: Nonpoint Source Solutions

Purpose: This project reduced nonpoint source pollution through 1) the installation of rain gardens along roads, parking lots, and other impervious surfaces at Black Hawk College in Moline, Illinois; 2) the restoration of 6.3 acres of wetland on an un-named tributary to the Rock River (ILP25) in the Green Valley Nature Preserve in Moline, Illinois; and 3) the restoration of 985 linear feet of stream channel on an un-named tributary to the Rock River at a new commercial development in Rock Island, Illinois. A public education program was also implemented to explain nonpoint source pollution and promote simple solutions for reducing nonpoint source pollution.

Project Location: Rock Island County

Subgrantee: River Action, Inc.
Post Office Box 964
Davenport, Iowa 52805

Project Reports and Other Informational Materials:

"Rock River: Nonpoint Source Solutions." December 20, 2013. River Action, Inc.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
009	Stream Channel Restoration	895 ft.	11	9	-	19
657	Wetland Restoration	6.3 ac.	-	93	57,500	674
013	Rain Garden	3 no.	-	3	2,985	20

Stream channel restoration pre-construction.

Stream channel restoration post-construction.

10-11(319) ST

Title: BMP Implementation Addressing Kinkaid Lake Sedimentation & TMDL

Purpose: This project installed seven water and sediment control basins, stabilized 2,000 feet of eroding gullies, seeded 86 acres in native grasses, and stabilized 1,258 feet of eroding shoreline in the Kinkaid Lake (ILRNC) watershed. Shoreline stabilization was accomplished by barge applied rip rap. All practices were designed to reduce nonpoint source pollution and improve water quality. Kinkaid Lake is included on Illinois' 303d list. A TMDL and Phase 1 Diagnostic / Feasibility Study have been completed for Kinkaid Lake.

Project Location: Jackson County

Subgrantee: Kinkaid-Reed's Creek Conservancy District
1763 Water Plant Road
Murphysboro, Illinois 62966

Project Reports and Other Informational Materials:

Project Evaluation and Final Report - Kinkaid Lake TMDL Best Management Practices Implementation. July 2012. HDR.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
327	Conservation Cover	86 ac.	552	608	-	1,211
412	Grassed Waterway	1.75 ac.	94	94	-	188
638	Water and Sediment Control Basin	415 ft.	2,278	473	-	945
580	Streambank and Shoreline Protection	1,258 ft.	322	322	-	642

Kinkaid Lake shoreline stabilization pre-construction.

Kinkaid Lake shoreline stabilization post-construction

10-12(319) JC

Title: Naper Settlement Stormwater Attenuation Action Plan

Purpose: This project implemented BMPs to reduce nonpoint source pollution to West Branch DuPage River (ILGBK02) from the Naper Settlement in DuPage County, Illinois. The project included the construction of 42,900 square feet permeable pavement, 3,100 square feet of bioswales, 8,965 square feet of rain gardens, two cisterns to capture and store rain water from roofs for re-use on site, and 1,095 square feet of infiltration zones. The project installed BMPs as identified in the DuPage River Watershed Plan and addressed pollutants identified in the DuPage River/Salt Creek Watershed TMDL Stage 1 Report.

Project Location: DuPage County

Subgrantee: Naperville Heritage Society
523 South Webster Street
Naperville, Illinois 60540

Project Reports and Other Informational Materials:

"Naper Settlement Stormwater Attenuation Action Plan." January 2012. WRD Environmental, Inc.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
12	Cistern	2 no.	-	-	-	-
13	Rain Garden	8 no.	-	1	1,716	2
835	Urban Filter Strip	0.07 ac.	-	0	429	1
845	Infiltration Trench	7 no.	-	0	495	3
890	Porous Pavement	1 ac.	-	9	11,880	94

Rain garden and permeable pavement post-construction.

Rain garden and permeable pavement post-construction.

10-14(319)CD

Title: American Bottom Wetland Interpretive Site and Educational Campaign

Purpose: This project restored approximately 20 acres of wetlands within the American Bottom floodplain to improve the water quality of Horseshoe Lake (ILRJC) and enhance aquatic habitat. Other best management practices (BMPs) were installed in and around the restored wetlands to reduce nonpoint source pollution, including 464 linear feet of elevated boardwalk over the wetland, a 469 linear foot gravel trail on the west side of the wetland, and a 13,482 square foot permeable pavement parking lot. To educate the public about wetlands, nine interpretive signs were placed at the site, a website was developed, and educational events held.

Project Location: Madison County

Subgrantee: Southwestern Illinois Resource Conservation & Development
406 East Main Street
Mascoutah, Illinois 62258

Project Reports and Other Informational Materials:

"American Bottom Wetland Interpretive Site & Educational Campaign - Final Report & Project Evaluation." February 27, 2013. HeartLands Conservancy.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
657	Wetland Restoration	20.47 ac.	-	5	7,525	45
575	Trails and Walkways	933 ft.	-	-	-	-
890	Porous Pavement	0.31 ac.	-	0	702	2

Elevated boardwalk over wetland during construction.

Elevated boardwalk over wetland post-construction.

10-15(319) MF

Title: Nippersink Creek Watershed Plan Implementation

Purpose: The project implemented best management practices identified in the Nippersink Creek Watershed Plan (2008) to improve water quality in Nippersink Creek (ILDTK-06) and Wonder Lake (ILRTZC). Best management practices installed included approximately 780 feet of shoreline stabilization on Wonder Lake, thirty (30) riffles to stabilize approximately 2,500 feet of eroding stream channel, and one low earthen berm water control structure to function as a wetland and reduce gully erosion.

Project Location: McHenry County

Subgrantee: Nippersink Watershed Association (NWA)
P.O. Box 168
Wonder Lake, Illinois 60097

Project Reports and Other Informational Materials:

"Final Report for Nippersink Creek Watershed Plan Implementation FAA 3191016." June 17, 2013. Nippersink Watershed Association.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	780 ft.	29	29	-	56
584	Stream Channel Restoration	2,500 ft.	160	160	-	320
587	Structure for Water Control	1 no.	-	-	-	-

Wonder Lake shoreline stabilization post-construction.

Wonder Lake shoreline stabilization post-construction.

10-16(319)CD

Title: Clean Water: Helping Agriculture Protect the Headwaters

Purpose: The Champaign County Soil & Water Conservation District worked cooperatively with local agribusinesses and producers to minimize soil and nutrients from moving into local streams and drainage ditches through the adoption of strip till and deep placement of fertilizer in crop production. A program was implemented to make specialized farm equipment available to producers in Champaign County and to provide cost share payments to producers in Champaign County to implement strip-till, strip-till with deep nutrient placement, and soil testing. The program resulted in 9,997.71 acres of farm land being planted with strip-till or strip-till with deep nutrient placement. The project covered Champaign County with special emphasis on the Salt Fork Vermilion River, Embarrass River, and the Little Vermilion River segments in the county.

Project Location: Champaign County

Subgrantee: Champaign County Soil & Water Conservation District
2110 West Park Court
Champaign, Illinois 61821

Project Reports and Other Informational Materials:

"Clean Water: Helping Agriculture Protect the Headwaters." July 13, 2012. Champaign County Soil & Water Conservation District.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
329	Conservation Tillage	9,997 ac.	21,461	23,691	-	47,169

10-17(319)JC

Title: Kickapoo Creek National Monitoring Project

Purpose: This project conducted annual vegetation sampling of restored areas of Kickapoo Creek (ILEIE03) to help determine the effectiveness of the Kickapoo Creek Corridor Restoration Project. In the completion of the annual vegetation sampling, the City of Bloomington 1) established permanent transects for all future vegetation sampling; 2) performed qualitative vegetation sampling to characterize the overall floristic integrity of the site; 3) performed quantitative vegetation sampling to provide reproducible and consistent data collection for estimates of species' presence, frequency, relative density, and cover; and 4) produced an annual vegetation report that met the requirements of the United States Geological Survey for inclusion in their national Monitoring Annual Report.

Project Location: McLean County

Subgrantee: City of Bloomington
109 E Olive Street
Bloomington, Illinois 61701-5219

10-18 (319)JC

Title: Kickapoo Creek National Monitoring Project

Purpose: This project conducted surface water monitoring of Kickapoo Creek (ILEIE03) to determine the effectiveness of the "Kickapoo Creek Corridor Restoration Project". Monitoring documented the biological enhancement resulting from the restoration project by determining: 1) effectiveness of the stream restoration in terms of stream fisheries in the restored stream segments, 2) sediment transport through the restored stream segments, 3) construction erosion controls, 4) reduction of stream bank erosion by re-vegetation, and 5) effectiveness of floodplain wetland restoration in capturing residential runoff after the housing development has been constructed. Data collection and analysis also included fecal coliform bacteria samples. All monitoring and associated data collected was entered into U. S. EPA's Nonpoint Source Management System (NPSMS) and U. S. EPA's STORET system.

Project Location: McLean County

Subgrantee: US Geological Survey
1201 West University Avenue, Suite 100
Urbana, Illinois 61801-2347

10-19 (319)JC

Title: Watershed Based Planning

Purpose: This project developed two (2) watershed-based plans, one for Madigan Creek (a portion of HUC 070900060802), a tributary of the Kishwaukee River (ILPQ02), and one for Buckbee Creek (a portion of HUC 070900050401), a tributary of the Rock

River (ILP23). Both plans were designed to improve water quality by controlling nonpoint source pollution. The plans are consistent with the USEPA watershed based plan guidance dated October 23, 2003 (as revised), Chicago Metropolitan Agency for Planning's "Guidance for Developing Watershed Action Plans in Illinois" dated June 2007, total maximum daily load (TMDL) implementation plan requirements, and current watershed planning principles.

Project Location: Winnebago County

Subgrantee: County of Winnebago Highway Department
424 North Springfield Avenue
Rockford, Illinois 61101-5097

Project Reports and Other Informational Materials:

"Winnebago County Watershed Improvement Plan: Buckbee Creek Watershed." July 2013. Hey and Associates, Inc.

"Winnebago County Watershed Improvement Plan: Madigan Creek Watershed." July 2013. Hey and Associates, Inc.

10-20(319) ST

Title: Spring Creek Watershed Plan

Purpose: This project developed a watershed-based plan for the Spring Creek (ILDTH01) watershed (HUC 071200061202), a tributary of the Fox River, designed to improve water quality by controlling nonpoint source pollution. The plan is consistent with the USEPA watershed based plan guidance dated August 26, 2003 (as revised), Chicago Metropolitan Agency for Planning's "Guidance for Developing Watershed Action Plans in Illinois" dated June 2007, total maximum daily load (TMDL) implementation plan requirements, and current watershed planning principles. This project also educated the public about water quality and the impacts of nonpoint source pollution.

NPS Program: All Sources

Project Location: McHenry County

Subgrantee: Citizens for Conservation Spring Creek Watershed
459 West Illinois Route 22
Barrington, Illinois 60011

Project Reports and Other Informational Materials:

"Spring Creek Watershed-Based Plan – A Strategy for Protecting and Restoring Watershed Health." September 2012. Applied Ecological Services, Inc.; Integrated Lakes Management, inc.; Tallgrass Restoration, LLC.

"Spring Creek Watershed-Based Plan – A Strategy for Protecting and Restoring Watershed Health – Executive Summary." September 2012. Applied Ecological Services, Inc.; Integrated Lakes Management, inc.; Tallgrass Restoration, LLC.

10-21(319)ST

Title: Candlewick Lake Watershed Plan

Purpose: This project developed a watershed-based plan for the Candlewick Lake (ILRPV) watershed (a portion of HUC 070900060402), a tributary of Beaver Creek (IL_PQD-07) and the Kishwaukee River (IL_PQ-14), designed to improve water quality by controlling nonpoint source pollution. The plan was developed to be consistent with the consistent with USEPA watershed-based plan guidance found in Appendix C of the Nonpoint Source Program and Grants Guidelines for States and Territories dated April 12, 2013 (as revised), Chicago Metropolitan Agency for Planning's "Guidance for Developing Watershed Action Plans in Illinois" dated June 2007, total maximum daily load (TMDL) implementation plan requirements, and current watershed planning principles.

Project Location: Boone County

Subgrantee: Candlewick Lake Association, Inc.
13400 Hwy. 76
Poplar Grove, Illinois 61065

Project Reports and Other Informational Materials:

"Candlewick Streams and Lakes Conservation Plan." July 1, 2014. Olson Ecological Solutions, LLC.

