Appendix 3

Closed Section 319 Grants - FFY 2000 - 2009

Completed Projects

TABLE OF CONTENTS

Page

Title

FFY 2000 FEDERALLY FUNDED SECTION 319 PROJECTS_____7 Pittsfield National Monitoring Program_____7 Waukegan River National Monitoring Program_____7 Northeastern Illinois Community Assistance Office_____7 Evaluation of Treated Swine Waste Application 8 2nd National NPS Pollution Control Information/Education Conference 8 Farm Progress Show/Illinois State Fair 2000_____9 Armitage Creek Project_____9 North Fork Embarras Watershed Project – Phase 2_____10 Nutrient Management Plan Implementation 10 Salt Creek Streambank Stabilization – Phase 2 11 North Fork Vermilion River Project – Phase 2 12 West Branch DuPage River Streambank Restoration – Phase 2 12 Senachwine Creek Watershed Project – Phase 2_____13 Cache River Reforestation Project – Phase 2_____14 Chicago Botanic Garden Lake WRAS Implementation 14 Roof Greening Project Opening_____15 Salt Creek NPS Pollution Outreach & Education 16 Total Maximum Daily Load Development______16 Total Maximum Daily Load Development 17 Old Salem Chautauqua Wetland Basin Project_____17 Total Maximum Daily Load Development 17 Total Maximum Daily Load Development_____18 FFY 2001 FEDERALLY FUNDED SECTION 319 PROJECTS 19 Lake Branch WRAS (Nutrient Management Plan) Implementation_____19 Nonpoint Source Pollution Book – Phase 2 20 CREP & Watershed Management Education in Illinois 20 Chicagoland Environmental Network 20 Greater Eliza Watershed Project – Phase 2_____21 Fox River WRAS Implementation Project 22 Upper DesPlaines River WRAS Implementation Project 23 Prentiss Creek Streambank Stabilization Project 24 Salt Creek Streambank Stabilization – Phase 3 24 Rivers Rising Video_____25 Illinois Buffer Partnership 25 Salt Creek TMDL Implementation Plan Execution – Phase 1 26 Total Maximum Daily Load Development 27 Governor Bond Lake TMDL Implementation Plan Execution – Phase 1 28 Watershed Based Planning Assistance 28 Fourth Ward Yard Nonpoint Source Pollution Control Demonstration 29 Brewster Creek Monitoring Project 29 Lake Paradise Wetland Restoration Project______30 Brewster Creek Restoration Project 31 Silver Creek Stabilization 31 Ralph Welch Gully Stabilization_____32 FFY 2002 FEDERALLY FUNDED SECTION 319 PROJECTS_____33 Priority Lake & Watershed Implementation Program_____33 North Fork Embarras Watershed Project – Phase 3_____33 Nutrient Management Plan Implementation – Phase 2_____34 Livestock Winter Feed Stations Demonstrations 35

Green Roof System to Reduce Urban Runoff	36
NPS Program Implementation Assistance	37
Northern Illinois Community Assistance Office	
Conservation Reserve Enhancement Program (CREP) Assistance	38
Lake Galena Watershed Project	38
Morton Arboretum Parking Lot Runoff Control	39
North Branch Chicago River Watershed Project	40
Addison Creek Streambank Stabilization	40
Otter Lake In-Lake Sediment Control Project	41
East Branch DuPage River Tributary No. 6 Stream Restoration	42
Vandalia Lake Water Quality Information & Education	42
Ravinia Neighbors Association Sewer Stencil	43
Secret Agent Worm Website	43
Rainfall Simulator/Crop Residue Demonstration	43
Rig Rivers Rising	44
Manure Management Workbook	44
Tazewell County SWCD - Talbott Streambank Stabilization	45
Long Lake Shoreline Stabilization	45
Kickapoo Creek Monitoring Project	46
Web-Based Illinois Manure Management Planner	46
Total Maximum Daily Load Development	47
FFY 2003 FEDERALLY FUNDED SECTION 319 PROJECTS	48
Lake Arlann Silt Abatement Project	48
Evaluation of N Management Practices	48
Conservation Practices Mapping and Assessment	
Watershed Planning in Northeastern Illinois	49
Northeastern Illinois Stream Restoration Inventory	50
Mitchell Park Ravine Watershed Project – Phase 2	51
Roof Greening Project	
Muddy Waters Pond Restoration	
Villa Park Urban BMP Demonstration	
Springbrook Creek Stream Meandering	
Governor Bond Lake Stormwater Basin No. 4	54
Fox Point North – Flint Creek Streambank Stabilization	55
Lake Springfield Watershed BMP Implementation	56
Addison Creek Riparian Restoration	56
Hillsboro Lake Stormwater Wetland No. 1 Project	57
Lake Vermilion Shoreline Stabilization Project	57
North Fork Vermilion River Watershed Project	
Charleston SCR Sedimentation Basin	58
Salt Creek Streambank Stabilization – Elk Grove Village	59
Lyman Woods Streambank, Streambed, & Gully Stabilization	60
Integrated Watershed Planning for Rayse Creek	60
Stream Restoration Phase 2 – Trib. 6 to E. Br. DuPage R.	61
RiverWorks Exhibit	61
RiverWorks Exhibit A Sustainable Community Based Approach to Reducing NPS Pollution	62
Normeastern minors Stream Restoration inventory	02
Watershed Planning to Protect the Kishwaukee River Basin	63
Hyacinth Place: Model Permeable Paver System	63
Total Maximum Daily Load Development	64

FFY 2004 FEDERALLY FUNDED SECTION 319 PROJECTS	65
Priority Lake & Watershed Implementation Program (PLWIP)	65
Of Time and the River	
Green Roof Project on the McKessen Building, Rock Island	
Streambank Cleanup And Lakeshore Enhancement (SCALE)	
North Fork Embarras River Watershed Project – Phase 4	67
Protecting Water Quality in Urban Centers of Illinois	67
Greater Eliza Watershed Project – Phase 3	68
Kaskaskia River Watershed Hypoxia Analysis	
Watershed Based Planning	
Watershed Based Planning Homer Lake: Making it Clear One Household, One field at a Time	70
Watershed Based Plan Upgrades in Northeastern Illinois	71
Fox River Watershed Planning, Restoration, & Protection	72
Upper DesPlaines River WRAS Implementation	73
Conservation Reserve Enhancement Program (CREP) Assistance	74
North Branch Watershed Project - Ongoing Implementation Phase	
NPS Program Implementation Assistance - Phase 2	75
Conservation Practices Mapping and Assessment	76
Farm Progress Show Site BMP Project	76
Regional Stormwater BMP Park	
Flint Creek Watershed Based Plan	
Watershed Capacity Building	
Waukegan River Restoration Project	
Total Maximum Daily Load Development	78
FFY 2005 FEDERALLY FUNDED SECTION 319 PROJECTS	80
City of Chicago Best Management Practices Implementation	80
Nonpoint Source Pollution Control Program Evaluation	80
Lincoln Park Zoo South Pond Environmental Education Project	
Streambank Erosion Control in the Lake Galena Watershed	
Working with the Amish	
Manure Management Options for Swine Producers to Reduce NPS Pollution	
Bringing Wetlands to Life Through Restoration and Public Communication	83
NRCS Urban Office Technical Assistance	
Patriot's Park Lake Phase 2 Implementation	84
Springdale Restoration Project	
Stream Corridor Restoration Project - Phase 3 (Trib. 6)	85
Poplar Creek Watershed Planning, Restoration, & Protection	85
Armitage Creek Streambank Stabilization	86
Watershed Based Plan Development for 303(d) Listed Waters	87
Carlinville Lake Watershed Plan	87
Governor Bond Lake Shoreline Stabilization No. 1	88
Jackson Creek Watershed Planning	
Technical Assistance for Green Infrastructure Projects	89
Salt Creek Streambank Stabilization	89
Kinkaid Lake TMDL Best Management Practices Implementation	90
DuPage R. & Salt Cr. TMDL Implementation Project	
Monroe County Recharge Area Delineation	
Four Winds Way Creek Rehabilitation	
Green Roof Installation Project	
Total Maximum Daily Load Development	

FFY 2006 FEDERALLY FUNDED SECTION 319 PROJECTS	94
Otter Lake BMP Effectiveness Monitoring Project	94
Waukegan River Water Quality Monitoring	94
Animal Waste BMP Program	95
Streambank Cleanup And Lakeshore Enhancement (SCALE)	95
Watershed Protection, Restoration, and Education	_96
Metra Parking Lot Expansion BMPs	_97
North Branch Watershed Project-Implementation Phase 5	_97
Permeable Lot Best Practices Project	98
Adventures with Aqua Implementing BMPs in the Mossville Bluffs Watershed	99
Implementing BMPs in the Mossville Bluffs watershed	99
Updating the LaMoine River Watershed Management Plan	100
Water Quality Testing at Countryside Lake Association	100
Watershed-Based Plan Development for Aux Sable Creek	101
Kickapoo Creek National Monitoring Project	101
Silver Creek Stabilization La Moine River Watershed Targeting for NPS Control	102
Clinton Lake Watershed Social Indicator Effort	102
Cermak/Blue Island BMP Demonstration Project	103
La Moine River Outreach Program	104
	104
FFY 2007 FEDERALLY FUNDED SECTION 319 PROJECTS	105
Low Impact Development Techniques in Madison County, Illinois	105
Illinois LICA 2007 and 2008 Conservation Expos	
Conservation Reserve Enhancement Program (CREP) Assistance	106
Protecting Water Quality in Urban Centers of Illinois-Phase 2	106
Libertyville Facility BMP Demonstration Project	107
Fox River Stabilization Project	
DuPage River, Salt Creek TMDL Implementation Phase II	108
North Branch Watershed Project - Implementation Phase 6	109
Otter Lake Shoreline Erosion Control	109
LaMoine Livestock Exclusion	110
Stabilization of White Pine Drainage Channel	111
Kickapoo Creek Corridor Restoration	111
Glacial Park Center Stormwater BMPs	112
Clean Water: The Role of Trees and Vegetation	113
Mid-Illinois River TMDL Education Geomorphic and In-channel Habitat Assessment of South Kickapoo Creek	113
Geomorphic and In-channel Habitat Assessment of South Kickapoo Creek	113
Mackinaw Riverbank Stabilization - Waibel Project	
Total Maximum Daily Load Development	114
	110
FFY 2008 FEDERALLY FUNDED SECTION 319 PROJECTS	
Illinois Urban Manual Update & NPS Program Assistance Streambank Cleanup And Lakeshore Enhancement (SCALE)	110
Resource Management Mapping Service	117
South Pond Enhancement Demonstration & Education Project	117
Watershed Canacity Building	118
Watershed Capacity Building Fox River Watershed Restoration and Education	118
Clinton Lake Watershed	119
Clinton Lake Watershed Clinton County Livestock Nutrient Management Project	120
Bull CrBull's Brook & Indian Cr. Watershed-Based Plan Implementation	120
BMP Implementation Addressing Highland Silver Lake TMDL	121
BMP Implementation Addressing Kinkaid Lake Sedimentation & TMDL	122