"Candlewick Streams and Lakes Conservation Plan: Executive Summary." July 1, 2014. Olson Ecological Solutions, LLC.

10-22(319)SR

Title: Science Assessment to Support an Illinois Nutrient Reduction Strategy

Purpose: This project compiled a comprehensive statewide assessment of the current conditions and practices affecting nutrient losses to Illinois waters. The assessment identified and assessed nutrient (nitrogen and phosphorus) inputs and management practices, including current cropping practices, phosphorus losses, developed nutrient balances to understand the direction of soil pools, identified and estimated point source influences and determined total nitrogen, nitrate, total phosphorus, and dissolved reactive phosphorus loads leaving the state annually. A report was developed outlining costs and associated expected load reductions, including a discussion of effectiveness expectation for each practice identified. The project identified critical watersheds that will be used by nutrient strategy developers to prioritize watersheds in Illinois for implementation. The project also included the

development of scenarios of reductions that might be achieved, costs of implementing each scenario and percent of reduction achieved by each scenario.

Project Location: Statewide

Subgrantee: University of Illinois
1901 S. First Street, Suite A
Champaign, Illinois 61820

Project Reports and Other Informational Materials:

"Science Assessment to Support an Illinois Nutrient Reduction Strategy." May 6, 2014. University of Illinois.

10-23(319) AW

Title: Total Maximum Daily Load Development

Purpose: The Illinois EPA developed Total Maximum Daily Loads (TMDLs) and implementation plans for each pollutant within selected watersheds on the 303(d) list through computer modeling. For each watershed, computer models were used to identify a distribution of pollutant loading (allocation) that can be expected to result in the attainment of water quality standards. The methodologies used for TMDL development were documented. Modeling results were used to support the development of implementation plans for TMDL attainment.

10-(319) AW

FEDERAL FISCAL YEAR 2011

Title: East Bureau Creek Monitoring Project

Purpose: This project was an agreement between the Illinois EPA and the USGS for the installation, operation, and maintenance of a continuous discharge streamgage and continuous nitrate sensor on East Bureau Creek (ILDQA01, HUC 0713000106) in the Big Bureau Creek watershed. Real-time stream flow and nitrate concentration data results were made available on a USGS website. The data gathered through this project was used to educate citizens in the watershed on local water quality, and to show the improvements that can be made when Best Management Practices are followed.

Project Location: Bureau County

Subgrantee: US Geological Survey
1201 West University Avenue, Suite 100
Urbana, Illinois 61801-2347

11-0(319) AW (FWN12301)

Title: Ravine Stabilization in the Farm Creek Watershed

Purpose: This project stabilized seven (7) eroding ravines in or near the Farm Creek (ILDZZP03) watershed, a tributary of the Illinois River (ILD30). The forested ravines were stabilized using rock lining and gabion baskets at the tow of the ravine. The installation of these grade stabilization structures will help reduce nonpoint source pollution and improve water quality.

Project Location: Tazewell County

Subgrantee: Tri-County Regional Planning Commission
211 Fulton Street, Suite 207
Peoria, Illinois 61602-1332

Project Reports and Other Informational Materials:

"Ravine Stabilization in the Farm Creek Watershed – Final Report and Project Evaluation." July 2013. Tri-County Regional Planning Commission.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
410	Grade Stabilization Structure	15 no.	14,592	14,592	-	29,147

Grade stabilization structure post-construction.

Grade stabilization structure post-construction.

11-01(319) ST

Title: Illinois Urban Manual Update & NPS Program Assistance

Purpose: This project allowed for continued technical and educational assistance to, and through, county soil and water conservation districts (SWCDs) on water quality issues. This project also systematically updated the nonpoint source pollution control practice standards contained in the Illinois Urban Manual (IUM). A series of supporting efforts were also carried out under this project, including the development of a pocket field manual for the inspection of soil erosion and sedimentation control practices, training sessions and streaming video tutorials on green infrastructure practices for stormwater management, and presentations describing updates to the IUM.

Project Location: Statewide

Subgrantee: Association of Illinois Soil & Water Conservation Districts
4285 North Walnut Street Road
Springfield, Illinois 62707

Project Reports and Other Informational Materials:

"Illinois Urban Manual Update & NPS Program Assistance – Final Report." February 2014. Association of Illinois Soil & Water Conservation Districts.

"Illinois Urban Manual – Field Manual for Inspection of Erosion and Sediment Control Best Management Practices." October 2013. Association of Illinois Soil & Water Conservation Districts.

11-03(319)SR

Title: Woods Creek Watershed Based Plan

Purpose: This project developed a watershed based plan for the Woods Creek watershed, which is a sub-watershed of HUC 071200061201 and part of the Fox River

watershed. Woods Creek is tributary to Lake-in-the-Hills 1W Lake (ILRTZZ) and Crystal Lake Outlet Creek (ILDTZR-01). The Woods Creek watershed based plan was designed to improve water quality by controlling nonpoint source pollution. The plan is consistent with the USEPA watershed based plan guidance dated October 23, 2003 (as revised), Chicago Metropolitan Agency for Planning's "Guidance for Developing Watershed Action Plans in Illinois" dated June 2007, total maximum daily load (TMDL) implementation plan requirements, and current watershed planning principles.

Project Location: McHenry County

Subgrantee: Village of Algonquin
110 Meyer Drive
Algonquin, Illinois 60101

Project Reports and Other Informational Materials:

"Woods Creek Watershed-Based Plan – A Strategy for Protecting and Restoring Watershed Health." January 2013. Applied Ecological Services, Inc.

"Woods Creek Watershed-Based Plan – A Strategy for Protecting and Restoring Watershed Health – Executive Summary." January 2013. Applied Ecological Services, Inc.

11-05(319) CD

Title: Judson University Tyler Creek Restoration

Purpose: This project stabilized 1,536 feet of eroding streambank and 200 feet of eroding streambed and established 0.4 acres of riparian buffer along a segment of Tyler Creek (ILDTZP-02), a tributary of the Fox River, located at the Judson University campus in Elgin, Illinois. Streambanks were stabilized using a combination of stone toe protection, vegetated geogrids, gabion baskets, slope re-grading, minor clearing of non-native vegetation, and re-vegetation with deep-rooted native plants. Stream channel stabilization was achieved through the removal of two existing on-line dams and the installation of two boulder cross vanes and four boulder jetties. The riparian buffer strip was planted with native vegetation to help reduce fecal coliform loadings by discouraging waterfowl from accessing the stream.

Project Location: Kane County

Subgrantee: Judson University
1151 N. State Street
Elgin, Illinois 60123

Project Reports and Other Informational Materials:

"Judson University Tyler Creek Restoration." November 2013. Trotter and Associates, Inc.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
035	Buffer Zone Enhancement / Installation	0.33 ac.	-	-	-	-
580	Streambank and Shoreline Protection	1,536 ft.	49	49	-	100
584	Stream Channel Stabilization	200 ft.	-	-	-	-

Tyler Creek bank stabilization pre-construction.

Tyler Creek bank stabilization post-construction.

11-06(319) CD

Title: Nippersink Creek Watershed Plan Implementation

Purpose: This project continued implementation of the Nippersink Creek Watershed Plan. At Wonder Lake (ILRTZC), approximately 745 linear feet of eroding shoreline over four sites were stabilized through rip rap and a vegetative buffer strip (0.3 acres). At the Manke parcel, this project removed 1,352 feet of agricultural drain tile and vegetated the surrounding area (20 acres of critical area planting). At the Barber Fen parcel, this project 1) stabilized 1,790 linear feet of eroding streambank along a segment of Nippersink Creek (ILDTK-06) and 2) removed 2,198 feet of agricultural drain tile and vegetated the surrounding area (10 acres of critical area planting). Streambanks were stabilized using a combination of stone toe protection, slope re-grading, erosion control blanket, and seeding with native vegetation. At the Wanda parcel, this project 1) stabilized 900 linear feet of eroding streambed on a tributary of Nippersink Creek with 15 riffles and 2) installed 1,800 feet of livestock exclusion fencing. At Wonder Lake, approximately 795 linear feet of eroding shoreline were stabilized through rip rap. On Galt Creek, approximately 1,509 feet of eroding streambank were stabilized.

Project Location: McHenry County

Subgrantee: Nippersink Watershed Association
7602 Hancock Drive
Wonder Lake, Illinois 60097

Project Reports and Other Informational Materials:

"Final Report for Nippersink Creek Watershed Plan Implementation." December 15, 2014. Nippersink Watershed Association.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
035	Buffer Zone Enhancement / Installation	30.31 ac.	16	33	-	61
382	Fencing	1,800 ft.	-	-	-	-
580	Streambank and Shoreline Protection	4,839 ft.	283	280	-	406
584	Stream Channel Stabilization	900 ft.	10	8	-	16

Wonder Lake shoreline stabilization post-construction.

Galt Creek bank stabilization post-construction.

11-09(319) CD

Title: North Branch Chicago River Watershed Project

Purpose: This project implemented additional best management practices (BMPs) in accordance with the North Branch Watershed Management Plan. An existing parking lot was replaced with a one acre stormwater wetland and 1,886 feet of eroding drainage ditches were stabilized through re-grading and planting native vegetation in the Village of Bannockburn to treat runoff before discharge to the Middle Fork North Branch of the Chicago River (ILHCCC-02). Approximately 1,810 feet of eroding drainage ditch were stabilized through re-grading and planting native vegetation and 3,445 feet of eroding shoreline over two detention basins were stabilized with native vegetation in the Village of Bannockburn. A rain garden totaling 1,025 square feet was installed at the Metra parking lot in the Village of Deerfield to treat runoff before discharge to the West Fork North Branch of the Chicago River (ILHCCB-05). Approximately 0.77 acres of wetland were restored through re-grading and re-vegetation and 760 feet of eroding drainage ditch were stabilized through re-grading and planting native vegetation in the Village of Green Oaks.

Project Location: Lake County

Subgrantee: Lake County Stormwater Management Commission
500 West Winchester Road
Libertyville, Illinois 60048

Project Reports and Other Informational Materials:

"North Branch Chicago River Watershed Project Final Report." December 2, 2013. Lake County Stormwater Management Commission.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
013	Rain Garden	2 no.	-	43	57,555	166
580	Streambank and Shoreline Protection	3,445 ft.	31	52	-	205
800	Urban Stormwater Wetlands	3 no.	-	58	158,708	458
814	Bioswale	2.43 ac.	-	224	231,970	1,610

Metra parking lot rain garden during construction.

Metra parking lot rain garden post-construction.

11-10(319) CD

Title: Lake Carlinville Improvements

Purpose: This project installed nonpoint source pollution control best management practices (BMPs) on private property and property owned by City of Carlinville in the Lake Carlinville (ILRDG) watershed. BMPs included 10,614 feet of water and sediment control basins; ten grade stabilization structures; three ponds; three sediment basins; 0.5 acres of grassed waterway; and 275 acres of brush management. An educational program was also implemented. This was Phase 1 of a multi-phase implementation project.

Project Location: Macoupin County

Subgrantee: City of Carlinville
550 North Broad Street
Carlinville, Illinois 62626-1019

Project Reports and Other Informational Materials:

"Carlinville Lake Erosion Control & TMDL Implementation Project." May 12, 2014. City of Carlinville.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
314	Brush Management	275 ac.	28	28	-	216
350	Sediment Basin	3 no.	928	654	-	2,249
378	Pond	3 no.	355	402	-	1,603
410	Grade Stabilization Structure	10 no.	358	191	-	624
412	Grassed Waterway	0.5 ac.	17	26	-	97
638	Water and Sediment Control Basin	10,614 ft.	1,550	1,835	-	6,167

Water and sediment control basin post construction.

Grade stabilization structure post-construction.

11-11(319) TK

Title: Cahokia Creek Restoration at Roxana Landfill

Purpose: This project transformed a 4,920 foot segment of highly unstable stream channel on Cahokia Creek (ILJQ-05) into a 3,000 foot stable meandered stream by realigning the channel in three locations to achieve a larger radius curve and installing two (2) rock riffles. Approximately 3,390 feet of stone toe protection with suitable woody vegetation was established on the outside banks of all meander bends. A 66 foot wide vegetated riparian corridor was established along the entire 3,000 foot reach. In addition, 2.5 acres of wetlands were restored from the abandoned oxbows. An informational brochure was produced and an on-site workshop was conducted.

Project Location: Madison County

Subgrantee: HeartLands Conservancy
406 East Main Street
Mascoutah, Illinois 62258

Project Reports and Other Informational Materials:

"Cahokia Creek Restoration at Roxana Landfill." June 2014. HeartLands Conservancy.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
009	Stream Channel Restoration	3,000 ft.	3,287	3,287	-	6,574

Stream channel restoration pre-construction.

Stream channel restoration post-construction.

11-12(319) MF

Title: Naperville Parks Water Quality Improvement Project

Purpose: This project installed a variety of best management practices (BMPs) along with educational signage at four parks within the West Branch of the DuPage River (ILGBK-02) watershed. At Seager Park, a 26,493 square foot permeable parking lot and driveway, a 0.65 acre buffer of native vegetation in and around a dry detention basin, a 6,000 square foot native filter strip around the parking lot, and four interpretive signs were installed. At Weigand Park, a 8,095 square foot permeable parking lot, a 0.25 acre buffer of native vegetation between the parking lot and the river, a 335 square foot permeable walking path, a 775 square foot pervious concrete path, and one interpretive sign were installed. At Knoch Park, one interpretive sign and a 10,000 gallon cistern to capture rainwater from the restroom building, picnic shelter, and playground area for irrigation of the ball fields were installed. At Pioneer Park, one interpretive sign was installed, 6 acres of wetland were restored through the removal of reed canary grass and reseeding with a wet prairie mesic mix, and 1,200 feet of streambank were stabilized. The Naperville Park District also completed 1,833 feet of streambank stabilization at Westglen Commons and 2,103 feet of streambank stabilization at Springbrook Crossing.

Project Location: DuPage County

Subgrantee: Naperville Park District
320 West Jackson Ave.
Naperville, Illinois 60540-5252

Project Reports and Other Informational Materials:

"Naperville Parks Water Quality Improvement Project Final Report." August 2013. Naperville Park District.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
012	Cistern	1 no.	-	-	93	1
580	Streambank and Shoreline Protection	5,136 ft.	11	10	-	23
657	Wetland Restoration	6 ac.	-	5	8,451	32
035	Buffer Zone Enhancement / Installation	0.9 ac	-	-	41	-
835	Urban Filter Strip	0.68 ac.	-	-	31	-
890	Porous Pavement	0.82 ac.	-	1	1,833	10

Knoch Park cistern pre-installation.

Seager Park permeable pavement during construction.

11-13(319) CD

Title: Carbon Cliff Permeable Streets

Purpose: This project implemented best management practices (BMPs) to reduce nonpoint source pollution associated with urban runoff from the Village of Carbon Cliff prior to discharge to an unnamed tributary of the Rock River (ILP-04). This project replaced three existing asphalt streets with 56,900 square feet of porous pavement (permeable interlocking concrete pavement roadways) constructed over a layer of open-graded stone that serves as the structural base as well as provides temporary storage of runoff. The temporarily stored runoff will either infiltrate into the sub-grade or slowly drain via perforated pipe in the stone base. Also, six stone infiltration channels were constructed in the parkway next to the porous pavement roadway to capture runoff in a gravel trench and allow it to infiltrate into the stone base beneath the roadway. An informational brochure was developed and made available at the Village Hall.

Project Location: Rock Island County

Subgrantee: Village of Carbon Cliff
106 1st Avenue
Carbon Cliff, Illinois 61239

Project Reports and Other Informational Materials:

"Carbon Cliff Green Streets - Green Infrastructure Guide." (brochures) 2013. Conservation Design Forum.

"Carbon Cliff Permeable Paving Streets – Project Report." November 2013. Conservation Design Forum.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
845	Infiltration Trench	6 no.	-	22	2,109	12
890	Porous Pavement	1.3 ac.	-	1	362	7

Permeable pavement post-construction.

Cobble curb cuts and infiltration channel post-construction.

11-14(319) SR

Title: Long Run Creek Watershed Based Plan

Purpose: This project develop a watershed-based plan for the Long Run Creek (IL_GHE-01) watershed (a portion of HUC 071200040703), a tributary of the Illinois and Michigan Canal (IL_GH), designed to improve water quality by controlling nonpoint source pollution. The plan is consistent with the USEPA watershed based plan guidance dated October 23, 2003 (as revised), Chicago Metropolitan Agency for Planning's "Guidance for Developing Watershed Action Plans in Illinois" dated June 2007, total maximum daily load (TMDL) implementation plan requirements, and current watershed planning principles. The Long Run Creek (IL_GHE-01) watershed contains Tampier Lake (IL_RGZO), which was on the 303d list for total suspended solids and total phosphorus.

Project Location: Counties of Will and Cook

Subgrantee: Village of Lemont
Lemont Village Hall
418 Main Street
Lemont, IL 60439

Project Reports and Other Informational Materials:

"Long Run Creek Watershed-based Plan." March 2014. Applied Ecological Services.

11-15(319) SR

Title: Nippersink Watershed Social Evaluation-Phase 2

Purpose: This project continued the efforts of the Phase 1 outreach and educational activities and assessed the effectiveness of ongoing outreach and educational activities to influence changes in knowledge, values, and beliefs about water quality and watershed health within the Nippersink Creek (ILDTK04) watershed.

Project Location: McHenry County

Subgrantee: Nippersink Watershed Association
P.O. Box 168
Wonder Lake, Illinois 60097

Project Reports and Other Informational Materials:

"Final Report for Nippersink Watershed Social Evaluation - Phase II." September 30, 2014. Nippersink Watershed Association.

11-16(319) CD

Title: Agricultural BMPs Technical Assistance Program

Purpose: This project provided technical assistance to private landowners and farm managers located throughout the North Mill Creek (ILGWA) watershed (HUC 071200040201) to educate and engage them in the implementation of agricultural best management practices (BMPs) to address current water quality impairments.

Project Location: Lake County

Subgrantee: Lake County Stormwater Management Commission
333 Peterson Road, Suite C
Libertyville, Illinois 60048

Project Reports and Other Informational Materials:

"Agricultural Best Management Practice Technical Assistance Program, North Mill Creek-Dutch Gap Canal Watershed - Final Report." July 15, 2014. Lake County Stormwater Management Commission.

11-17(319) ST

Title: Total Maximum Daily Load Development

Purpose: The Illinois EPA developed Total Maximum Daily Loads (TMDLs) and implementation plans for each pollutant within selected watersheds on the 303(d) list through computer modeling. For each watershed, computer models were used to identify a distribution of pollutant loading (allocation) that can be expected to result in the attainment of water quality standards. The methodologies used for TMDL

development were documented. Modeling results were used to support the development of implementation plans for TMDL attainment.

11-(319) AW

FEDERAL FISCAL YEAR 2012

Title: Streambank Cleanup And Lakeshore Enhancement (SCALE)

Purpose: This project provided financial assistance to selected applicants to conduct lakeshore and streambank clean-up events between 01/01/13 and 01/31/16. Local organizations that had previously conducted a lakeshore or streambank clean-up event were eligible to participate. The local sponsor was given up to $3,500 to help conduct their clean-up event. The local sponsor could use the funds for event promotion, event equipment or disposal fees.

Project Location: Statewide

Project Reports and Other Informational Materials:

"Streambank Cleanup And Lakeshore Enhancement (SCALE) Program." February 2016. Illinois Environmental Protection Agency.

12-0 (319)CD

Title: RMMS Maintenance and Enhancement

Purpose: This project continued the development and maintenance of Illinois EPA water quality databases in the Resource Management Mapping Service (RMMS). These databases included Section 319 funded best management practices, Lakes Program BMPs and diagnostic/feasibility studies, Watershed-based Plans, Illinois Green Infrastructure Grant Program for Stormwater Management (IGIG) BMPs, and Potential NPS Pollution Control Projects as well as new databases specified by Illinois EPA. Funding were also used to update and expand the RMMS website maintained at the University of Illinois, tools needed for analysis, as well as the public and internal reports generated. RMMS, as a vehicle for interactively creating and managing records in these water quality databases, provided the ability for data to be viewable and queryable and reports to be generated based on that data instantaneously. While the databases and the website are external to Illinois EPA, work was done under the direction of the Illinois EPA Bureau of Water.

Project Location: Statewide

Subgrantee: University of Illinois
1901 South First Street, Suite A
Champaign, Illinois 61820

12-01(319)SR

Title: Conservation Reserve Enhancement Program (CREP) Staffing

Purpose: This project provided well trained, effective staff (CREP Resource Specialists) to promote and to work with landowners enrolling or currently enrolled in CREP to 1) extend to a 35 year or permanent State conservation easement and/or, 2) enhance

the retired land with water quality BMPs. The staff geographically covered the CREP designated areas (Illinois & Kaskaskia River Basins). The distribution of staff were strategically placed to insure the highest level of effectiveness giving priority to acres in close proximity to the lakes and stream segments identified on the 303 (d) and impaired waters that have a TMDL. A project report was prepared that explains the project goals and documents the steps taken and results achieved. The report included a list of the soil and water conservation districts involved and their CREP accomplishments, including a summary by 12-digit Hydrologic Unit Code (HUC) of the CREP best management practices (BMPs) implemented in association with this project.

Project Location: Statewide

Subgrantee: Association of Illinois Soil & Water Conservation Districts
4285 N. Walnut Street Road
Springfield, Illinois 62707

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
612	Tree Planting	989.9 ac.	1,974	1,974	-	3,951
880	Permanent Seeding	243.2 ac.	674	674	-	1,343
657	Wetland Restoration	483.6 ac.	845	845	-	1,691
666	Woodland Improvement	2,112 ac.	-	-	-	-

12-02(319) JC

Title: Flint Creek Stream and Floodplain Restoration

Purpose: This project stabilized approximately 1,900 feet of eroding streambanks and streambed and established a 25 ft. wide vegetative buffer (4 acres) over two segments of North Flint Creek, a tributary to Grassy Lake (VTI) and Flint Creek (ILDTZS-01) in the Village of North Barrington. The segments included both sides of an approximately 2,000 foot stretch (upstream site) in Section 13, T43N, R9E and the north side of a 300 foot stretch (downstream site) in Section 14. Streambanks were stabilized through re-grading, riprap stone toe protection (1,797 ft on upstream site & 103 ft on downstream site), erosion control matting, native plant plugs and trees, native seed, riffles (18 on upstream site & 2 on downstream site), and vegetated geogrid. Additionally, the village informed the community about the project through newsletters, public meetings/presentations, and web updates.

Project Location: Lake County

Subgrantee: Village of North Barrington
111 Old Barrington Rd.
North Barrington, Illinois 60010

Project Reports and Other Informational Materials:

"Flint Creek Stream and Floodplain Restoration – Final Report." January 15, 2014. Village of North Barrington.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	1,900 ft.	56	49	-	96
835	Urban Filter Strip	4.0 ac.	-	5	3,373	56

North Flint Creek stabilization pre-construction.

North Flint Creek stabilization post-construction.

12-03 (319)JC

Title: Lake Sara Shoreline Stabilization Project

Purpose: This project stabilized 9,577 feet of eroding shoreline on Lake Sara (ILRCE) through the installation of transitional wetland breakwaters. Another 3,911 feet of eroding bare shoreline or deteriorated seawall were stabilized with rip rap by private landowners at their expense. An information and education program was implemented that consisted of brochures, resident program letters, public awareness presentations, and booth displays.

Project Location: Effingham County

Subgrantee: Effingham Water Authority
P. O. Box 411
Effingham, Illinois 62401

Project Reports and Other Informational Materials:

"Lake Sara Shoreline Protection Project." February 19, 2014. Effingham Water Authority.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	13,488 ft.	1,158	1,158	-	2,315

Lake Sara shoreline stabilization post-construction.

Lake Sara shoreline stabilization post-construction.

12-04(319) ST

Title: City of Tuscola NPS Pollution Reduction Project

Purpose: This project constructed 2,700 feet of two-stage drainage ditch along Scattering Fork (IL_BER-01), a tributary of the Embarras River. The floodplain shelf on the west bank was expanded 30 feet and one acre of bioswale installed along the channel to maximize the impact the floodplain shelf has on the stormwater runoff within the watershed. Do to site constraints and the urban nature of the site, a two-stage shelf was only constructed on the west bank. The two-stage ditch reduced erosion and sediment and nutrients in the stream. Also, a stormwater treatment wetland was constructed outside of the channel at the north end of the project site to trap urban runoff from residential areas. This wetland receives and treats runoff from high flow events in Scattering Fork and tile flow from adjacent crop ground was modified to outlet directly into the wetland prior to reaching the stream.