Barrington Area Community Outreach Program	122
TMDL/Watershed Based Plan Adaptive Implementation Demonstration Project	123
North Mill Creek Water Quality Study and Watershed Plan	
Embarras River Watershed Based Planning	
Clear Creek Watershed Plan Update	124
Watershed Liaison	125
Total Maximum Daily Load Development	125
FFY 2009 FEDERALLY FUNDED SECTION 319 PROJECTS	126
North Fork Vermilion River Project - Phase 4	100
In-stream Restoration and Monitoring of Kickapoo Creek near Charleston, Illinois	126
Silver Creek Stabilization	
Joliet Junior College Lake Clean-up and Management	<u>127</u>
Holiday Shores Lake Watershed Sediment and Nutrient Reduction Project	<u>128 </u>
Flint Creek Watershed Plan Implementation Projects	<u>129 </u>
Early Childhood Center Water Quality Improvement Project	<u>129</u>
West Branch of the DuPage River Improvement Project	
Lake Sara Shoreline Protection Project	131
Implementation of BMPs Addressing Cedar Lake	
Nippersink Watershed Assessment / Watershed Manager	
BMP Implementation in Fulton and McDonough Counties, Illinois	
Kickapoo Creek Corridor Restoration Phase 2	133
Roosevelt Park Stormwater BMPs and Education	
East Branch Kishwaukee River Watershed-Based Plan	<u>134 </u>
Total Maximum Daily Load Development	135

FFY 2000 FEDERALLY FUNDED SECTION 319 PROJECTS

- **Title:** Pittsfield National Monitoring Program
- **Purpose:** This project completed the identification of sources of sediment and the efficiency of sediment control practices on the tributary watershed of Lake Pittsfield (ILRDP). This project was funded each year under Section 319 since 1992.

Project Location: Pike County

Project Reports and Other Informational Materials:

00-1(319)ST

Title: Waukegan River National Monitoring Program

Purpose: This project completed the utilization of the national monitoring program initiated under Section 319 in federal fiscal year 1994 to demonstrate the effectiveness of biotechnical stream stabilization techniques implemented on the Waukegan River (ILQ01). A videotape was also produced, which documents the monitoring program and the conditions of the physical and biological enhancements achieved on the Waukegan River.

Project Location: Lake County

Subgrantee: Illinois State Water Survey Post Office Box 697 Peoria, Illinois 61652-0697

00-2(319)ST

Title: Northern Illinois Community Assistance Office

Purpose: This project provided training to Natural Resource Conservation Service regional staff on water quality regulations and technical issues. Furthermore, the project encouraged the provision of nonpoint source pollution control related technical assistance to appropriate local agencies and organizations in northeastern Illinois. The Natural Resources Conservation Service's Northeastern Illinois Community Assistance Office was established to serve the six county northeastern Illinois area. This office provided technical assistance to soil and water conservation districts, planning commissions, county departments, townships and municipalities in northeastern Illinois. In addition to direct technical assistance, the staff of this office provided information/education and training assistance. The major focus of the office was on erosion/sediment control, water quality, and natural resource management.

Project Location: Counties of Lake, McHenry, Kane, DuPage, Cook, and Will

Subgrantee: USDA Natural Resources Conservation Service 603 East Diehl Road, Suite 131 Naperville, Illinois 60563-1476

00-4(319)SR

Title: Evaluation of Treated Swine Waste Application

Purpose: This project assessed a new method of treating swine waste called aerobic thermophilic treatment (AT Treatment) in terms of its ability to reduce nutrient and bacterial nonpoint source (NPS) pollution as compared to current practices in growing corn following swine waste application. Data was collected on NPS nutrient and bacterial pollution arising from the application of treated swine waste as a nutrient source for corn. Instead of sampling and analysis at a given pork producer's operation and application to his corn fields where large numbers of environmental samples would be required for statistical confidence, this assessment used constructed replicate field plots where ground and surface water can be collected and sampled. A statistically designed study using 12 constructed field lysimeters with triplicate treatments of AT treated fertilizer, lagoon treated fertilizer with inorganic nitrogen fertilizer added to increase nitrogen value and an untreated control was used. The comparative study between the treatments assessed the levels of contamination of ammonia nitrogen, nitrate nitrogen, total nitrogen, orthophosphate-P, total phosphorus and fecal coliforms. Collected data was analyzed and disseminated to the public through an Internet web page and by presentations.

Project Location: Jackson County

Subgrantee: Southern Illinois University, Research Development & Administration Carbondale, Illinois 62901-4709

00-5(319)JC

Title: 2nd National NPS Pollution Control Information/Education Conference

Purpose: The purpose of this project was to bring together a variety of entities involved in nonpoint source pollution control information and education programs in the United States. The conference focused on those groups and individuals with an interest in nonpoint source pollution control information and education projects and those with experience in information and education projects. The conference included sessions, displays, and field trips to share a variety of nonpoint source pollution control information programs that are currently being implemented or are under development. The conference was held May 14 – 17, 2001 in Chicago, Illinois.

Project Location: Cook County

Subgrantee: Chicago Botanic Garden 1000 Lake Cook Road Glencoe, Illinois 60022

Project Reports and Other Informational Materials:

"2nd National Conference Nonpoint Source Pollution Information & Education Programs." March 2002. Chicago Botanic Garden.

00-6(319)BL

Title: Farm Progress Show/Illinois State Fair 2000

Purpose: The purpose of this project was to create a nonpoint source pollution control/water quality display for the 2000 Farm Progress Show and Illinois State fair. The target audience was Illinois agricultural producers and their families. Illinois agriculture covers approximately 87 percent of the state. The Farm Progress Show is held in Illinois every three years. Attendance is estimated at 250,000 (rainy weather) to over 500,000 (sunshine). Eighty percent of the attendees are from within 100 miles of the show with the remaining 20 percent from everywhere else, including England, Australia, Canada, Mexico, etc.

Project Location: Sangamon County

Subgrantee: Not Applicable

00-7(319)CD

Title: Armitage Creek Project

Purpose: Approximately 2,420 feet of Armitage Creek, a tributary of the East Branch DuPage River (ILGBL10), were stabilized utilizing bioengineering techniques (a-jacks, fiber roll, vegetation) to protect streambanks and enhance water quality. A drop structure was also constructed to receive flow from a roadside swale and eliminate scour. The project included an educational component to inform residents and property owners through newsletters, meetings, and workshops.

Project Location: DuPage County

Subgrantee: Village of Glendale Heights 300 Civic Center Plaza Glendale Heights, Illinois 60139

Project Reports and Other Informational Materials:

"Armitage Creek Streambank Stabilization Project – Final Report." October 23, 2003. Village of Glendale Heights.

BMP Implementation Summary:

			Es	duction	
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (Ibs/year)	Nitrogen (Ibs/year)
580	Streambank/Shoreline Protection	2,420 ft.	199	168	337
00-8(319)SR					

Title: North Fork Embarras Watershed Project – Phase 2

Purpose: This project protected and improved the water quality of the North Fork Embarras River (ILBEF05) watershed by reducing nonpoint source pollution through a continuation of the efforts initiated with Section 319 funding under federal fiscal year 1996. A comprehensive program of sediment and nutrient reduction was implemented that included watershed protection, information, and education efforts. Upland BMPs installed included 21 grassed waterways, 16 sediment basins, 1 water and sediment control basin, 1 pond, 2 terraces, and 5 grade stabilization structures. One streambank stabilization project using longitudinal peakstone toe protection was installed on 60 linear feet of streambank on the main channel.

Project Location: Counties of Jasper and Clark

Subgrantee: North Fork Conservancy District Post Office Box 7, 110 East Main Casey, Illinois 62420

Project Reports and Other Informational Materials:

"North Fork Embarras Watershed Project – Final Report." April 2002. North Fork Conservancy District.

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BMP Implementation Summary:

				Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
350	Sediment Basin	16 no.	525	149	301.5	
378	Pond	1 no.	63	21	42	
410	Grade Stabilization Structure	5 no.	19	19	37	
412	Grassed Waterway	48.4 ac.	195	186	371	
580	Streambank/Shoreline Protection	60 ft.	61	61	122	
600	Terrace	?	17	11	20.5	
638	Water & Sediment Control Basin	55 ft.	33	?	?	
00-9(319)JC						
00-9(319)00						

Title: Nutrient Management Plan Implementation

Purpose: This project demonstrated to producers that Nutrient Management Plans should be an integral component to their farming operation. Producers were provided with an incentive payment to follow (not exceed) the nitrogen rate, timing, and application guidelines established by the University of Illinois within watersheds identified as having nitrate impaired waters. The short-term goal was to increase the number of acres managed according to nutrient management plans in the selected watersheds. The long-term goal was to maintain the number of acres managed with nutrient management plans in these watersheds after the project ends and to be able to demonstrate to other producers in the State the value of nutrient management planning. Waterbodies protected included Lake Decatur (ILREA), Lake Bloomington (ILRDO), Paris Twin Lakes (ILRBX), Georgetown Lake (ILRBS), and Lake Vermilion (ILRBD).

Project Location: Counties of Edgar, Champaign, Macon, McLean, and Vermilion

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

Project Reports and Other Informational Materials:

"Draft Watershed Plan for the Little Vermilion River. October 2004. Champaign County Soil and Water Conservation District.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
590	Nutrient Management	79,321 ac.	?	23,511	46,451

00-10(319)JC

Title: <u>Salt Creek Streambank Stabilization – Phase 2</u>

Purpose: This project reduced erosion and nonpoint source pollution through the stabilization of 1,975 feet of eroding streambank along a segment of Salt Creek (ILGL09) located in Wood Dale, Illinois. Bioengineering techniques (i.e., a-jacks, erosion control blankets, willow posts, fiber roll) were used. This was a continuation of a streambank stabilization effort on Salt Creek initiated in 1998 with FFY94 Section 319 funding. Salt Creek is a Category 1 watershed in the Unified Watershed Assessment and is currently under TMDL development.