Project Location: Douglas County

Subgrantee: City of Tuscola
214 N. Main Street
Tuscola, Illinois 61953

Project Reports and Other Informational Materials:

"City of Tuscola NPS Pollution Reduction Project." January 31, 2014. City of Tuscola.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Sediment (tons/year)	Estimated Load Reduction Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
009	Stream Channel Restoration	2,700 ft.	13.5	100	-	611
800	Urban Stormwater Wetlands	1 no.	13.5	100	-	611

Two-stage ditch pre-construction.

Two-stage ditch post-construction.

12-05(319)SR

Title: Clinton County Livestock Waste Management Project

Purpose: This project assisted nine livestock producers in the Shoal Creek (ILOI-08) and Sugar Creek (ILOH-01) watersheds within Clinton County with their waste handling facilities. Only facilities located in impaired watersheds that had livestock identified as a source of impairment were eligible. Any facility that required an NPDES permit was not eligible. All nine facilities that received assistance had a Comprehensive Nutrient Management Plan (CNMP) developed that met the NRCS requirements.

Project Location: Clinton County

Subgrantee: HeartLands Conservancy
406 East Main Street
Mascoutah, Illinois 62258

Project Reports and Other Informational Materials:

"Clinton County Livestock Nutrient Management Project." July 2015. HeartLands Conservancy, Inc.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Sediment (tons/year)	Estimated Load Reduction Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
312	Waste Management System	4 no.	-	1,705	-	8,523
313	Waste Storage Structure	1 no.	-	127	-	634
558	Roof Runoff Management	1 no.	-	76	-	630
559	Roofing for Runoff Control	6 no.	-	1,528	-	2,861

Title: West Branch DuPage River Corridor Restoration

Purpose: This project included riparian zone restoration and bank stabilization along a 3.3 mile segment of the West Branch DuPage River (ILGBK05) just upstream of Warrenville, in the McDowell Grove Forest Preserve in Naperville, Illinois. Best management practices included 1) the implementation of 7,625 linear feet of streambank stabilization using vegetated rock toe, emergent wetland toe, large woody debris, and boulder clusters; 2) the implementation of six (6) pool/riffles for stream channel stabilization; 3) the installation of energy dissipation practices at nine (9) sites within the project area; 4) site preparation including removal of existing vegetation and the re-grade of incised banks into floodplain terraces to allow the river to access the floodplain areas more frequently; and 5) the restoration of 58.25 acres of wetland and/or riparian buffer vegetation. The project also included an outreach component to educate the public about nonpoint source pollution reduction opportunities available to them.

Project Location: DuPage County

Subgrantee: DuPage County Division of Stormwater Management
421 N. County Farm Road
Wheaton, Illinois 60187

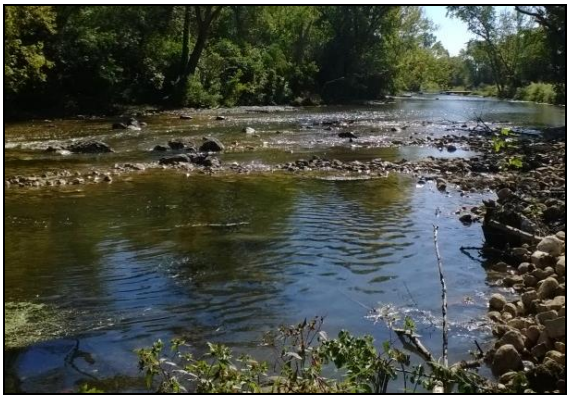
Project Reports and Other Informational Materials:

"West Branch DuPage River Corridor Restoration Project – Final Report." September 30, 2014. County of DuPage Department of Stormwater Management.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	7,625 ft.	366	366	-	732
584	Stream Channel Stabilization	9,800 ft.	-	-	-	-
035	Buffer Zone Enhancement/Installation	58.25 ac.	92	140	-	261
910	Rock Outlet Protection	9 no.	-	-	-	-


W. Br. DuPage River channel stabilization post-construction.


W. Br. DuPage River channel stabilization post-construction.

12-07(319) CD

Title: Nonpoint Source Pollution Management Workshop

Purpose: Illinois EPA hosted the first statewide biennial NPS pollution management workshop for Illinois EPA staff and local, state, and federal partners to interact with those groups and individuals that are committed to reducing NPS pollution to Illinois water resources. Future biennial workshops will alternate between rural and urban agendas. The 2012 workshop focused on nutrients and other rural issues and included components that presented information on topics such as development and implementation of watershed based plans, Total Maximum Daily Loads (TMDL) and Load Reduction Strategies (LRS). The workshop also presented best management practice (BMP) technologies and application, and the use of water quality and technology-based tools for NPS pollution control. The workshop was designed to capture stakeholder and partner needs in regard to the Program to be used in the NPS Management Program Feedback Loop.

Project Location: Statewide

Project Reports and Other Informational Materials:

"Rural Landscape NPS Workshop – Final Report." June 28, 2013. Illinois Environmental Protection Agency.

12-08 (319)CD

Title: Total Maximum Daily Load Development

Purpose: The Illinois EPA developed Total Maximum Daily Loads (TMDLs) and implementation plans for each pollutant within selected watersheds on the 303(d) list through computer modeling. For each watershed, computer models were used to identify a distribution of pollutant loading (allocation) that can be expected to result in the attainment of water quality standards. The methodologies used for TMDL development were documented. Modeling results were used to support the development of implementation plans for TMDL attainment.

12-(319) AW

FEDERAL FISCAL YEAR 2013

Title: Nonpoint Source Pollution Management Workshop

Purpose: Illinois EPA hosted the second statewide biennial Nonpoint Source (NPS) pollution management workshop for Illinois EPA staff and local, state, and federal partners to interact with those groups and individuals that are committed to reducing NPS pollution to Illinois water resources. Biennial workshops alternate between rural and urban agendas. The 2014 workshop focused on urban issues and included components that present information on topics such as development and implementation of watershed based plans, Total Maximum Daily Loads (TMDL) and Load Reduction Strategies (LRS). The workshop also presented best management practice (BMP) technologies and application, and the use of water quality and technology-based tools for NPS pollution control. The workshop was designed to capture stakeholder and partner needs in regard to the Program to be used in the NPS Management Program Feedback Loop.

Project Location: Statewide

Project Reports and Other Informational Materials:

"Stormwater Best Management Practices Seminar – Final Report." March 2015. The Conservation Foundation.

13-00 (319)CD

Title: Kickapoo Creek National Monitoring Project

Purpose: This project conducted surface water monitoring of Kickapoo Creek (ILEIE-03) to determine the effectiveness of the "Kickapoo Creek Corridor Restoration Project". Monitoring documented the biological enhancement resulting from the restoration project by determining: 1) effectiveness of the stream restoration in terms of stream fisheries in the restored stream segments, 2) sediment transport through the restored stream segments, 3) construction erosion controls, 4) reduction of streambank erosion by re-vegetation, and 5) effectiveness of floodplain wetland restoration in capturing residential runoff after the housing development has been constructed. Data collection and analysis also included fecal coliform bacteria samples. All monitoring and associated data collected was entered into U. S. EPA's Nonpoint Source Management System (NPSMS) and U. S. EPA's STORET system.

Project Location: McLean County

Subgrantee: US Geological Survey
1201 West University Avenue, Suite 100
Urbana, Illinois 61801-2347

Kickapoo Creek monitoring.

Kickapoo Creek monitoring.

13-01 (319)JC

Title: Buffalo Creek Watershed-Based Plan

Purpose: This project developed a watershed-based plan for the Buffalo Creek (ILGST) watershed, a tributary to the Upper Des Plaines River, located in Cook and Lake Counties, Illinois. The plan is consistent with the USEPA watershed based plan guidance dated April 12, 2013 (as revised), Chicago Metropolitan Agency for Planning's "Guidance for Developing Watershed Action Plans in Illinois" dated June 2007, and current watershed planning principles. The watershed-based planning process focused on addressing water quality impairments in the watershed and providing the structure for reduction of nonpoint source pollution.

Project Location: Cook and Lake Counties

Subgrantee: Lake County Stormwater Management Commission
500 West Winchester Road
Libertyville, Illinois 60048

Project Reports and Other Informational Materials:

"Buffalo Creek Watershed-Based Plan." December 2015. Lake County Stormwater Management Commission; Cardno; TRC; Bleck Engineering Company, Inc.; Living Lands Conservation Company.

"Buffalo Creek Watershed-Based Plan – Executive Summary." December 2015. Lake County Stormwater Management Commission; Cardno; TRC; Bleck Engineering Company, Inc.; Living Lands Conservation Company.

13-02(319)ST

Title: Outreach to Farmers: Lake Mauvaise Terre Watershed

Purpose: This project provided information and outreach aimed primarily at agricultural stakeholders to encourage their adoption of nutrient management and best management practices (BMPs) to reduce nonpoint source (NPS) pollution loadings to Mauvaise Terre Lake (IL_SDL) and Mauvaise Terre River (ILDD-02 & ILDD-04). A product of this effort was a list of practices that when implemented will reduce nutrient and sediment loadings as defined in the TMDL report. This project also developed a watershed-based plan for the Lake Mauvaise Terre (IL_SDL) watershed that is consistent with the USEPA watershed-based plan guidance dated April 12, 2013.

Project Location: Morgan County

Subgrantee: American Farmland Trust
2717 Blue Ridge Court
Bloomington, Indiana 47408

Project Reports and Other Informational Materials:

"Lake Mauvaise Terre Watershed Implementation Plan." October 31, 2014. American Farmland Trust & Northwater Consulting.

"Lake Mauvaise Terre Watershed Implementation Plan; Addendum - Streambank Erosion & Lake Sediment Basin Assessment." December 28, 2015. American Farmland Trust & Northwater Consulting.

"Outreach to Farmers: Lake Mauvaise Terre Watershed – Final Report." December 30, 2015. American Farmland Trust.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
570	Runoff Management System	1 no.	17.5	86	-	798

13-03(319)JC

Title: Countywide Watershed BMP Implementation Program

Purpose: This project implemented best management practices (BMPs) at three sites. The Indian Creek Streambank Stabilization project component stabilized 1,927 linear feet of eroded streambank along Indian Creek (ILGU-02) through bank re-shaping and the installation of cross vanes, J-hooks, root wad composites, stone toe protection, and native seeding. The Kildeer Creek Streambank and Stream Channel Stabilization project component stabilized 550 feet of eroding streambank and stream channel on Kildeer Creek through re-grading the banks slope and installing erosion control blanket and native vegetation, boulder toe or articulated concrete block at the normal water line, and a riffle for channel grade control. The Skokie

River Restoration project component daylighted 2,002 linear feet of stream and retrofitted an existing irrigation pond into a 1.75 acre wet detention basin.

Project Location: Lake County

Subgrantee: Lake County Stormwater Management Commission
500 West Winchester Road
Libertyville, Illinois 60048

Project Reports and Other Informational Materials:

"Countywide Watershed BMP Implementation Program – Final Report." March 31, 2016. Lake County Stormwater Management Commission.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
009	Stream Channel Restoration	2,002 ft.	-	410	983,269	1,407
410	Grade Stabilization Structure	2 no.	4	4	-	8
580	Streambank and Shoreline Protection	550 ft.	90	90	-	179
584	Stream Channel Stabilization	1,927 ft.	254	206	-	410
800	Urban Stormwater Wetlands	1 no.	-	68	72,368	446


Indian Creek stabilization post-construction.


Skokie River daylighting post-construction.