Project Location: DuPage County

Subgrantee: City of Wood Dale 404 North Wood Dale Road Wood Dale, Illinois 60191

Project Reports and Other Informational Materials:

"Salt Creek Stream Bank Stabilization Project – Phase 2 – Final Report." February 11, 2002. City of Wood Dale.

BMP Implementation Summary:

			Estimated Load Reduction		
DMD Code	BMP Name	Amount	Sediment	Phosphorus	Nitrogen
BMP Code		Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,975 ft.	301	255	511
00-11(319)SR					

Title: North Fork Vermilion River Project – Phase 2

Purpose: Operators in the area were contacted to increase awareness and to help them adopt conservation measures. Best management practices (BMPs) were designed and constructed to reduce siltation and nutrient/pesticide transport. BMPs used in this project included grassed waterways (6.07 ac.), grade stabilization structures (7), terraces (7,515 ft.), and tree planting (1.5 ac.). Public meetings and other educational programs, including a cover crop demonstration, were conducted to increase awareness to all citizens in the watershed. This was a continuation of an effort on the North Fork Vermilion River (ILBPG09) initiated with FFY97 Section 319 funding. The North Fork Vermilion River is a Category 1 watershed in the Unified Watershed Assessment.

Project Location: Vermilion County

Subgrantee: Vermilion County Soil & Water Conservation District 191 South Henning Road Danville, Illinois 61832

Project Reports and Other Informational Materials:

"North Fork Vermilion River Project – Phase 2 – Final Report." November 2002. Vermilion County Soil & Water Conservation District.

BMP Implementation Summary:

-	-		Es	timated Load Re	duction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
410	Grade Stabilization Structure	7 no.	9	9	18
412	Grassed Waterway	6.07 ac.	86.5	86	171
600	Terrace	7,515 ft.	480	482	964
612	Tree Planting	1.5 ac.	3	6	12
00-12(319)JC					

Title: West Branch DuPage River Streambank Restoration – Phase 2

Purpose: This project reduced erosion and nonpoint source pollution through the stabilization of eroding streambanks along 300 feet of the West Branch DuPage River (ILGBK05) using bendway weirs, biotechnical slope stabilization, and vegetation. This was a continuation of a streambank stabilization effort on the West Branch DuPage River initiated with FFY98 Section 319 funding. The West Branch DuPage River is a Category 1 watershed in the Unified Watershed Assessment. The project also

included an education component involving an urban best management practices workshops.

Project Location: DuPage County

Subgrantee: The Conservation Foundation 10 S 404 Knoch Knolls Road Naperville, Illinois 60565

Project Reports and Other Informational Materials:

"West Branch DuPage River Streambank Restoration – Phase 2 – Final Report." May 2002. The Conservation Foundation.

BMP Implementation Summary:

-	-		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	300 ft.	81	81	162
00-13(319)SR					

Title: Senachwine Creek Watershed Project – Phase 2

Purpose: This project improved water quality through the treatment of uplands and floodplains in the Senachwine Creek (ILDM01) watershed, and through the implementation of a watershed educational/training program. Cost-share assistance was provided to watershed landowners to implement a variety of upland and floodplain best management practices (BMPs). Upland BMPs included 54,507.5 feet of terraces, 13 acres of waterways, 36 water and sediment control basins, 1 grade stabilization structures, and one animal waste management system project. Floodplain BMPs included 12 ponds and 1 streambank stabilization project. This was a continuation of an effort initiated with FFY94 Section 319 funding. Senachwine Creek is a Category 1 watershed in the Unified Watershed Assessment. The project also included an educational component to increase public awareness concerning nonpoint source pollution control.

Project Location: Peoria County

Subgrantee: Illinois River Soil Conservation Task Force 2412 West Nebraska Avenue Peoria, Illinois 61604

Project Reports and Other Informational Materials:

"Senachwine Creek Watershed Nonpoint Source Control Project Phase 2 – Final Report." February 2003. Illinois River Soil Conservation Task Force.

Billi ilipi			Es	timated Load Re	duction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
312	Animal Waste Management System	1 no.	45	45	90
350	Sediment Basin	9 no.	233	439	874
362	Diversion	1 no.	?	51	534
378	Pond	12 no.	1,967	1,242	2,487
393	Filter Strip	1 ac.	177	214	427
412	Grassed Waterway	13 ac.	1,009	1,205	2,406
580	Streambank/Shoreline Stabilization	101 ft.	?	?	?
600	Terrace	54,507 ft.	3,658.2	2,958	5,672
638	Water & Sediment Control Structure	12,936 ft.	1,492.2	992	1,971
657	Wetland Restoration	90 ac.	?	?	?
00-14(319)ST					

BMP Implementation Summary:

Title: Cache River Reforestation Project – Phase 2

Purpose: This project converted environmentally sensitive croplands to forest through planting of native hardwood species. The project was targeted toward fields designated as "prior converted cropland" or "farmed wetland" with an emphasis on plantings in riparian corridors that provide streambank stability and/or connect fragmented habitats. Technical assistance was also provided for the improvement of already existing timber stands along with an information/education program. This was a continuation of an effort initiated with FFY96 Section 319 funding. The Cache River (ILIX01) is a Category 1 watershed in the Unified Watershed Assessment.

Project Location: Counties of Union, Johnson, Alexander, Pulaski, and Massac

Subgrantee: Shawnee Resource Conservation and Development Area R.R. 6, Box 255 1305 North Carbon Marion, Illinois 62959

Project Reports and Other Informational Materials:

"Cache River Reforestation Project, Phase 2 – Final Report." August 11, 2003. Shawnee Resource Conservation and Development Area.

BMP Implementation Summary:

			Estimated Load Reduction		
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	Nitrogen (Ibs/year)
612	Tree Planting	1,525.3 ac		10,286	20,577
00-15(319)JC					

Title: Chicago Botanic Garden Lake WRAS Implementation

Purpose: This project installed best management practices along 5,783 linear feet of shoreline on the Chicago Botanic Garden Lagoon (ILRHJA) to arrest shoreline erosion and reduce nonpoint source pollution while protecting or enhancing habitat and aesthetic qualities. The installation of shoreline stabilization practices was consistent with the recommendations of the Chicago Botanic Garden's "Aquatic Initiative – Lagoon Shoreline Restoration Master Plan" and "Clean Lakes Diagnostic/Feasibility Study," which together served as a watershed restoration action strategy. Shoreline stabilization practices included sheet-pilings, stone walls, cobbles, fiber rolls, A-jacks, lunkers, native grasses and shrubs, erosion control blankets, live fascines, branch-packing, and vegetated geogrids. The project also included an education component including meetings, tours, and construction of a webpage about the project and the shoreline restoration techniques.

Project Location: Cook County

Subgrantee: Chicago Botanic Garden 1000 Lake Cook Road Glencoe, Illinois 60022

Project Reports and Other Informational Materials:

"Chicago Botanic Garden Lakes Watershed Restoration Action Strategy Implementation – Final Report." August 2006. Chicago Horticultural Society – Botanic Garden.

BMP Implementation Summary:

-	-		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	5,783 ft.	56	56	111

00-16(319)AW

Title: Roof Greening Project Opening

Purpose: The Peggy Notebaert Nature Museum created and exhibited a temporary display to announce and describe the Roof Greening Project to be implemented under Illinois Federal Fiscal Year 2003 Section 319 grant. The display describes, in a non-technical manner, the proposed green roof system in terms of its design, construction, function, and benefits. The display also presents information on nonpoint source pollution from urban runoff, its impacts on the environment, and the importance of water quality protection. The Peggy Notebaert Museum also held a ceremony to 1) announce the Illinois EPA's partnership with the Peggy Notebaert Museum on the Roof Greening Project 2) recognize project participants, 3) explain the project's purpose and the importance of nonpoint source pollution control, and 4) encourage cooperation among public and private groups for enhanced environmental awareness and protection programs.

Project Location: Cook County

Subgrantee: The Peggy Notebaert Nature Museum 2430 Cannon Drive Chicago, Illinois 60614 Title: Salt Creek Nonpoint Source Outreach & Education

Purpose: This project developed a traveling education fair to educate the public about nonpoint source (NPS) pollution and the importance of protecting water quality in the Salt Creek (ILGL09) watershed. These traveling education fairs took place in three targeted communities. A start up kit of materials and resources were compiled to provide assistance to other communities who would like to assemble and host their own education fair and creek clean up. The Salt Creek Watershed Network website located at <u>www.saltcreekwatershed.org</u> was updated to include easy-to use formatting, design enhancements, more basic and technical content on NPS pollution and water quality appropriate to both less informed and more skilled users, more links, more conservation action, a kid-friendly section, and easier feedback interface.

Project Location: Cook County

Subgrantee: Salt Creek Watershed Network 8738 Washington Avenue Brookfield, Illinois 60513

00-18(319)BL

Title: Total Maximum Daily Load Development

Purpose: The Illinois EPA developed Total Maximum Daily Loads (TMDLs) and implementation plans for each pollutant within eight (8) watersheds on the 303(d) list through computer modeling. The eight (8) watersheds were also Category 1 watersheds in the Unified Watershed Assessment. Watersheds included Beaucoup Cr. (ILNC05), Casey Fork (ILNJ07), Bonnie Cr. (ILNCD01), Big Muddy R. (ILN12), Dutchman Cr. (ILADD01), Little Muddy R. (ILNE05), Little Wabash R. (ILC21), and Big Muddy R. (ILN11). 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.

Project Location:

Subgrantee: Camp, Dresser, & McKee

00-18(319)BY

- **Title:** Total Maximum Daily Load Development
- **Purpose:** The Illinois EPA developed Total Maximum Daily Loads (TMDLs) and implementation plans for each pollutant within the Fox River (ILCH01) watershed on the 303(d) list through computer modeling. The watershed was also a Category 1 watershed in the Unified Watershed Assessment. For the 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.
- Subgrantee: Tetra Tech EM, Inc. 200 East Randolph Drive Suite 400 Chicago, Illinois 60601

Project Reports and Other Informational Materials:

00-19(319)BY

Title: Old Salem Chautauqua Wetland Basin Project

- **Purpose:** This project created a 6.5 acre sediment basin with wetland plantings by restoring an existing breached pond that was originally build in 1926 directly adjacent to the Sangamon River (ILE24).
- **Project Location:** Menard County
- Subgrantee: Old Salem Chautauqua Homeowners Association P.O. Box 42 Petersburg, Illinois 62675

BMP Implementation Summary:

			Es	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	1 no.	19	1	1
00-19(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 the W. Br. DuPage R. (ILGBK05) watershed on the 303(d) list through computer modeling. The one (1) watershed was also a Category 1 watershed in the Unified Watershed Assessment. For the 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.

Project Location:

Subgrantee: CH2MHill 727 North First Street, Suite 400 St. Louis, Missouri 63102-2542

Project Reports and Other Informational Materials:

00-20(319)BY

Title: Total Maximum Daily Load Development

Purpose: The Illinois EPA developed Total Maximum Daily Loads (TMDLs) and implementation plans for each pollutant within the Charleston Side Channel Reservoir (ILRBC) watershed as identified on the 303(d) list through computer modeling. The watershed is also a Category 1 watershed in the Unified Watershed Assessment. 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 an implementation plan for TMDL attainment. The TMDL was approved by USEPA on September 10, 2003

Project Location: Coles County

Subgrantee: Tetra Tech, Inc. 10306 Eaton Place Suite 340 Fairfax, Virginia 22030

Project Reports and Other Informational Materials:

"Charleston Side Channel Reservoir Total Maximum Daily Load Report." August 2003. Tetra Tech Inc.

00-21(319)GE

FFY 2001 Federally Funded Section 319 Projects

- Title: Lake Branch WRAS (Nutrient Management Plan) Implementation
- Purpose: The Lake Branch was a Category 1 watershed in the Unified Watershed Assessment. This project began implementation of the Lake Branch WRAS (Sugar Cr./Lake Branch Watershed Pilot Project). The Lake Branch Watershed was a 303d listed water in a portion of the state which has comparatively high number of livestock operations. Sources identified in the Illinois Water Quality Report 1998 Update listed moderate to high for feedlots. Waste Utilization Plans were developed for livestock producers in the Lake Branch Watershed (ILOHA01) that were not presently required to have a Comprehensive Nutrient Management Plans (CNMPs) under the NPDES permit program. Additionally technical support was supplied to design upgraded waste handling facilities for operations in need of this service. Operations in need of upgrades were eligible for cost share for the upgrade. The overall goal of this project was to demonstrate to producers that Waste Utilization Plans should be an integral component to their livestock operation. The project also included cost-share assistance to watershed landowners through the Illinois Department of Natural Resources' (IDNR) Conservation 2000 program to implement a variety of upland and floodplain best management practices (i.e., waterways, grade stabilization structures, vegetative filter strips). The upland and floodplain BMPs were funded through the State Conservation 2000 program administered by IDNR and used as match against Section 319 funding for Waste Utilization Plans and upgraded waste handling facilities.

Project Location: Clinton County

Subgrantee: Southwestern Illinois Resource Conservation & Development Area, Inc. 406 East Main Mascoutah, Illinois 62258

Project Reports and Other Informational Materials:

"Lake Branch Watershed Restoration Action Strategy (WRAS) Implementation." June 2005. Southwestern Illinois RC&D, Inc.

BMP Implementation Summary:

•	2		Es	timated Load Re	duction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
312	Waste Management System	1 no.	?	1,002	6,807
313	Water Storage Structure	7 no.	?	4,256	27,580
342	Critical Area Planting	2 ac.	540	459	918
410	Grade Stabilization Structure	6 no.	?	?	?
412	Grassed Waterway	6.1 ac.	711	191	383
558	Roof Runoff Management	1 no.	?	927	6,807
638	Water & Sediment Control Basin	3,050 ft.	1,397.5	650	1,301
04.04/040\00	(10)				
01-01(319)CD	(JC)				

- **Title:** Nonpoint Source Pollution Book Phase 2
- **Purpose:** This project developed a "Magic School Bus" style book on urban NPS pollution for 3rd through 5th grades. The Secret Agent Worm project is a comprehensive educational program that centers around the antics of two zany superspy worms— Napoleon Soil and Jane Blonde. In their first adventure, *The Disappearing Earth*, Napoleon and Jane tackled the priority-one nonpoint pollution problem of soil erosion. In this project, the Secret Agent Worms now turn their eyes to urban runoff. This adventure takes them deep beneath the streets in city storm sewers, where they are trying to track down the source that is contaminating a river. The Urban Runoff Teacher's Packet includes a copy of the new book, *Beneath the City of Ooze*, along with Secret Agent Worm stickers, bookmarks, and a poster.

Project Location: Statewide

Subgrantee: The University of Illinois 801 South Wright Street Champaign, Illinois 61820

Project Reports and Other Informational Materials:

"The Secret Agent Worms Return in ... Beneath the City of Ooze." 2003. University of Illinois.

01-02(319)BL

Title: CREP & Watershed Management Education in Illinois

Purpose: This project established a partnership among Illinois EPA, Illinois Department of Natural Resources (IDNR), and University of Illinois to create two new jointly funded positions to address the information and education needs of various groups on CREP and watershed management. The primary audience was staff from agencies and organizations whose responsibilities cover conservation programs and watershed management. Both programs were used to assist individuals and basin/watershed groups in developing and implementing equitable, economically viable, resource-conserving strategies.

Project Location: Statewide

Subgrantee: The University of Illinois 801 South Wright Street Champaign, Illinois 61820

01-03(319)BL

Title: Chicagoland Environmental Network

Purpose: The Chicagoland Environmental Network facilitated the exchange of information and resources concerning nonpoint source pollution, water quality, and other related environmental issues. The public was provided access to information and volunteer

opportunities through a computer database of environmental organizations and agencies involved in habitat restoration, wetlands, prairies, watershed projects, urban gardening, revitalization programs, energy conservation, and recycling. This project also included the construction of a Clean Water Display and rain gardens.

Project Location: Cook County

Subgrantee: Chicago Zoological Society 3300 South Golf Road Brookfield, Illinois 60513

01-04(319)BL

Title: Greater Eliza Watershed Project – Phase 2

Purpose: The purpose of this project was to protect and improve the water quality of the Greater Eliza (ILMWD01) Watershed by reducing nonpoint source pollutants. The project provided cost-share assistance to watershed landowners to implement a variety of upland and floodplain best management practices (i.e., sediment basins, ponds, grassed waterways, grade stabilization structures, water and sediment control basins). An educational program was developed to educate the public about the importance of streambank stabilization and nonpoint source pollution. This project was a continuation of an effort initiated with FFY 1998 Section 319 funding.

Project Location: Mercer County

Subgrantee: Mercer County Soil & Water Conservation District 308 Southeast 8th Avenue Aledo, Illinois 61231

Project Reports and Other Informational Materials:

Greater Eliza Watershed Project Phase 2 – Final Report." May 12, 2004. Mercer County Soil and Water Conservation District.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year
350	Sediment Basin	3 no.	253	324	648
378	Pond	5 no.	1,228	962	1,924
410	Grade Stabilization Structure	3 no.	109	109	218
412	Grassed Waterway	3.1 ac.	247	223	450
600	Terrace	400 ft.	5	7	13
638	Water & Sediment Control Basin	22,323 ft.	2,506	1,257	2,511

01-07(319)JC

Title: Fox River WRAS Implementation Project

Purpose: The project included seven watershed restoration and protection projects as well as watershed-wide project coordination, technical assistance, and continued plan development. A "conservation engineer" was hired to provide technical assistance for best development and land management practices throughout the Nippersink Creek (ILDTK04) watershed, a tributary of the Fox River. The project stabilized 415 feet of eroding streambank along Tyler Creek (ILDTZP02). Approximately 140 feet of eroding streambank along Otter Creek (ILDTF02), a tributary to Ferson Creek and the Fox River, were stabilized and structures were installed to protect the quality of an adjacent 40 acre wetland park (Otter Creek Bend Wetland). A dam located on Brewster Creek (ILDT38) at the Elgin YWCA's Camp was removed to restore the impoundment to a meandering stream channel with a 4.9 acre wetland area and riparian buffer of native vegetation. A sediment monitoring program was implemented to demonstrate the effectiveness of the stream restoration and dam removal techniques. A biofiltration system was constructed in the center median of a parking lot in the West Main Street Park to drain and filter runoff to improve water quality by removing heavy metals and nutrients and reducing runoff volume. Stream restoration techniques (coir fiber rolls, A-jacks, lunkers, vegetated geogrids, deep rooted vegetation, and removal of non-native vegetation and undercut trees) were implemented along 5,790 feet of the Fox River and 6,060 feet of seven tributary At Greater Raceway Woods, an existing outlet structure of an streams. impoundment on an unnamed tributary of the Fox River (ILDT20) was modified and streambank and streambed stabilization was implemented along a 2,000 foot segment of the tributary.

Project Location: Counties of McHenry & Kane

Subgrantee: Northeastern Illinois Planning Commission 222 South Riverside Plaza, Suite 1800 Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Implementation of the Fox River Watershed Management Plan – Phase 1 – Final Report." October 2004. Northeastern Illinois Planning Commission.

"Improving the Fox River Watershed." (videotape, 16 min.) 2005. Kane County Forest Preserve District.

"Boone Creek Watershed Protection & Restoration Strategy – Executive Summary." January 2004. Boone Creek Watershed Alliance.

"Watershed Protection and Restoration Strategy for Boone Creek." May 23, 2003. Northeastern Illinois Planning Commission.

"Brewster Creek Dam Removal and Stream Restoration." (videotape) 2004. Kane County Department of Environmental Management.

"Preliminary Results of Dam Removal Analysis on Brewster Creek Near St. Charles, Illinois, 2003-2004." October 2004. Kane County Department of Environmental Management.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	14,745 ft.	872	872	1,745
657	Wetland Restoration	4.9 ac.	?	?	?
845	Infiltration Trench	295 ft.	1.2	1	3
910	Rock Outlet Protection	1 no.	?	?	?
01-08(319)SR					
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Title: Upper DesPlaines River WRAS Implementation Project

Purpose: The DesPlaines River is a Category 1 watershed in the Unified Watershed Assessment. This project began implementation of the Watershed Restoration Action Strategy for the Upper DesPlaines River (ILG30). The project included four watershed restoration and protection projects as well as watershed-wide project coordination, technical assistance, and continued plan development. A 4.0-acre native riparian buffer was restored along Indian Creek (ILGU02), a tributary to the DesPlaines River, within the Reed-Turner Woodland Nature Preserve. Stabilization practices (coir fiber rolls, soil lifts, live staking, and a-jacks) were installed along 1,200 feet of streambank (600 feet of stream) of a tributary to Sylvan Lake (ILRGZF) in the Indian Creek sub-watershed along with the restoration of 0.33 acres of bottomland floodplain and 1.0 acre of savanna woodland. Watershed Implementation Plans were developed for the Indian Creek sub-watershed. Approximately 2.0 acres of sedge meadow were restored within a 47-acre Illinois State Nature preserve to increase stormwater storage capacity and biofiltration of runoff. Approximately 2,970 feet of eroding shoreline on East Pond were stabilized through the installation of aquatic plantings, seeding, erosion blankets, minor regrading, shrubs, retaining wall, and terracing to create littoral vegetative shelves.