13-04(319) CD

Title: Upper Babbling Brook Multi-BMP Project

Purpose: This project implemented best management practices (BMPs) along 3.18 miles of Babbling Brook, a tributary of Lost Nation Lake (ILRPZF) within the Clear Creek (ILPZU) watershed near Dixon, Illinois. Approximately 2,675 feet of eroding, channelized stream on Babbling Brook over 3 sites were re-meandering and stabilized. Approximately 1,140 feet of eroding streambank on Babbling Brook over multiple sites were stabilized using rip rap and by thinning trees, removing brush, and restoring native plant communities to establish three acres of native plant filter strip along the stabilized streambanks. Approximately 4,500 feet of livestock exclusion fencing were installed over approximately 10 acres to limit the access of

cattle to Babbling Brook. Livestock stream crossings were installed at 4 locations on Babbling Brook. A 2.55 acre sediment containment basin was constructed on Babbling Brook with 2,006 feet of rip rap and 7.92 acres of native plant filter strip installed around the sediment basin. A severely eroded ditch, formed in a pasture from a tile outlet draining adjacent crop fields was treated by extending the tile 1,100 feet where water discharges to a controlled area along the shoreline of the sediment basin and establishing a grassed waterway above the extended tile.

Project Location: Ogle County

Subgrantee: Lost Nation / New Landing River Conservancy District
205 Cuyahoga Drive, Suite A
Dixon, Illinois 61021

Project Reports and Other Informational Materials:

"Upper Babbling Brook Multi-BMP Project." July 31, 2015. Olson Ecological Solutions, LLC.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
350	Sediment Basin	1 no.	-	220	250,637	-
393	Filter Strip	7.92 ac.	567	725	-	1,360
412	Grassed Waterway	0.33 ac.	168	182	-	414
009	Stream Channel Restoration	2,675 ft.	296	296	-	592
580	Streambank and Shoreline Protection	1,140 ft.	100	100	-	199
382	Fencing	4,500 ft.	-	-	-	-
575	Stock Trails and Walkways	48 ft.	-	-	-	-


Babbling Brook restoration pre-construction.


Babbling Brook restoration post-construction.

13-05(319) SR

Title: Kinkaid Lake BMP Implementation

Purpose: This project helped protect the beneficial uses of Kinkaid Lake (ILRNC) from the impairments of nonpoint source (NPS) pollution. This project stabilized 3,109 feet of shoreline that were in areas of either high moderate or severe categories of erosion. The project also stabilized approximately 1,470 feet of gully on the 100 acre Worthen Farm property owned by the Conservancy District that drains into the Kinkaid Marina in an area that is highly visible to the general public.

Project Location: Jackson County

Subgrantee: Kinkaid-Reed's Creek Conservancy District
1763 Water Plant Road
Murphysboro, Illinois 62966

Project Reports and Other Informational Materials:

"Kinkaid Lake TMDL Best Management Practices Implementation." July 2015. HMG Engineers Inc.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
412	Grassed Waterway	0.8 ac.	69	69	-	137
580	Streambank and Shoreline Protection	3,109 ft.	793	793	-	1,586


Kinkaid Lake off-shore breakwater pre-construction.


Kinkaid Lake off-shore breakwater post-construction.

13-06(319) JC

Title: Hobson Creek Corridor BMPs at Caddie Corner Park

Purpose: This project stabilized 483 feet of eroding streambank and 140 feet of eroding streambed on Hobson Creek located between Greene Road and Greene Trails Road in Woodridge, Illinois. The banks were stabilized using minor re-grading, erosion control blanket, seeding and planting, rock toe, and eleven rock points along with a 0.2 acre riparian buffer. Channel down-cutting was controlled through the installation of four rock riffles. Hobson Creek is a tributary of the East Branch of the DuPage River (ILGBL-05). The project site, Caddie Corner Park, is owned by the Woodridge Park District.

Project Location: DuPage County

Subgrantee: Woodridge Park District
2600 Center Drive
Woodridge, Illinois 60517

Project Reports and Other Informational Materials:

"Hobson Creek BMPs at Caddie Corner Park - Project Evaluation and Final Report." December 2014. Living Waters Consultants, Inc.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	483 ft.	33	31	-	68
584	Stream Channel Stabilization	140 ft.	19	9	-	36


Hobson Creek stabilization post-construction.


Hobson Creek stabilization post-construction.

13-07(319) ST

Title: 2013 Green Campus Initiatives

Purpose: This project implemented best management practices (BMPs) to reduce nonpoint source pollution discharged to the East Branch of the DuPage River (ILGBL-05 & ILGBL-02) from two schools in Woodridge, Illinois. At the Willow Creek School, an existing asphalt play area was replaced with 14,322 square feet of permeable pavers and 622 square feet of rain garden and 310 square feet of infiltration trench were also installed. At the Edgewood School, existing asphalt parking and play areas were replaced with 57,965 square feet of permeable pavers and 5,990 square feet of rain gardens were installed. The project also included 6 interpretive signs (3 at each site), a brochure, and workshops.

Project Location: DuPage County

Subgrantee: Woodridge School District 68
7925 Janes Avenue
Woodridge, Illinois 60517

Project Reports and Other Informational Materials:

"2013 Green Campus Initiative Sustainability Guide." (Brochure) 2015. Woodridge School District 68.

"2013 Green Campus Initiatives - Project Evaluation and Final Report." January 2016. Woodridge School District 68.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
013	Rain Garden	3 no.	-	-	385	-
845	Infiltration Trench	1 no.	-	-	148	-
890	Porous Pavement	1.66 ac.	-	1	1,423	11

Edgewood School permeable pavement post-construction.

Edgewood School rain garden post-construction.

13-08(319) ST

Title: Otter Lake TMDL Implementation

Purpose: The project installed upland and shoreline stabilization best management practices (BMPs) as recommended in the Hodges Creek Watershed TMDL Report (November 2006) for Otter Lake (ILRDF) in Macoupin County, Illinois. This project installed three grade stabilization structures, 6 water and sediment control basins, nine ponds, one sediment basin, and one stormwater wetland. The project also stabilized 2,819 linear feet of eroding shoreline.

Project Location: Macoupin County

Subgrantee: Otter Lake Water Commission
P.O. Box 468
Virden, Illinois 62690

Project Reports and Other Informational Materials:

"Otter Lake Shoreline Erosion Control & TMDL Implementation Project." September 3, 2015. Otter Lake Water Commission.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
350	Sediment Basin	1 no.	31	275	-	599
378	Pond	9 no.	384	957	-	1,821
410	Grade Stabilization Structure	3 no.	5	11	-	14
580	Streambank and Shoreline Protection	2,819 ft.	375	451	-	751
638	Water and Sediment Control Basin	1,295 ft.	52	100	-	168
800	Urban Stormwater Wetlands	1 no.	4	5	-	11

Otter Lake shoreline stabilization post-construction.

Pond post-construction.

13-09(319) JC

Title: Phase 4 of Salt Creek Streambank Stabilization

Purpose: This project stabilized 850 feet of Salt Creek (ILGL) located between Central Road and Barker Avenue in Rolling Meadows, Illinois. The banks and toe of the slope were stabilized using stone toe with vegetated slopes in areas where erosion was severe. In areas where erosion was less severe, selected clearing of non-native plants, minor re-grading and replanting with native deep-rooted vegetation was used. Also, a brochure was developed and a public information meeting held to educate residents adjacent to the creek on the project and proper stream maintenance.

Project Location: Cook County

Subgrantee: City of Rolling Meadows
3900 Berdnick Street
Rolling Meadows, Illinois 60008

Project Reports and Other Informational Materials:

"Salt Creek Streambank Stabilization Stage 4 Project Final Report." January 8, 2016. Christopher B. Burke Engineering, Ltd.

"Salt Creek Streambank Stabilization Educational Brochure." 2014. Christopher B. Burke Engineering, Ltd.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	850 ft.	233	233	-	468

Salt Creek bank stabilization post-construction.

Salt Creek bank stabilization post-construction.

13-10(319) ST

Title: Indian Creek Watershed Project

Purpose: This project continued work started in 2010 in the Indian Creek (ILDSPA-01) watershed to implement comprehensive conservation agriculture systems. This project continued outreach to the watershed's 160 producers and demonstrated how using the 4Rs can improve nutrient use efficiency and the best approaches to reduce nutrient losses. Outreach and Information & Education included farmer/demo vignettes, meetings/field tours, presentations, 1 on 1 visits with producers, interactive website, annual reports, and round table up & coming.

Project Location: Livingston County

Subgrantee: Conservation Technology Information Center
3495 Kent Avenue, Suite J100
West Lafayette, Indiana 47906

Project Reports and Other Informational Materials:

"Indian Creek Project Final Activity Report." December 2016. Conservation Technology Information Center.

13-11 (319) TS

Title: RMMS Maintenance and Enhancement

Purpose: This project continued the development and maintenance of Illinois EPA water quality databases in the Resource Management Mapping Service (RMMS). These

databases included Section 319 funded best management practices, Lakes Program BMPs and diagnostic/feasibility studies, Watershed-based Plans, Illinois Green Infrastructure Grant Program for Stormwater Management (IGIG) BMPs, and Potential NPS Pollution Control Projects as well as new databases specified by Illinois EPA. Funding was also used to update and expand the RMMS website maintained at the University of Illinois, tools needed for analysis, as well as the public and internal reports generated. RMMS, as a vehicle for interactively creating and managing records in these water quality databases, provides the ability for data to be viewable and queryable and reports to be generated based on that data instantaneously. While the databases and the website are external to Illinois EPA, work is done under the direction of the Illinois EPA Bureau of Water.

Project Location: Statewide

Subgrantee: University of Illinois
1901 South First Street, Suite A
Champaign, Illinois 61820

Project Reports and Other Informational Materials:

"Resource Management Mapping Service – Final Report." July 2016. CyberInfrastructure and Geospatial Information Laboratory.

13-12(319)SR

Title: Lake Wildwood Stream and Floodplain Restoration

Purpose: This project realigned an existing 520 foot segment of Shaw Creek (ILDPA) that had 30 foot high eroding streambanks and stabilized both banks (800 feet) of the new 400 foot segment of stream using stone toe protection, three rock riffles, bank grading, and native riparian vegetation. Two connected, off-line sediment basins with a combined size of 1.13 acres were also built to trap and hold sediment before it enters Lake Wildwood (ILRDK).

Project Location: Marshall County

Subgrantee: Lake Wildwood Association Inc.
1000 Lake Wildwood Drive
Varna, Illinois 61375

Project Reports and Other Informational Materials:

"Lake Wildwood Association Inc. Stream and Floodplain Restoration." June 10, 2016. Hey and Associates, Inc.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
350	Sediment Basin	2 no.	2,885	2,885	-	5,770
584	Stream Channel Stabilization	800 ft.	670	670	-	1,340

Basin during construction.

Riffle and weir connecting the two basins post-construction.

13-13(319) JC

FEDERAL FISCAL YEAR 2014

Title: Spring Branch Subwatershed Action Plan

Purpose: This project developed a watershed-based plan for the Spring Branch watershed that is designed to improve water quality by controlling nonpoint source pollution. Spring Branch (ILPWNC) is an assessed headwater stream and a 3,927 acre sub-watershed of the 17,545 acre Middle Yellow Creek (HUC 070900031304) watershed. The plan is consistent with USEPA watershed-based plan guidance found in Appendix C of the Nonpoint Source Program and Grants Guidelines for States and Territories dated April 12, 2013 (as revised), and the Chicago Metropolitan Agency for Planning's "Guidance for Developing Watershed Action Plans in Illinois" dated June 2007.

Project Location: Stephenson County

Subgrantee: Blackhawk Hills RC&D
102 US Route 30, Suite 3
Rock Falls, Illinois 61071

Project Reports and Other Informational Materials:

"Spring Branch Watershed Implementation Plan." 2016. Olson Ecological Solutions LLC.

14-01 (319) JC

Title: Silver Creek Watershed Based Plan

Purpose: This project developed a watershed-based plan for the Silver Creek (ILGM-01) watershed (a 6,766 acre subwatershed of HUC 071200040506), a tributary to the Des Plaines River and located in DuPage and Cook Counties, Illinois. The project was facilitated by the Silver Creek Watershed Committee (SCWC), which is a consortium of stakeholders that includes municipalities, agencies, universities, and concerned citizens in the Silver Creek watershed. This stakeholder-driven, watershed-based plan addressed U.S. EPA's nine minimum elements for watershed-based planning. The watershed-based planning process focused on addressing water quality concerns in the watershed and provided a structure for the reduction of nonpoint source pollution.

Project Location: Cook & DuPage Counties

Subgrantee: Village of Melrose Park
1000 North 25th Avenue
Melrose Park, Illinois 60160

Project Reports and Other Informational Materials:

"Silver Creek Watershed-based Plan." July 2016. Silver Creek Watershed Committee & Living Waters Consultants.