Project Location: Lake County

Subgrantee: Northeastern Illinois Planning Commission 222 South Riverside Plaza, Suite 1800 Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Indian Creek Watershed Implementation Plan." May 21, 2003. Applied Ecological Services, Inc.

"Upper Des Plaines Watershed Restoration Action Strategy Implementation - Final Report." September 30, 2003. Northeastern Illinois Planning Commission.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
410	Grade Stabilization Structure	2 no.	?	?	?
580	Streambank/Shoreline Protection	4,170 ft.	100	100	199
657	Wetland Restoration	7.3 ac.	8	12	25
910	Rock Outlet Structure	1 no.	?	?	?
01-09(319)JC					

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Title: Prentiss Creek Streambank Stabilization Project

Purpose: Approximately 6,790 feet of eroding streambank along Prentiss Creek (ILGBLA), a tributary of the East Branch DuPage River, were stabilized utilizing bioengineering techniques (vegetated gabions, regarding, vegetation, and stone shelf). The installed practices were designed to protect streambanks and enhance water quality. The East Branch DuPage River is a Category 1 watershed in the Unified Watershed Assessment for which a TMDL and implementation plan have been completed.

Project Location: DuPage County

Subgrantee: Village of Woodridge One Plaza Drive Woodridge, Illinois 60517-4199

Project Reports and Other Informational Materials:

"Prentiss Creek Streambank Stabilization Project Final Report." July 2003. Christopher B. Burke Engineering West, Ltd.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	6,790 ft.	256	256	512

01-10(319)ST

Title: Salt Creek Streambank Stabilization – Phase 3

Purpose: This project reduced erosion and nonpoint source pollution through the stabilization of eroding streambanks along a segment of Salt Creek (approximately 1,111 feet) located in Wood Dale, Illinois. Bioengineering techniques (.e., a-jacks and vegetated geo-grids) were used. This was the third phase of a Salt Creek (ILGL03) streambank stabilization effort in the City of Wood Dale initiated in 1998 with FFY 1994 Section 319 funding and continued with FFY 2000 Section 319 funding. Salt Creek (ILGL09) is a Category 1 watershed in the Unified Watershed Assessment and is scheduled for TMDL development over the next two years.

Project Location: DuPage County

Subgrantee: City of Wood Dale 404 North Wood Dale Road Wood Dale, Illinois 60191

Project Reports and Other Informational Materials:

"Salt Creek Stream Bank Stabilization Project – Phase 3 – Final Report." January 2003. City of Wood Dale.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,111 ft.	134	113	226
01-11(319)SR					

Title: Rivers Rising Video

Purpose: The Illinois EPA and the John G. Shedd Aquarium developed a ½ hour video documentary on the relationships between humans and riparian ecosystems, specifically the Amazon and Mississippi Rivers. The Video examines how human land uses influence water quality as well as the volume and velocity of runoff. The video features Section 319 projects, and others, that have been implemented to mitigate adverse environmental impacts and improve water quality in the Mississippi River watershed.

Project Location: Cook County

Subgrantee: John G. Shedd Aquarium 1200 South Lake Shore Drive Chicago, Illinois 60605

Project Reports and Other Informational Materials:

"Big Rivers Rising." (28.5 minute video) December 2002. John G. Shedd Aquarium.

01-12(319)SR

Title: Illinois Buffer Partnership

Purpose: Trees Forever and the Illinois Council on Best Management Practices (C-BMP) improved water quality by promoting riparian restoration in targeted watersheds (Blackberry Cr. (ILDTD02), Farm Cr. (ILDZZP03), & Kickapoo Cr. (ILEIE05)) within the Illinois River basin. This project promoted an integrated approach to managing riparian zones through the planting of trees, shrubs and grasses along streams; stabilizing streambanks; enhancing stream channels with natural materials; and employing constructed wetlands. The primary objectives of the project were to

increase the number and quality of riparian management systems in the watersheds by: 1) coordinating training sessions for local professionals and consultants; 2) providing informational and promotional programs and activities on the importance of stream corridors and the need for riparian restoration; and 3) assisting with the establishment of demonstration projects on rural landowner properties through the coordination of riparian management design, funding, and installation assistance to landowners.

Project Location: Counties of Kane, Kendall, Tazewell, & Logan

Subgrantee: Trees Forever 770 7th Avenue Marion, Iowa 52302

Project Reports and Other Informational Materials:

"Illinois Buffer Partnership – Final Report." December 15, 2003. Trees Forever.

BMP Implementation Summary:

-	-		Es	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
393	Filter Strips	9.3 ac.	228	378	748
580	Streambank/Shoreline Protection	3,300 ft.	12	11	22
612	Tree Planting	255 ac.	816	1,030	2,055
657	Wetland Restoration	35 ac.	?	29	124
01-13(319)JC					

Title: <u>Salt Creek TMDL Implementation Plan Execution – Phase 1</u>

Purpose: The Illinois EPA began executing the nonpoint source pollution control recommendations of the Salt Creek Total Maximum Daily Load (TMDL) implementation plan prepared with funding under the FFY1999 Section 319 grant. The project stabilized 12,500 feet of eroding streambanks along Salt Creek (ILGL09) in Elk Grove Village. Also, streambank, wetland, and upper buffer restoration techniques were applied along the Middle Fork of Salt Creek located in the Village of Westchester to reduce erosion, enhance infiltration, reduce runoff volume and velocity, improve water quality, and enhance aquatic habitat. The project also stabilized 1,000 feet of eroding streambed and 750 feet of eroding streambank and establish a vegetative riparian buffer along Spring Brook Creek, a tributary of Salt Creek, located at the Spring Brook Nature Center in the Village of Itasca. A stormwater outfall discharging to Spring Brook Creek was repaired and stabilized with a small wetland established at the outfall to further control erosion and filter stormwater before discharge to the creek. Finally, a vegetated swale (bio-filter or bio-retention) and a manufactured treatment system (oil and grit separators) were constructed in Brookfield to receive and treat runoff from the municipal parking lot and the roof of the Village Hall before it discharges to Salt Creek.

Project Location: Counties of Cook & DuPage

Subgrantee: Northeastern Illinois Planning Commission 222 South Riverside Plaza, Suite 1800 Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Salt Creek TMDL Implementation Plan Execution – Phase 1 – Final Report." August 2005. Northeastern Illinois Planning Commission.

"Salt Creek Watershed." (map brochure) 2004. Salt Creek Watershed Network & Northeastern Illinois Planning Commission.

"Salt Creek – A Resource Worth Preserving. Best Management Practices for Reducing Non-Point Source Pollution." June, 2004. Salt Creek Watershed Network & Northeastern Illinois Planning Commission.

"Salt Creek – A Resource Worth Preserving. Guide for Funding Watershed Improvements and Projects." June, 2004. Salt Creek Watershed Network & Northeastern Illinois Planning Commission.

"Salt Creek Headwater Recovery Project...at Wolf Road Prairie." (brochure) 2004 Save the Prairie Society.

BMP Implementation Summary:

		Estimated Load Reduction			
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
010	Oil and Grit Seperator	1 no.	?	?	?
580	Streambank/Shoreline Protection	16,850 ft.	481	449	899
584	Stream Channel Stabilization	1,000 ft.	28	23	47
657	Wetland Restoration	35 ac.	?	22	55
845	Infiltration Trench	240 ft.	?	?	4
910	Rock Outlet Protection	1 no.	?	?	?

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. Watersheds included ILDAG01 (Palmyra-Modesto, Hodges Cr., Otter, Hettick), ILOIL01 (Glen Shoals, Hillsboro Old), ILBPG09 (Vermilion, N. Fk. Vermilion R.), ILCA03 (Skillet Fk. Cr.), ILDA04 (Carlinville, Macoupin Cr. Briar Cr., Beaver Dam), ILBM02 (Paris Twin East & West, Sugar Cr.), ILDK17 (Evergreen, Mackinaw R. Six Mile Cr., Turkey Cr.), ILOKA01 (N. Fk. Kaskaskia R.), ILBEZX01 (Oakland, Walnut Point), ILODL02 Highland Silver), ILBPJ03 (Salt Fk. Vermilion R., Homer), ILD04 (Mauvaisse Terre R.), ILB007 (Little Vermilion R.), ILC19 (Little Wabash R.).

Project Location: Statewide

Subgrantee: Tetra Tech; Limno Tech; & Camp, Dresser, & McKee

01-15(319)BY

Title: <u>Governor Bond Lake TMDL Implementation Plan Execution – Phase 1</u>

Purpose: The Illinois EPA began executing the nonpoint source pollution control recommendations of the Governor Bond Lake Total Maximum Daily Load (TMDL) implementation plan. Three rural stormwater wetlands were constructed on tributaries to Governor Bond Lake (ILROP) to improve water quality, remove suspended and soluble nonpoint source pollutants, enhance habitat and aesthetics, and improve water retention and other beneficial hydrologic functions.

Project Location: Bond County

Project Reports and Other Informational Materials:

"Governor Bond Lake TMDL Implementation Phase 1 Stormwater Wetland Basins #1, #2, (Kingsbury Branch) & #3 (Dry Branch) – Final Report." December 1, 2005. Heartland Ecosystem Services, Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	24.54 ac.	5,975	1,200	1,280

01-16(319)ST

Title: Watershed Based Planning Assistance

Purpose: This project updated the Illinois EPA's draft "Guidance for Developing Watershed Implementation Plans in Illinois." This (WIP) guidance was revised to be consistent with the USEPA watershed based plan guidance, total maximum daily load (TMDL) implementation plan requirements, and current watershed planning principles. Other revisions were made to improve the format, content, and presentation of information contained within the Illinois EPA guidance. One workshop was held in northeastern Illinois and one in central Illinois to provide technical assistance to entities interested in undertaking comprehensive watershed management initiatives in Illinois. At the workshops, information was provided to assist these entities with the development of "watershed based plans" and educate them about the updated guidance document. The workshops also addressed the various forms of nonpoint source pollution, their impacts on the environment, methods for reducing nonpoint source pollution, and the importance of water quality protection.

Project Location: Cook County

Subgrantee: Northeastern Illinois Planning Commission Suite 1800, 222 Riverside Plaza Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Guidance for Developing Watershed Action Plans in Illinois." June 2007. Chicago Metropolitan Agency for Planning.

01-17(319)SR

Title: Fourth Ward Yard Nonpoint Source Pollution Control Demonstration

Purpose: This project constructed a bioretention area, dry-well catch basin, and infiltration drain field to reduce and treat stormwater runoff before it is discharged to the South Branch Chicago River (ILHC01). The site will be used as a demonstration site for City of Chicago Department of Environment, Department of Transportation staff.

Project Location: Cook County

Subgrantee: City of Chicago 30 N. LaSalle Chicago, Illinois 60602

Project Reports and Other Informational Materials:

"Fourth Ward Project Final Report." October 12, 2006. City of Chicago.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
845	Infiltration Trench	2 no.	?	0	7
945	Subsurface Drain	1 no.	?	0	3
01-18(319)CD					

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Title: Brewster Creek Monitoring Project

Purpose: This project continued the monitoring and assessment activities initiated under Financial Assistance Agreement Number 3190108 to demonstrate the effectiveness of the stream restoration and dam removal techniques implemented on Brewster Creek (ILDTZO01). Stream flow, sediment, geomorphic, and rainfall data were collected. Sediment delivery and hydraulic conveyance were monitored and evaluated so as to document water quality responses to the gradual dam removal technique. The monitoring program was designed to establish criteria on sediment delivery and hydraulic conveyance for the gradual removal of dams in northeastern Illinois. Furthermore, the project evaluated which field and laboratory methods will determine sediment compaction and stability when lake and sediment water levels are reduced by the gradual removal of the dam. The monitoring program included an assessment of sediment stability based upon existing data and newly gathered sediment data (i.e., sediment moisture and grain size). This aspect of the monitoring program was designed to evaluate the stability of the restored channel in Brewster Creek and the minimization of suspended sediment concentrations from the evolving stream channel when dams are gradually reduced.

Project Location: Kane County

Subgrantee: Kane County Department of Environmental Management 719 Batavia Avenue Geneva, Illinois 60134

Project Reports and Other Informational Materials:

"Erosion Dynamics of a Stepwise Small Dam Removal, Brewster Creek Dam Near St. Charles, Illinois." June 2007. Kane County Department of Environmental Management.

01-19(319)SR

Title: Lake Paradise Wetland Restoration Project

Purpose: The project restored twelve (12) acres of wetlands adjacent to Lake Paradise (ILRCG) to reduce erosion and nonpoint source pollution, and improve water quality through the installation of environmentally sound practices while protecting or enhancing aquatic habitat and aesthetic qualities. This project implements recommendations of a Phase 1 Diagnostic /Feasibility Study that was completed for Lake Paradise.

Project Location: Coles County

Subgrantee: City of Mattoon 208 N. 19th Street Mattoon, Illinois 61938-2838

Project Reports and Other Informational Materials:

"Lake Paradise Wetland Restoration Project – Final Report." September 2007. Goodpaster-Jamison, Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	12 ac.	?	8	48

01-20(319)SR

Title: Brewster Creek Restoration Project

Purpose: This project implemented stream restoration activities on Brewster Creek (ILDTZO01) located at the YWCA camp in Elgin, Illinois to reduce nonpoint source pollution and enhance aquatic habitat. The activities and modifications included 1) installation of a small control structure (i.e., stone riffle) to prevent excessive headcut of the channel, 2) installation of biotechnical streambank stabilization techniques along an eroding section of Brewster Creek, and 3) implementation of wetland restoration measures (clearing or herbicide application to remove non-native or undesirable vegetation, controlled burns, re-vegetation with native wetland plugs and seed) along Brewster Creek.

Project Location: Kane County

Subgrantee: Kane County Department of Environmental Management 719 Batavia Avenue Geneva, Illinois 60134

Project Reports and Other Informational Materials:

"Brewster Creek Restoration Project." April 2007. Kane County Department of Environmental Management.

01-22(319)SR

Title: <u>Silver Creek Stabilization</u>

Purpose: This project stabilized 975 feet of eroding streambanks along a segment of Silver Creek (ILGM01), a tributary of the DesPlaines River, located in Melrose Park, Illinois. Streambanks were stabilized using stone toe protection, slope re-grading, minor clearing of non-native vegetation, re-vegetation with native wetland plugs and seed, and riffles.

Project Location: Cook County

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

Project Reports and Other Informational Materials:

"Silver Creek Streambank Stabilization project, Phase 1, Tributary to the Des Plaines River – Section 319 Project Report." July 2007. Living Waters Consultants, Inc.

01-23(319)SR

- **Title:** Ralph Welch Gully Stabilization
- **Purpose:** This project stabilized a severely eroded gully located in the East Fork of the LaMoine River watershed. A 10 acre native prairie was restored at the Welch Educational Area located in McDonough County. Additionally, runoff controls were implemented on a small livestock operation in the watershed.
- **Project Location:** McDonough County
- Subgrantee: McDonough County SWCD 1607 West Jackson Street Macomb, Illinois 61455

Project Reports and Other Informational Materials:

"Ralph Welch Gully Stabilization – Final Report." September 2007. McDonough County Soil & Water Conservation District.

BMP Implementation Summary:

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		Estimated Load Reduction						
		Sediment	Phosphorus	Nitrogen				
BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)				
Waste Storage Structure	1 no.	23	174	523				
Grade Stabilization Structure	1 no.	153	153	306				
	BMP Name Waste Storage Structure	BMP Name Amount Waste Storage Structure 1 no.	Es Sediment BMP Name Amount (tons/year) Waste Storage Structure 1 no. 23	BMP Name Amount (tons/year) (lbs/year) Waste Storage Structure 1 no. 23 174				

01-24(319)JC

FFY 2002 Federally Funded Section 319 Projects

- **Title:** Priority Lake & Watershed Implementation Program
- Purpose: Section 319 funding will be used to supplement the existing State funded (Conservation 2000) Priority Lake and Watershed Implementation Program (PLWIP). PLWIP is a reimbursement grant program designed to support lake protection, restoration, and enhancement activities at "priority" lakes where causes and sources of problems are apparent, project sites are highly accessible, project size is relatively small, and local entities are in a position to quickly implement Funding is provided for in-lake BMPs (i.e., shoreline needed treatments. stabilization, aerator/destratifier installation) and near-lake BMPs (i.e., dry dams, filter strips) that reduce nonpoint source pollution or mitigate their impacts. The first round of PLWIP projects will stabilize eroding shorelines of Glen Shoals Lake (1,000 feet at \$35,000), Royal Lakes (895 feet at \$44,000), Lake Carlinville (275 feet at \$10,000), Kinkaid Lake (1,850 feet at \$40,000), and Herrin Old Lake (200 feet at \$16,000). Also, dredging (\$40,000) will be done on Charlie Brown Lake and a sediment basin (\$40,000) will be constructed for Veteran's Park Lake. A second round of PLWIP projects will install a new dam and spillway at Marine Reservoir (\$40,000), install rip rap at Governor Bond Lake (\$27,450), dredge Drost Park Lake (\$40,000), repair spillway and stabilize 300 feet of shoreline at Salem Reservoir (\$40,000), and continue dredging Charley Brown Lake (\$37,550).

NPS Program: Hydrologic Modification & Agriculture

- **Project Location:** Counties of Montgomery, Macoupin, Williamson, Clay, Jefferson, Madison, Bond, Marion, & McLean.
- Waterbody Name (ID): Glen Shoals Lake (ILROL), Royal Lakes (ILUDZL), Lake Carlinville (ILRDG), Kinkaid Lake (ILRNC), Herrin Old Lake (ILRNZD), Charlie Brown Lake (ILRCV), Veteran's Park Lake (ILSNC), Marine Reservoir, Governor Bond Lake, Drost Park Lake, Salem Reservoir

BMP Implementation Summary:

•	•		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	1 no.	?	?	?
580	Streambank/Shoreline Protection	4,820 ft.	163	138	275
007	Dredging	1 no.	?	?	?
014	Spillway Restoration	1 no.	?	?	?
02-0(319)AW					

Title: North Fork Embarras Watershed Project – Phase 3

Purpose: This project protected and improved the water quality of the North Fork Embarras River (ILBEF05) watershed by reducing nonpoint source pollution through a continuation of the efforts initiated with Section 319 funding under federal fiscal years 1996 and 2000. A comprehensive program of sediment and nutrient reduction was implemented that included watershed protection, information, and education efforts. Upland BMPs installed included 11 grassed waterways, 11 sediment basins, 19 water and sediment control basins, and 4 grade stabilization structures. Two streambank stabilization projects using longitudinal peak stone toe protection were installed on 250 linear feet of streambank on the main channel.

Project Location: Counties of Jasper and Clark

Subgrantee: North Fork Conservancy District Post Office Box 7, 110 East Main Casey, Illinois 62420

Project Reports and Other Informational Materials:

"North Fork Embarras Watershed Project – Final Report." September 2004. North Fork Conservancy District.

BMP Implementation Summary:

•			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	6 no.	280	115	234
378	Pond	5 no.	184	48	93
410	Grade Stabilization Structure	4 no.	50.5	13.5	28
412	Grassed Waterway	11.1 ac.	85	85	173
580	Streambank/Shoreline Protection	250 ft.	64	57	115
638	Water & Sediment Control Basin	7,300 ft.	322	83	164
02-01(319)JC					

Title: Nutrient Management Plan Implementation – Phase 2

Purpose: This project demonstrated to producers that Nutrient Management Plans should be an integral component to their farming operation. Producers were provided with an incentive payment to follow (not exceed) the nitrogen rate, timing, and application guidelines established by the University of Illinois within watersheds identified as having nitrate impaired waters. The short-term goal was to increase the number of acres managed according to nutrient management plans in the selected watersheds. The long-term goal was to maintain the number of acres managed with nutrient management plans in these watersheds after the project ends and to be able to demonstrate to other producers in the State the value of nutrient management planning. This project was a continuation of the effort initiated with Section 319 funding under FFY 2000. Traditional soil erosion control practices were also implemented under this project. The project also used aerial GPS video mapping to assess stream channel conditions within selected TMDL watersheds. The assessment data was used for effective planning for the implementation of conservation practices within TMDL watersheds for water quality protection and improvement.