Title: BMP Implementation to Protect the Sangamon River

Purpose: This project installed best management practices (BMPs) on four agricultural landowners' property to reduce nonpoint source pollution discharged into the North Lake Fork (IL_EIGB-01) in HUC 071300090302 and Mosquito Creek (IL_EQ-01) in HUC 071300060601. BMPs implemented under this project included approximately 7.2 acres of grassed waterways; 285 acres of cover crops; 1,390 feet of water and sediment control basins; 6,722 feet of terraces; and one grade stabilization structure. The project also included workshops/field days and other educational activities.

Project Location: Macon County

Subgrantee: Macon County Soil and Water Conservation District
4004 College Park Road
Decatur, Illinois 62521

Project Reports and Other Informational Materials:

"Final Report for BMP Implementation to Protect the Sangamon River." August 15, 2016. Macon County Soil and Water Conservation District.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
340	Cover and Green Manure Crop	285 ac.	172	193	-	386
410	Grade Stabilization Structure	1 no.	8	8	-	16
412	Grassed Waterway	7.2 ac.	995	1,222	-	2,393
600	Terrace	6,722 ft.	110	138	-	263
638	Water and Sediment Control Basin	1,390 ft.	457	425	-	850


Grassed waterway with rock checks post-construction.


Aluminum toewall grade stabilization post-construction.

Title: Illinois CREP Implementation & Stewardship Specialists

Purpose: This project provided well trained, effective staff (Stewardship Specialists) to promote the Conservation Reserve Enhancement Program (CREP) and to work with landowners enrolling or currently enrolled in CREP to 1) extend to a 35 year or permanent State conservation easement and/or, 2) enhance the retired land with water quality best management practices (BMPs). The staff geographically covered the Illinois River and Kaskaskia River basins and they were strategically placed to ensure the highest level of effectiveness. In addition, they gave priority to acres in close proximity to the lakes and stream segments identified on the 303(d) impaired waters list that had a TMDL.

Project Location: Statewide

Subgrantee: Association of Illinois Soil & Water Conservation Districts
4285 N. Walnut Street Road
Springfield, Illinois 62707

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
612	Tree Planting	222 ac.	531	531	-	1,061
657	Wetland Restoration	164 ac.	253	253	-	506

14-04(319) JC

Title: Apple Canyon Lake Comprehensive Watershed Plan

Purpose: This project developed a watershed-based plan for the Apple Canyon Lake (ILRMJ) watershed (HUC 070600050601) that is designed to improve water quality by controlling nonpoint source pollution. Education programs were carried out to inform the public about water quality conditions and engage them in the watershed planning process. Water quality monitoring was conducted to provide a baseline and to set watershed goals.

Project Location: Jo Daviess County

Subgrantee: Apple Canyon Lake Property Owners Association
14A157 Canyon Club Drive
Apple River, Illinois 61001

Project Reports and Other Informational Materials:

"Apple Canyon Lake Watershed Based Management Plan." 2016. Jo Daviess County Soil & Water Conservation District.

"Apple Canyon Lake Comprehensive Watershed Plan – Final Report." August 2016. Jo Daviess County Soil & Water Conservation District.

14-05 (319) CD

Title: Accelerating BMP Adoption for Lake Decatur

Purpose: This project installed best management practices (BMPs) at 14 project sites within the Macon and Piatt county portions of the Lake Decatur (ILREA) watershed. BMPs included 575 linear feet of streambank stabilization; 8,900 linear feet of stream channel stabilization; 37.3 acres of grassed waterways; 7 grade stabilization structures; 378 acres of cover crops; two sediment basins; four ponds; 52.95 acres of permanent vegetative cover; one water control structures; 2 water and sediment control basin systems (3,495 linear feet); 25,693 feet of terraces (including parallel tile outlets); 3,689 feet of diversions; and 1 acre of heavy use area protection. Projects were selected by their ability to control sediment, nitrates, and phosphorus and their proximity to the river and lake.

Project Location: Macon and Piatt Counties

Subgrantee: Macon County Soil and Water Conservation District
4004 College Park Road
Decatur, Illinois 62521

Project Reports and Other Informational Materials:

"Final Report for Accelerating BMP Adoption for Lake Decatur." January 31, 2017. Macon County Soil and Water Conservation District.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
340	Cover and Green Manure Crop	378 ac.	213	238	-	476
348	Dam, Diversion	1 no.	207	235	-	455
350	Sediment Basin	2 no.	224	224	-	447
378	Pond	4 no.	1,230	721	-	1,444
410	Grade Stabilization Structure	7 no.	349	258	-	505
412	Grassed Waterway	37.3 ac.	1,929	2,179	-	3,800
600	Terrace	25,693 ft.	607	600	-	1,188
638	Water and Sediment Control Basin	3,495 ft.	200	100	-	200
580	Streambank and Shoreline Protection	575 ft.	41	41	-	81
584	Stream Channel Stabilization	8,900 ft.	1,123	385	-	771


Terraces post-construction.


Pond post-construction.

Title: Carpenter Creek Stream Restoration

Purpose: The project stabilized 7,973 linear feet of streambank along Carpenter Creek, a tributary of the Fox River (ILDT20), located north of Spring Street in Carpentersville, Illinois. To stabilize both banks (4,973 feet) north of Maple Avenue, a two-stage ditch was installed, the low-flow channel of the two-stage ditch was meandered to mimic natural channel behavior and prevent erosion and channel migration, the channel was widened and a floodplain shelf installed on both banks, and five vane weirs and eight rock riffles were installed to prevent erosion of the streambed. Eight in-line wetlands (1.37 acres) were constructed upstream of the riffles. Both banks (3,000 feet) downstream of Maple Avenue were stabilized with a fifteen foot wide buffer of native vegetation. Eight rain gardens and four informational signs were also installed in the Carpenters Park portion of the project site.

Project Location: Kane County

Subgrantee: Village of Carpentersville
1200 L.W. Besinger Drive
Carpentersville, Illinois 60110

Project Reports and Other Informational Materials:

"Carpenter Creek Stream Restoration." June 2016. HR Green, Inc.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	7,973 ft.	499	431	-	862
657	Wetland Restoration	1.37 ac.	-	164	174,751	609
035	Buffer Zone Enhancement / Installation	0.96 ac.	-	17	17,262	135
013	Rain Garden	8 no.	-	-	370	1


Carpenter Creek pre-construction.


Carpenter Creek stabilization post-construction.

Title: Lake Carlinville Improvements - Phase 2

Purpose: This project installed nonpoint source pollution control best management practices (BMPs) on private property and property owned by City of Carlinville in the Lake Carlinville (ILRDG) watershed. BMPs included three (3) sediment basins; 4,100 feet of stream channel stabilization; 283 acres of permanent vegetative cover on forested ground adjacent to the lake; the repair and/or construction of three (3) ponds; one grade stabilization structure; 1,400 feet of water and sediment control basins; 4.3 acres of grassed waterways; and the establishment of 335 acres of cover crops.

Project Location: Macoupin County

Subgrantee: City of Carlinville
550 North Broad Street
Carlinville, Illinois 62626-1019

Project Reports and Other Informational Materials:

"Carlinville Lake Erosion Control & TMDL Implementation Project." July 31, 2017. City of Carlinville.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
340	Cover and Green Manure Crop	335 ac.	28	41	-	82
350	Sediment Basin	2 no.	81	106	-	313
378	Pond	3 no.	208	229	-	457
410	Grade Stabilization Structure	1 no.	-	-	-	-
412	Grassed Waterway	4.3 ac.	543	653	-	1,307
587	Structure for Water Control	1 no.	40	40	-	79
638	Water and Sediment Control Basin	1,400 ft.	43	52	-	104
584	Stream Channel Stabilization	4,100 ft.	510	510	-	1,020
408	Forest Land Erosion Control System	283 ac.	144	144	-	288


Stream channel stabilization post-construction.


Waterway post-construction.

14-08 (319) JC

Title: North Mill Creek Channel Restoration – Phase 1

Purpose: This project included 1) the modification of the Rasmussen dam and the abandonment of Rasmussen Lake, 2) the creation of a new stream channel of 4,500 linear feet through what was once Rasmussen Lake, and 3) the creation of a temporary 14 acre pond. The project restored 4,500 feet of stream channel and disconnected the eroding lake shore from the restored stream channel of North Mill Creek (ILGWA).

Project Location: Lake County

Subgrantee: Lake County Forest Preserve District
1899 West Winchester Road
Libertyville, Illinois 60048

Project Reports and Other Informational Materials:

"North Mill Creek Channel Restoration – Phase 1 – Final Report." July 31, 2016. Lake County Forest Preserve District.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
009	Stream Channel Restoration	4,500 ft.	261	261	-	523

North Mill Creek restoration pre-construction.

North Mill Creek restoration post-construction.

14-09 (319) CD

Title: Lake Bloomington Paired Watershed Cover Crop Study

Purpose: This project conducted a paired watershed monitoring study to determine the effectiveness of winter cover crops to reduce nitrate loading and total suspended solids (TSS). The study assessed the efficiency of cover crops to sequester fall-applied inorganic nitrogen, residual nitrogen and reduce nitrate leaching and sediment loading to Lake Bloomington (ILRDO). Additionally, this project educated farmers and conservation agents on cover crop management and effectiveness in

reducing nitrate and sediment loading through localized cover crop field plots and annual field days.

Project Location: McLean County

Subgrantee: Illinois State University
Department of Agriculture
143 Ropp Agriculture Building, Campus Box 5020
Normal, Illinois 61761

Project Reports and Other Informational Materials:

"Lake Bloomington Paired Watershed Cover Crop Study." July 15, 2016. Illinois State University.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
340	Cover and Green Manure Crop	757 ac.	-	-	-	12,112

14-10 (319) TS

Title: Candlewick Lake Bioswale Project

Purpose: This project reduced nonpoint source pollution by converting existing dry ditches at selected inlets to Candlewick Lake (IL_RPV) into 10,000 square feet of bioswales planted with native vegetation. The bioswales were designed to remove sediment and nutrients by filtering runoff from upstream residential and agricultural areas. Candlewick Lake (IL_RPV) is a tributary of Beaver Creek (IL_PQD-07) and covered by the watershed-based plan completed for the Beaver Creek watershed (HUCs 070900060401 and 070900060402) in 2008. Also, as recommended by the Beaver Creek plan, an updated and expanded watershed-based plan for the Candlewick Lake portion of HUC 070900060402 was completed in July, 2014.

Project Location: Boone County

Subgrantee: Candlewick Lake Association, Inc.
13400 Hwy. 76
Poplar Grove, Illinois 61065

Project Reports and Other Informational Materials:

"Candlewick Lake Bioswale Project." July 28, 2016. Olson Ecological Solutions, LLC.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
814	Bioswale	0.23 ac.	-	98	55,217	582

Bioswale pre-construction.

Bioswale post-construction.

14-11 (319) SR

Title: West Fork Stabilization in Downtown Glenview

Purpose: This project stabilized approximately 1,050 feet of eroding streambank along both sides of a 525 foot segment of the West Fork of the North Branch of the Chicago River (IL_HCCB-05) located in downtown Glenview, Illinois. Streambanks were stabilized using vegetated rock toe, two riffle and pool structures, a cross vane, a 0.85 acre riparian buffer of deep-rooted native vegetation, thirteen native trees, and sixteen native shrubs.

Project Location: Cook County

Subgrantee: Village of Glenview
1225 Waukegan Road
Glenview, Illinois 60025

Project Reports and Other Informational Materials:

"West Fork Stabilization in Downtown Glenview – Section 319 Project Report." July 31, 2016. Village of Glenview.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	1,050 ft.	42	42	-	84

W. Fk. N. Br. Chicago River stabilization during-construction.


W. Fk. N. Br. Chicago River stabilization post-construction.

14-12 (319) SR

Title: Lakes Bloomington & Evergreen Watershed Social Assessment

Purpose: This project implemented a social indicator survey in the watersheds of Lake Bloomington (HUC 0713000402) and Evergreen Lake (HUC 071300040502) in McLean County, Illinois. Base-line data was collected on the values, attitudes, knowledge, and opinions held by the urban residents of the Lake Bloomington (ILRDO) & Evergreen Lake (ILSDA) watersheds regarding water quality and nonpoint source pollution control best management practices (BMPs). The social indicator monitoring program was designed to 1) document and evaluate what urban residents in the watersheds know about and are concern about regarding water quality and the effects their current activities have on water quality; 2) document and evaluate what urban residents in the watersheds know about onsite wastewater treatment systems; 3) document and evaluate the knowledge and opinions held by the urban residents of the watersheds regarding the effect of water conservation on water quality and quantity; 4) provide data to direct future education and outreach efforts; and 5) provide social data that is designed to inform an update of the current Lake Bloomington and Evergreen Lake watershed management plans that will more directly address social aspects of watershed management for the future.