Project Location: Statewide

Subgrantee: Illinois Department of Agriculture State Fairgrounds, P.O. Box 19281 Springfield, Illinois 62794-9281

Project Period: 01/01/03 through 08/31/07

Project Reports and Other Informational Materials:

"Nutrient Management Plan Implementation – Phase II – Final Report." March 7, 2008. Illinois Department of Agriculture.

BMP Implementation Summary:

	cincination outilinary.				
			Est	timated Load Re	duction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
329	Conservation Tillage	295.7 ac.	521	677	1,353
342	Critical Area Planting	0.75 ac.	80	79	156
410	Grade Stabilization Structure	8 no.	92.7	95	189
412	Grassed Waterway	36.65 ac.	944.3	972.4	1,945
512	Pasture & Hayland Planting	377.6 ac.	627.2	817	1,630
580	Streambank/Shoreline Protection	14,367 ft.	2,293	2,262	4,367
590	Nutrient Management	22,818 ac.	-	?	?
600	Terrace	2,636 ft.	78.1	99	198
638	Water & Sediment Control Basin	15,175 ft.	1,997.2	1,716	3,432
02-02(319)JC					

Title: Livestock Winter Feed Stations Demonstrations

Purpose: This project acted as a model for livestock operations throughout the state by creating "winter feed stations" that assist in the reduction of nonpoint source pollutants caused by the concentrated animal densities typically associated with winter feeding. The stations included downspouts and gutters, heavy use area protection, stacking areas, water storage/control structures, and water level drawdown/re-filling. One 30 head and two 60 head feed stations were constructed in different locations in the Sugar Creek (ILOH05) watershed and included manure storage. This practice reduced the number of locations that farmers have to occupy during wet a wet season to feed and manage their herd. The practice provided stabilized feeding areas to minimize erosion that in combination with the dry stacked waste also reduces the runoff and leaching of nutrients. The perimeter of the feed station was designed to accept this traffic through the use of geofabric and gravel to handle the herd and reduce ground destruction and material loss. The design, construction, and benefits of the stations were documented in a final report and an educational booklet.

Project Location: Counties of Madison & Clinton

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

Project Reports and Other Informational Materials:

"Livestock Winter Feed Stations – A Feed and Waste Management Structure Designed to Improve Water Quality." 2004. Southwestern Illinois Resource Conservation & Development Area.

BMP Implementation Summary:

BMP Code BMP Name	ementation ourmary.		Estimated Load Reduction		
BMD Codo	PMD Name	Amount	Sediment (tons/year)	Phosphorus	Nitrogen (Ibs/year)
570	Runoff Management System	3 no.	(10115/year) ?	<u>(lbs/year)</u> 74	<u>(ibs/year)</u> 534
600	Terrace	900 Ft.	28	28	56
02-03(319)CD					

Title: Green Roof System to Reduce Urban Runoff

Purpose: This project addressed urban runoff nonpoint source impacts to Salt Creek (ILGL09) and demonstrated innovative, infiltration based stormwater management approaches for highly impervious areas. A "green roof" system was designed and constructed on the Conservation Design Forum's office building to reduce runoff and pollutant loading and serve as a prototypical green roof to educate local communities and businesses about this management practice. A green roof was constructed on each of the three separate roofs on the CDF building and incorporated distinctly different designs (i.e., different thickness, growing media size, vegetation. etc.). Measurement equipment was installed to quantify reductions in runoff volume. The project also included an educational component involving tours and brochures. Salt Creek is a Category 1 watershed in the Unified Watershed Assessment and a TMDL and implementation plan is near completion.

Project Location: DuPage County

Subgrantee: Conservation Design Forum 375 West First Street Elmhurst, Illinois 60126

Project Reports and Other Informational Materials:

"A Green Roof Comparison Project: by Conservation Design Forum: Green Roof System to Reduce Urban Runoff – Final Report." January 2005. Conservation Design Forum.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
011	Green Roof System	0.16 ac.	?	?	1
	-				
02-04(319)ST					

- **Title:** NPS Program Implementation Assistance
- Purpose: The Association of Illinois Soil and Water Conservation Districts (AISWCD) dedicated one full time staff equivalent to act as a liaison between the AISWCD and the Illinois EPA and assist the Illinois EPA in implementing Illinois' Nonpoint Source Management Program. The liaison provided educational, informational and technical assistance to Soil and Water Conservation Districts (SWCDs), agricultural producers and other interested parties to help them better understand programs implemented under Sections 319(h), 305(b) and 303(d) of the Clean Water Act. The liaison encouraged SWCDs and producers to participate in watershed planning and nutrient management planning where appropriate. Three watershed planning processes were started (or continued) during the first year of this contract and four the second year. The liaison acted as a coordinating mechanism for the delivery of federal/state water quality related programs (i.e. EQIP, CPP, SSRP, CREP, 319 and ICLP). The liaison advertised programs, gave talks, met with landowners and acted as a tool to spread the word about how each of these programs can benefit water quality. The liaison acted as an overall facilitator for water quality coordination between SWCDs, Illinois EPA and other state/federal agencies.

Project Location: Statewide

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

Project Reports and Other Informational Materials:

"Nonpoint Source Program Implementation Assistance Final Report." April 2006. Association of Illinois Soil and Water Conservation Districts

02-05(319)CD

Title: Northern Illinois Community Assistance Office

Purpose: This project provided training to Natural Resource Conservation Service regional staff on water quality regulations and technical issues. Furthermore, the project encouraged the provision of nonpoint source pollution control related technical assistance to appropriate local agencies and organizations in northeastern Illinois. The Natural Resources Conservation Service's Northeastern Illinois Community Assistance Office was established to serve the six county northeastern Illinois area. This office provided technical assistance to soil and water conservation districts, planning commissions, county departments, townships and municipalities in northeastern Illinois. In addition to direct technical assistance, the staff of this office provided information/education and training assistance. The major focus of the office was on erosion/sediment control, water quality, and natural resource management.

Project Location: Counties of Lake, McHenry, Kane, DuPage, Cook, and Will

Subgrantee: USDA Natural Resources Conservation Service 603 East Diehl Road, Suite 131 Naperville, Illinois 60563-1476

02-06(319)SR

Title: Conservation Reserve Enhancement Program (CREP) Assistance

- **Purpose:** The Association of Illinois Soil & Water Conservation District (AISWCD) subcontracted with eleven (11) SWCDs to hire staff to facilitate the enrollment process of the Conservation reserve Enhancement Program (CREP) by setting appointments with producers to discuss CREP and conduct field visits to determine program eligibility. The SWCDs completed the Conservation Reserve Program 2 form, type the Conservation Plan of Operations, obtained the necessary producer signatures on required documents, and completed all state CREP enrollment forms. The SWCDs coordinated activities associated with land surveys, producer signatures on easements, and recording easements with the local abstract office. Field assistance was provided to the survey and design teams as well as construction assistance by evaluating the construction expenses and completing form AD-862.
- Project Location: Counties of Cass, Schuyler, McDonough, Hancock, Peoria, Tazewell, Fulton, Knox, Bureau, Marshall, Putnam, Sangamon, Menard, Christian, Shelby, Montgomery, Grundy, LaSalle, Kankakee, Iroquois, Morgan, Scott, and Greene, & Macoupin
- Subgrantee: Association of Illinois Soil & Water Conservation Districts 2520 Main Street Springfield, Illinois 62702

02-07(319)BL (JC)

Title: Lake Galena Watershed Project

Purpose: This project reduced nonpoint source (NPS) pollution delivered to Lake Galena (ILRMM) through the installation of best management practices (BMPs) adjacent to the lake and within the watershed. BMPs were used to stabilize approximately 2,250 feet of eroding shoreline along Lake Galena and establish, where possible, a buffer of native vegetation along the shoreline to reduce erosion, filter runoff, and enhance aquatic habitat. The project also involved the installation of approximately 1,140 feet of BMPs (i.e., rip-rap, jetties, minor stream regarding, fiber roll, vegetative stabilization) on Smallpox and Noname Creeks to stabilize eroded streambanks. Approximately 4,480 feet of BMPs (i.e., drainage way reshaping, grade stabilization, riprap, vegetative stabilization) were also installed to stabilize eroding drainage ditch banks.

Project Location: JoDaviess County

Subgrantee: Galena Territory Association 2000 Territory Drive Galena, Illinois 61036

Project Reports and Other Informational Materials:

Lake Galena Watershed Project – Final Report." April 2004. Galena Territory Association.

BMP Implementation Summary:

	Estimated Load R			limaleu Loau Re	auction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	3,390 ft.	634	633	1,266
581	Ditch Stabilization	4,480 ft.	159	163	320

Estimated Load Reduction

02-08(319)ST

Title: Morton Arboretum Parking Lot Runoff Control

Purpose: The Morton Arboretum enlarged their main parking lot, which lies adjacent to and between Meadow Lake (ILWGA) and the East Branch of the DuPage River (ILGBL10). The Arboretum installed best management practices (BMPs), which will reduce the amount of nonpoint source pollution to both waterbodies. The parking lot included bioswales, pervious materials, a gravel drainage layer, and a level spreader. The Project also included interpretive signs (Arboretum estimates 750,000 visitors annually), and pre- and post-workshops designed for city managers, developers, engineers, watershed planners and managers. The TMDL and implementation plan for the East Branch DuPage River is complete.

Project Location: DuPage County

Subgrantee: The Morton Arboretum 4100 Illinois Route 53 Lisle, Illinois 60532-1293

Project Reports and Other Informational Materials:

"The Morton Arboretum Main Parking Lot Runoff Control Project Final Report. January 2006. Christopher B. Burke Engineering West, Ltd.

BMP Implementation Summary:

			Es	timated Load Re	duction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
800	Urban Stormwater Wetland	1 no.	?	11	33
835	Urban Filter Strip	1.0 ac.	?	3	10
870	Level Spreader	1 no.	?	9	?
890	Porous Pavement	4.13 ac.	?	13	130
910	Rock Outlet Protection	1 no.	?	?	?

02-09(319)CD

- **Title:** North Branch Chicago River Watershed Project
- **Purpose:** Project partners implemented a variety of best management practices (BMPs) within the watershed. The types of BMPs (green roof, streambank stabilization, wetland restoration, detention basin retrofit, stormwater wetlands, bioswales, porous pavement) were identified in the North Branch Chicago River (ILHCC08) Watershed Management Plan. In addition, the project partners continued to implement an outreach program for adults and children focusing on nonpoint source pollution control and water quality. The applicant investigated and documented the need for changes to local administrative policy, procedure and regulations to meet the plan's goals and objectives.