Project Location: McLean County

Subgrantee: McLean County Soil & Water Conservation District
402 N. Kays Drive
Normal, Illinois 61761

Project Reports and Other Informational Materials:

"Your Water - Your Future. A Residential Household Survey to Assess Our Water Future. A Report on the Community Survey." December 2015. Illinois State University.

14-13 (319) ST

Title: Watershed Monitoring Plan & QAPP Development

Purpose: This project developed a water quality monitoring plan and Quality Assurance Project Plan (QAPP) for the Flint Creek (ILDTZS-01) and Spring Creek (ILDTH-01) watersheds. The plan established procedures to 1) assess the current state of water quality resulting from nonpoint source pollution within streams and lakes; 2) assess changes in water quality to determine BMP effectiveness; and 3) assess the public social behavior related to water quality issues. Water quality monitoring will be performed by collecting physical, chemical, biological, and social indicator data related to the watershed-based plans' goals and objectives.

Project Location: Lake, Cook, & McHenry Counties

Subgrantee: Citizens for Conservation
459 West Highway 22
Barrington, Illinois 60010

Project Reports and Other Informational Materials:

"Final Water Quality Monitoring Plan." February 2015. KOT Environmental Consulting, Inc.

"Final Quality Assurance Project Plan." August 2015. KOT Environmental Consulting, Inc.

14-14 (319) ST

Title: Lake Springfield Watershed-based Plan and BMP Implementation

Purpose: This project implemented best management practices (BMPs) in the Lake Springfield (ILREF) watershed to reduce nonpoint source pollution, soil erosion, and nutrient and sediment loadings to improve water quality in Lake Springfield and its watershed. BMPs included 1,899 acres of nutrient management plans; 120 acres of cover and/or green manure crops; eight acres of filter strips; four grade stabilization structures; 17.5 acres of grassed waterways; three dissipaters; 3,000 feet of shoreline stabilization; one water and sediment control basin; 61 acres of woodland improvement; and one denitrifying bioreactor. Also, by updating the existing Phase I Diagnostic/Feasibility Study for the Lake Springfield Restoration Plan, this project developed a revised watershed-based plan for the Lake Springfield watershed.

Project Location: Sangamon County

Subgrantee: Sangamon County Soil & Water Conservation District
2623 Sunrise Drive - Suite 1
Springfield, Illinois 62703

Project Reports and Other Informational Materials:

"Lake Springfield Watershed-based Management Plan." 2017. Sangamon County Soil & Water Conservation District.

"Lake Springfield Watershed-based Plan and BMP Implementation Project. 2017. Sangamon County Soil & Water Conservation District.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
340	Cover and Green Manure Crop	120 ac.	321	358	-	715
393	Filter Strip	8 ac.	12	27	-	50
410	Grade Stabilization Structure	4 no.	21	21	-	41
412	Grassed Waterway	17.5 ac.	365	365	-	729
580	Streambank and Shoreline Protection	3,000 ft.	144	144	-	288
587	Structure for Water Control	3 no.	552	276	-	276
590	Nutrient Management	1,899.5 ac.	-	-	-	-
638	Water and Sediment Control Basin	500 ft.	6	6	-	12
666	Woodland Improvement	61 ac.	182	215	-	429
845	Infiltration Trench	1 no.	-	-	-	-

Block chute grade stabilization post-construction.

Shoreline stabilization during construction.

14-15 (319) CD

Title: Monitoring of Kickapoo Creek near Charleston, Illinois

Purpose: A stream restoration project was completed on Kickapoo Creek (ILBEN-02) downstream of Mattoon in September 2010 by the Illinois Department of Natural Resources (IDNR) utilizing FFY2009 Section 319 funds. This project investigated the success of the restoration project by looking at the stream habitat and biota. Eastern Illinois University (EIU) conducted biological surveys on fish and macroinvertebrate populations and the U. S. Geological Survey (USGS) monitored water quality and gauging of the stream to separate the effects of unstable channels from the water quality effects of point sources. This monitoring approach provided the water quality information identified as a need in the Embarras River watershed-based plan.

Project Location: Coles County

Subgrantee: Eastern Illinois University
600 Lincoln Avenue
Charleston, Illinois 61920

Project Reports and Other Informational Materials:

"Monitoring to Support Embarras River Watershed Plan, Support and Evaluate Restoration Activities in Kickapoo Creek, a Tributary of the Embarras River." December 2016. Eastern Illinois University.

14-16 (319) JC

Title: Oakwood Hills Fen Stream Corridor Restoration

Purpose: This project restored 0.7 acres of riparian buffer and stabilized 1,101 feet of eroding streambank on an unnamed tributary of Silver Creek, a tributary of the Fox River (ILDT-22). Streambank stabilization techniques included rock vortex weirs, rock riffles, and vegetation. The project site was immediately upstream of the Oakwood Hills Fen Nature Preserve. An educational brochure was also developed to inform the public about nonpoint source pollution and the restoration project.

Project Location: McHenry County

Subgrantee: Village of Oakwood Hills
3020 North Park Drive
Oakwood Hills, Illinois 60013

Project Reports and Other Informational Materials:

"Oakwood Hills Fen Stream Corridor Restoration – Section 319 Project Report." August 2016. Village of Oakwood Hills.

"Stream Corridor Restoration Oakwood Hills Fen." (Brochure) August 2016. Village of Oakwood Hills.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
035	Buffer Zone Enhancement / Installation	0.7 ac.	-	-	51	-
580	Streambank and Shoreline Protection	1,101 ft.	157	157	-	315
812	Bio-retention Facility	0.1 ac.	-	9	5,991	70

Silver Creek tributary stabilization pre-construction.

Silver Creek tributary stabilization post-construction.

14-17 (319) SR

Title: Otter Creek Stabilization - Village of South Elgin

Purpose: This project stabilized 120 feet of severely eroding streambanks over two reaches of Otter Creek (ILDTFA), a tributary of Ferson Creek (ILDTF), within the Village of South Elgin. Streambank stabilization techniques included re-grading with stone toe and vegetated banks.

Project Location: Kane County

Subgrantee: Village of South Elgin
10 N Water Street
South Elgin, Illinois 60177

Project Reports and Other Informational Materials:

"Otter Creek Stabilization Phase 1 Final Project Report." January 13, 2017. Village of South Elgin.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
580	Streambank and Shoreline Protection	120 ft.	4	6	-	14

Otter Creek stabilization pre-construction.

Otter Creek stabilization post-construction.

14-18 (319) ST

FEDERAL FISCAL YEAR 2015

Title: Total Maximum Daily Load Development

Purpose: The Illinois EPA developed Stage 1 Total Maximum Daily Load (TMDL) reports for pollutants within five (5) selected watersheds: Upper La Moine River, La Moine/Missouri Creek, Upper Kaskaskia River/Shelbyville Lake, Lou Yaegar Lake, and Mississippi River. These Stage 1 reports will later be used to support the development of Total Maximum Daily Loads (TMDLs) and implementation plans for TMDL attainment, plans which will meet the nine minimum elements of a watershed-based plan.

Project Location: Henderson, Warren, Knox, Hancock, McDonough, Schuyler, Brown, Champaign, Piatt, Macon, Douglas, Coles, Moultrie, Shelby, Fayette, & Montgomery Counties.

Subgrantee: CDM Smith Inc. & Tetra Tech, Inc.

Project Reports and Other Informational Materials:

"Upper La Moine River Watershed TMDL Final Stage 1 Report." July 2017. CDM Smith.

La Moine/Missouri Creek Watershed TMDL Stage 1 Report." January 2017. Tetra Tech.

"Upper Kaskaskia River Watershed TMDL Final Stage 1 Report." January 2017. Tetra Tech.

"Lake Lou Yaeger Watershed TMDL Final Stage 1 Report." July 2017. CDM Smith.

"Mississippi River Watershed TMDL Stage 1 Report." January 2017. Tetra Tech.

15-0 (319) AH

Title: Streambank Cleanup And Lakeshore Enhancement (SCALE)

Purpose: The Streambank Cleanup And Lakeshore Enhancement program provided funds to assist groups that have established a recurring streambank or lakeshore cleanup to hold a cleanup event. Groups could receive up to $3,500 for implementation of their cleanup events. No local match was required to be provided by the sub-recipients. SCALE was specifically created to assist with litter collection and disposal in and along Illinois water resources. Funds could be used for safety attire (includes gloves and vests), litterbags, event promotions, logistical needs, and dumpster or landfill fees.

Project Location: Statewide

15-00 (319) CD

Title: Nonpoint Source and Nutrient Loss Reduction Strategy Workshop

Purpose: The Illinois Water Resources Center and Illinois-Indiana Sea Grant, in partnership with the Illinois EPA, held a Nonpoint Source and Nutrient Loss Reduction Strategy Workshop. The workshop focused on rural and urban nonpoint source programs, highlighting new innovations and case studies; watershed-based planning and meeting the nine minimum elements; and continued implementation of Illinois' Nutrient Loss Reduction Strategy.

Project Location: Statewide

Subgrantee: Illinois Water Resources Center and Illinois-Indiana Sea Grant
1101 W. Peabody Drive
374 National Soybean Research Center, MC-635
Urbana, Illinois 61801

15-01 (319) / FWN17132 ST

Title: Waverly Lake Watershed Implementation Plan and "Third-Party" TMDL

Purpose: This project developed 1) total maximum daily loads (TMDLs) for total phosphorus for Waverly Lake (IL_SDC) and 2) a watershed-based plan for the Waverly Lake (IL_SDC) watershed (a portion of HUC 071300110601). The watershed-based plan is designed to improve water quality by controlling nonpoint source pollution and is consistent with the USEPA watershed-based plan guidance. The TMDL and watershed-based plan include a detailed watershed characterization, quantifying point and nonpoint source pollution and identifying site-specific treatment practices. Load reductions were calculated for recommended best management practices (BMPs) and compared against water quality targets and total loading. The project specifically identified all in-lake and external sources of nutrients and sediment, and included a detailed assessment of lakeshore and streambank erosion. A pollutant loading model was used to target BMPs to the most critical areas and quantify annual loadings of sediment, nitrogen, and phosphorus.

Project Location: Morgan County

Subgrantee: City of Waverly
171 North Pearl, P.O. Box 174
Waverly, Illinois 62692

Project Reports and Other Informational Materials:

"Waverly Lake Watershed Implementation Plan & Total Maximum Daily Load." March 28, 2017. Northwater Consulting.

15-02 (319) TS

Title: Watershed Plan Development for Impaired DuPage County Waterways

Purpose: This project developed watershed-based plans for five (5) watersheds in DuPage County. The five watersheds included: 1) Kress Creek (IL_GBKB-01) watershed (a portion of HUC 071200040802), which is a tributary of the West Branch DuPage River (IL_GBK-05); 2) Klein Creek (IL_GBKC-01) watershed (a portion of HUC 071200040802), which is a tributary of the West Branch DuPage River (IL_GBK-05); 3) St. Joseph Creek (IL_GBLB-01) watershed (a portion of 071200040804), which is a tributary of the East Branch DuPage River (IL_GBL-05); 4) Sawmill Creek/Wards Creek (IL_GJ-01) watershed (HUC 071200040704), which is a tributary of the DesPlaines River (IL_G-03); and 5) Winfield Creek (IL_GBKF-01) watershed (a portion of 071200040802), which is a tributary of West Branch DuPage River (IL_GBK-05). The watershed-based plans were designed to improve water quality by controlling nonpoint source pollution and are consistent with the USEPA watershed-based plan guidance.

Project Location: DuPage County

Subgrantee: DuPage County Stormwater Management
421 North County Farm Road
Wheaton, Illinois 60187

Project Reports and Other Informational Materials:

"Kress Creek Watershed-Based Plan." August 2017. DuPage County Stormwater Management.

"Klein Creek Watershed-Based Plan." August 2017. DuPage County Stormwater Management.

"St. Joseph Creek Watershed-Based Plan." August 2017. DuPage County Stormwater Management.

"Sawmill Creek Watershed-Based Plan." August 2017. DuPage County Stormwater Management.

"Winfield Creek Watershed-Based Plan." August 2017. DuPage County Stormwater Management.

15-03 (319) SR

Title: Implementation of Watershed Monitoring Plan

Purpose: This project implemented a water quality monitoring plan and Quality Assurance Project Plan (QAPP) for the Flint Creek (IL_ DTZS-01) and Spring Creek (IL_ DTH-01) watersheds. The monitoring assessed 1) the current state of water quality resulting from nonpoint source pollution within streams and lakes; 2) changes in water quality to determine BMP effectiveness; and 3) the public social behavior

related to water quality issues. Water quality monitoring was performed by collecting physical, chemical, biological, and social indicator data related to the watershed-based plans' goals and objectives.

Project Location: Lake, Cook, & McHenry Counties

Subgrantee: Citizens for Conservation
459 West Highway 22
Barrington, Illinois 60010

Project Reports and Other Informational Materials:

"Baseline Water Quality Characteristics Flint and Spring Creek Watersheds, Illinois." July 2016. KOT Environmental Consulting, Inc.

15-04 (319) ST

Title: Lake Mauvaise Terre Pollutant Reduction Initiative & TMDL Implementation

Purpose: This project constructed best management practices (BMPs) to reduce nonpoint source pollution in the Lake Mauvaise Terre (IL_SDL) watershed, located in Morgan County, Illinois. BMPs included 34 water and sediment control basins (WASCBs), 2 sediment basins, 1 pond, 1 terrace (1,500 feet), 15 grade stabilization structures, 19.8 acres of grassed waterways, 420 acres of cover crops, 240 feet of diversions, 2,200 feet of surface drainage/field ditch, and one livestock waste management system.

Project Location: Morgan County

Subgrantee: City of Jacksonville
200 West Douglas Avenue
Jacksonville, Illinois 62650

Project Reports and Other Informational Materials:

"Lake Mauvaise Terre Pollutant Reduction Initiative." January 22, 2018. Northwater Consulting.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
312	Waste Management System	1 no.	1	12	-	57
340	Cover and Green Manure Crop	420 ac.	149	179	-	1,160
350	Sediment Basin	2 no.	50	152	-	526
362	Diversion	240 ft.	6	5	-	12
378	Pond	1 no.	16	71	-	450
410	Grade Stabilization Structure	15 no.	132	215	-	374
412	Grassed Waterway	20 ac.	860	1,808	-	8,445
600	Terrace	1,500 ft.	16	22	-	118
607	Surface Drainage (Field Ditch)	2,200 ft.	80	78	-	197
638	Water and Sediment Control Basin	22,456 ft.	962	1,982	-	5,263

Grassed waterway pre-construction.

Grassed waterway post-construction.

15-05(319) JC

Title: Des Plaines River Watershed BMP Implementation and Planning Program

Purpose: This project developed a watershed-based plan for the Upper and Lower Des Plaines River (IL_G-36) watershed (HUC 0712000402, 0712000403, and that portion of 0712000405 north of, and including, the confluence of Buffalo Creek). The plan was developed by updating five existing watershed-based plans (North Mill Creek –Dutch Gap Canal Watershed-Based Plan, Mill Creek Watershed and Flood Mitigation Plan, Indian Creek Watershed Plan, Bull Creek/Bulls Brook Watershed-Based Plan, and Buffalo Creek Watershed-based Plan) and integrating them under an expanded planning area and completing the elements of a watershed-based plan for the entire expanded planning area. This project will implement best management practices (BMPs) in the Mill Creek sub-watershed (2,565 linear feet of bioswales, 7.1 acres of grassed waterways (includes tile repair), 2.6 acres of filter strips, and 34 acres of conservation tillage) and the Bull Creek sub-watershed (250 linear feet of streambank stabilization, 2 check dams, and 0.56 acres of riparian buffer). Biological and chemical monitoring were also conducted.

Project Location: Lake & Cook Counties

Subgrantee: Lake County Stormwater Management Commission
500 W. Winchester Road, Suite 201
Libertyville, Illinois 60048

Project Reports and Other Informational Materials:

"Des Plaines River Watershed-Based Plan." June 2018. Lake County Stormwater Management Commission.

"Des Plaines River Watershed BMP Implementation and Planning Program Final Report." July 10, 2018. Lake County Stormwater Management Commission.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
035	Buffer Zone Enhancement / Installation	0.56 ac.	-	1	1,216	4
329	Conservation Tillage	34 ac.	25	29	-	58
393	Filter Strip	2.6 ac.	33	57	-	106
410	Grade Stabilization Structure	2 no.	17	17	-	34
412	Grassed Waterway	7.1 ac.	613	713	-	1,370
580	Streambank and Shoreline Protection	250 ft.	19	19	-	39
606	Subsurface Drain	30 ft.	61	80	-	149
814	Bioswale	1.03 ac.	-	13	17,843	83

Bull Creek bank stabilization pre-construction.

Bull Creek bank stabilization post-construction.

15-06 (319) CD

Title: Cedar Lake BMP Implementation - Gully & Shoreline Stabilization

Purpose: This project stabilized 9,368 feet of eroding gullies and 13,632 feet of eroding shoreline on Cedar Lake (IL_RNE), an impoundment on Cedar Creek (IL_NA-01) in Jackson County, Illinois. The eroding shorelines were stabilized using stone riprap off-shore breakwater structures or on-shore revetment. Seven eroding gullies were stabilized with rock checks and three eroding gullies were stabilized with water and sediment control basins. The project also included informational signs, a brochure, tours, and other educational activities.

Project Location: Jackson County

Subgrantee: City of Carbondale
200 South Illinois Avenue
Carbondale, Illinois 62902

Project Reports and Other Informational Materials:

"Project Evaluation and Final Report for the Cedar Lake Implementation Project." June 2017. HMG Engineers, Inc.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
410	Grade Stabilization Structure	124 no.	892	891	-	1,783
580	Streambank and Shoreline Protection	13,632 ft.	5,680	5,680	-	11,360

Cedar Lake shoreline stabilization post-construction.

Gully stabilization post-construction.

15-07 (319) JC

Title: Permeable Paver BMPs - Athletic Recreation Center

Purpose: This project constructed a 2.32 acre (100,925 square feet) permeable pavement parking lot at the Woodridge Park District's new Athletic Recreation Center in Woodridge, Illinois. The permeable pavement parking lot was constructed over an 18-inch layer of open-graded stone that serves as the structural base as well as provides temporary storage of runoff. The permeable pavement parking lot will reduce stormwater volume and nonpoint source pollution discharged to the East Branch of the DuPage River (IL_GBL-02), via an unnamed tributary, from the Athletic Recreation Center.

Project Location: DuPage County

Subgrantee: Woodridge Park District
2600 Center Drive
Woodridge, Illinois 60517

Project Reports and Other Informational Materials:

"Permeable Paver BMPs - Athletic Recreation Center - Section 319 Final Report." February 2017. Woodridge Park District.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
890	Porous Pavement	2.32 ac.	-	4	3,270	55

Permeable pavement parking lot during construction.

Permeable pavement parking lot post-construction.

15-08 (319) ST

Title: Crabtree Creek Corridor Stabilization Project

Purpose: This project stabilized approximately 1,278 feet of eroding streambank and 217 feet of eroding streambed and established a native vegetative buffer (0.51 acres) over two segments of Crabtree Creek, a tributary to the East Branch of the DuPage River (IL_GBL-02), in the Village of Woodridge. At the upstream site, best management practices (BMPs) included approximately 472 feet of streambank stabilization using stone toe protection, bank re-grading, three rock points, native riparian vegetation and other measures; 96 feet of stream channel stabilization using four rock riffle grade control structures; and 0.24 acres of native plant buffer. At the downstream site, best management practices (BMPs) included approximately 806 feet of streambank stabilization using stone toe protection, bank re-grading, native riparian vegetation, 156 feet of gabion basket and other measures; 121 feet of stream channel stabilization using four rock riffle grade control structures; and 0.27 acres of native plant buffer.

Project Location: DuPage County

Subgrantee: Woodridge Park District
2600 Center Drive
Woodridge, Illinois 60517

Project Reports and Other Informational Materials:

Crabtree Creek Corridor Stabilization – Upstream Project Area & Downstream Project Area – Section 319 Project Report. June 2017. V3 Companies and Living Waters Consultants, Inc.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction: Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
035	Buffer Zone Enhancement / Installation	0.51 ac.	-	1	337	4
580	Streambank and Shoreline Protection	1,278 ft.	146	146	-	290
584	Stream Channel Stabilization	217 ft.	24	24	-	48

Crabtree Creek bank stabilization pre-construction.

Crabtree Creek bank stabilization post-construction.

15-09 (319) ST

Title: Shaw Property – Nippersink Creek Stream Corridor Enhancement

Purpose: This project implemented best management practices recommended in the Nippersink Creek Watershed Plan (2008). Approximately 1,725 feet of streambank on Nippersink Creek (IL_DTK-06) was stabilized using coir fiber mattress and the installation of a riparian buffer filter strip (0.4 acres). An eroded gully was stabilized through grading, seeding, turf reinforcement mat, and a rock check. The project site (approximately 26 acres) was put into a permanent easement held by The Land Conservancy of McHenry County. The project also included outreach through Web page news releases on the Nippersink Watershed Association (NWA) site and the Land Conservancy Web site.

Project Location: McHenry County

Subgrantee: Nippersink Watershed Association
7602 Hancock Drive
Wonder Lake, Illinois 60097

Project Reports and Other Informational Materials:

"Final Report for the Shaw Property – Nippersink Creek Stream Corridor Enhancement." November 22, 2016. Nippersink Watershed Association.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
035	Buffer Zone Enhancement / Installation	26 ac.	-	-	-	-
580	Streambank and Shoreline Protection	1,725 ft.	163	163	-	326
581	Ditch Stabilization	100 ft.	5	5	-	10

Ditch (gully) stabilization during construction.

Nippersink Creek bank stabilization post-construction.

15-10 (319) CD

Title: Making the Nitrogen Fall in Season

Purpose: This project developed and implemented a Nutrient Loss Reduction Strategy (Strategy) that resulted approximately 22,000 acres of cropland being treated with post emergence nitrogen application; 8,058 acres of cropland being treated with strip-till; and 7,262 acres of cropland being treated with cover crops over the course of the project period. Side dress tillage bars and strip-till units were leased to farmers to be use on tillable cropland acreage in Champaign and Vermilion Counties in Illinois. Nutrient management plans were developed on cropland in which practices were implemented.

Project Location: Champaign & Vermilion Counties

Subgrantee: Champaign County SWCD
2110 West Park Court, Suite C
Champaign, Illinois 61821

Project Reports and Other Informational Materials:

"Making the Nitrogen Fall in Season." July 26, 2018. Champaign County Soil & Water Conservation District.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
340	Cover and Green Manure Crop	7,262 ac.	514	788	-	1,578
586	Strip Cropping (Field)	8,058 ac.	2,478	3,671	-	6,690
590	Nutrient Management	6,363 ac.	-	-	-	-

15-11 (319) JC

Title: Columbine Boulevard Bioswale

Purpose: This project converted an existing turf median on Columbine Boulevard in Rockford, Illinois into a 1,300-foot-long bioswale to reduce nonpoint source pollution

discharged to an unnamed tributary of Madigan Creek, which is a tributary of the Kishwaukee River (IL_PQ-02) in HUC 070900060802. The bioswale was seeded with native plantings designed to filter, retain, and infiltrate stormwater. A three-foot-wide stone infiltration trench was also installed under the redesigned swale.

Project Location: Winnebago County

Subgrantee: Winnebago County Highway Department
424 North Springfield Avenue
Rockford, Illinois 61101

Project Reports and Other Informational Materials:

"The Final Report for the Columbine Boulevard Bioswale BMP." October 19, 2018. Winnebago County Highway Department.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Sediment (tons/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Nitrogen (lbs/year)
814	Bioswale	0.86	-	6	6,607	21

Bioswale pre-construction.

Bioswale post-construction.

15-12 (319) ST