Project Location: Counties of Cook and Lake

Project Reports and Other Informational Materials:

"North Branch Watershed Project Implementation – Phase 3 Final Report." July 15, 2007. Friends of the Chicago River.

			Es	timated Load Re	duction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
010	Oil & Grit Seperator	1 no.	?	0	3
011	Green Roof	0.1 ac.	?	?	?
580	Streambank/Shoreline Protection	10,500 ft.	1089	1072	2144
657	Wetland Restoration	4.88 ac.	43	48	120
666	Woodland Improvement	37 ac.	?	?	?
800	Urban Stormwater Wetland	4 no.	?	221	947
835	Urban Filter Strip	0.1 ac.	?	7	15
890	Porous Pavement	0.33 ac.	?	5	53

BMP Implementation Summary:

02-10(319)CD

Title: Addison Creek Streambank Stabilization

Purpose: This project reduced erosion and nonpoint source pollution through the stabilization of approximately 3,750 feet of eroding streambanks along a 2,063 foot segment of Addison Creek (ILGLA02) located in Northlake, Illinois. Bioengineering techniques (i.e., re-grading, A-jacks with vegetation, vegetation with Stabilator toe, rip rap, and vegetated gabion baskets) were used. Addison Creek is a tributary of Salt Creek. Salt Creek is a Category 1 watershed in the Unified Watershed Assessment and is included on Illinois 303d list. The TMDL and implementation plan for Salt Creek is nearly complete.

Project Location: Cook County

Subgrantee: Addison Creek Conservancy District P.O. Box 2381 Northlake, Illinois 60164

Project Reports and Other Informational Materials:

"Addison Creek Streambank Stabilization Project – Final Report." November 2004. Christopher B. Burke Engineering, Ltd.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	3,750 ft.	298	252	504
02-11(319)SR					

Title: Otter Lake In-Lake Sediment Control Project

Purpose: Section 319 funding was used to design and construct a low water sedimentation control structure in the north end of Otter Lake (ILRDF). This structure provided a controlled sediment basin, controlling sediment and associated pollutants entering from the West Fork of Otter Creek. The project also stabilized 5,000 feet of eroding shoreline through barge applied rip rap. Otter Lake is on Illinois' Section 303(d) list. Although TMDL development has not yet been scheduled, a watershed-based plan (Phase 1 Diagnostic-Feasibility Study) has been developed which identifies the pollutants causing water quality impairments and describes best management practices (BMPs) to be implemented to solve water quality problems.

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 In-Lake Sedimentation Control Project." June 1, 2007. Otter Lake Water Commission.

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BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	5,000 ft.	391	391	781
350	Sediment Basin	1 no.	6,349	61	122

02-12(319)CD

Title: E. Br. DuPage R. Trib. No. 6 Stream Restoration

Purpose: Approximately 1,379 feet of eroding streambank along an unnamed stream, tributary number 6 of the East Branch DuPage River (ILGBL10), was stabilized by restoring a more natural floodplain terrace (removal of non-native and invasive shrubs and trees, selective bank excavation, re-vegetation with native herbaceous plant species) and bioengineering techniques (re-grading, vegetation, erosion control blanket, coir fiber roll, A-jacks, riffles). The installed practices were designed to protect streambanks and enhance water quality. The East Branch DuPage River is a Category 1 watershed in the Unified Watershed Assessment and is included on Illinois 303d list. The TMDL and implementation plan for the East Branch DuPage River are complete.

Project Location: DuPage County

Subgrantee: Hobson Creek Community Council 23W420 Country Court Naperville, Illinois 60540

Project Reports and Other Informational Materials:

"Hobson Creek Corridor Restoration Project, Phase 1 Tributary 6 to the East Branch DuPage River – Section 319 Project Report." December 2004. Ted Gray & Associates, Inc.

BMP Implementation Summary:

-	-		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,379 ft.	120	120	239
02-13(319)ST					

Title: Vandalia Lake WQ Information & Education

Purpose: A total of six watershed newsletters were developed and published over the course of the Agreement Period and mailed to all the farmers in the Vandalia Lake (ILROD) watershed, the Vandalia Lake residents, and the residents of the City of Vandalia, various local libraries, school libraries and the Illinois EPA. A Geographic Information System (GIS) study was conducted and GIS overlays developed of the Watershed, depicting land use, soils (including location of all sodium soils), topography, and erosion potential. The Fayette County Soil & Water Conservation District planned, coordinated, and held a Lake Awareness day for all the fifth and sixth graders in the Vandalia School District. The event educated the youth on the importance of improving water quality and reducing non-point source pollution in the Watershed. A Nutrient Management Workshop (Workshop) was also organized and held for the landowners in the watershed.

Project Location: Fayette County

Subgrantee: Fayette County Soil & Water Conservation District 301 South Third Street Vandalia, Illinois 62471

02-14(319)BL

Title: Ravinia Neighbors Association Sewer Stencil

Purpose: The Ravinia Neighbors Association coordinated a storm drain stencil project to educate the citizens of Highland Park, Illinois about urban nonpoint pollution and how to reduce urban nonpoint source pollution within this community. A stenciling event was held on the five Saturdays during the month of May in 2003 and 2004. A Storm Drain Data Card was created and filled out for all storm drains that were stenciled. The data cards included a description of the area that surrounds the storm drain to be stenciled and identified all the possible nonpoint source pollutants within six feet of each side of the storm drains.

Project Location: Lake County

Subgrantee: Ravinia Neighbors Association P.O. Box 804 Highland Park, Illinois 60035

02-15(319)BL

Title: Secret Agent Worm Website

Purpose: This project developed and placed on-line (linked to Illinois EPA's website) an interactive website based on the "Secret Agent Worms" book series to help children understand nonpoint source pollution, its causes, sources, and solutions.

Project Location: Statewide

Subgrantee: The University of Illinois 801 South Wright Street Champaign, Illinois 61820

02-16(319)BL

Title: Rainfall Simulator/Crop Residue Demonstration

Purpose: The Embarras River Management Association purchased six Rainfall Simulator/Crop Residue Demonstration Units (Simulator) and trailers. The Simulators and trailers were supplied to six county Soil and Water Conservation Districts (SWCDs) that shared the Simulators' use and ownership with six other SWCDs all in the Embarras River Watershed. These Simulators were used by the Natural Resource Conservation Service and Soil and Water Conservation District personnel at conservation education field days and tours to demonstrate the value of crop residues in reducing soil erosion and nutrient leaching.

Project Location: Counties of Champaign, Vermillion, Douglas, Edgar, Coles, Cumberland, Clark, Jasper, Crawford, Richland, and Lawrence.

Subgrantee: Embarras River Management Association P.O. Box 278 Toledo, Illinois 62468

Project Reports and Other Informational Materials:

"Rainfall Simulator Unit Instruction Manual." 2004. Embarras River Management Association.

"Rainfall Simulator Presentations 2003 – 2004." 2004. Embarras River Management Association.

"Rainfall Simulator Units Project Final Report." October 18, 2004. Embarras River Management Association.

02-17(319)BL

Title: Big Rivers Rising

Purpose: The John G. Shedd Aquarium duplicated 700 copies of the videotape production "Big Rivers Rising" developed under Financial Assistance Agreement Number 3190112 between the Illinois EPA and the John G. Shedd Aquarium. The Recipient distributed these videotape copies in accordance with the Promotion and Distribution Plan (Plan) developed under Financial Assistance Agreement Number 3190112 between the Illinois EPA and the John G. Shedd Aquarium.

Project Location: Statewide

Subgrantee: John G. Shedd Aquarium 1200 South Lake Shore Drive Chicago, Illinois 60605

02-18(319)SR

Title: Manure Management Workbook

Purpose: This project revised, edited and standardized existing Microsoft Word/Excel files into a workbook format, printed 1,000 copes of the workbook, and produced a CD version of the workbook. Three workshops were held to educate individuals on how to best use the Manure Management Workbook.

Project Location: Statewide

Subgrantee: Board of Trustee of University of Illinois 109 Coble Hall, 801 South Wright Street Champaign, Illinois 61820

Project Reports and Other Informational Materials:

02-19(319)BL

Title: Tazewell County SWCD - Talbott Streambank Stabilization

Purpose: This project stabilized 650 feet of eroding streambanks on Horseshoe Creek, a tributary of the Mackinaw River, to reduce erosion in order to improve water quality and reduce nonpoint source pollution.

Project Location: Tazewell County

Subgrantee: Tazewell County Soil & Water Conservation District 2934 Court Street Pekin, Illinois 61554

Project Reports and Other Informational Materials:

"Illinois EPA Section 319 Small Project Final Report – Tazewell County SWCD- Talbott Streambank Stabilization Project." June 12, 2006. Tazewell County Soil & Water Conservation District.

BMP Implementation Summary:

•		Estimated Load Reduction			
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	640 ft.	159	136	270
02-20(319)CD	1				

Title: Long Lake Shoreline Stabilization

Purpose: The project stabilized 475 feet of severely eroding shoreline on a section of Long Lake (ILRTJ) located in Lake County, Illinois. The project arrested shoreline erosion and reduced nonpoint source pollution through the installation of environmentally sound practices (i.e., excavation and re-grading, permanent turf reinforcement matting, rock toe protection, native vegetation planting) while protecting or enhancing habitat and aesthetic qualities. Three educational signs were also installed at the project site, which describe, in a non-technical manner, the shoreline stabilization in terms of its design, construction, function, cost, and benefits.

Project Location: Lake County

Subgrantee: Northeastern Illinois Planning Commission 233 South Wacker Drive, Suite 800 Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Long Lake Shoreline Stabilization Project." February 2008. Chicago Metropolitan Agency for Planning.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	475 ft.	144	144	287
02-22(319)SR					

Title: Kickapoo Creek Monitoring Project

Purpose: This project provided support and coordination for the Kickapoo Creek Monitoring Project. Fecal Coliform bacteria sampling and analysis were conducted. Surface water monitoring of Kickapoo Creek were conducted along with the collection of stream flow data and fish and invertebrate sampling.

Project Location: McLean County

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

02-23(319)JC

Title: Web-Based Illinois Manure Management Planner

Purpose: This project helped fund the creation of a web-based Illinois Manure Management Planner (IMMP). This IMMP will streamline the task of developing a manure management plan for the producer. Important features of the IMMP include electronic transfer capability of required reports to agencies, recordkeeping, and email reminders of user-defined dates for inspections.

Project Location: Statewide

Subgrantee: The Board of Trustees of the University of Illinois 1901 South First Street, Suite A Champaign, Illinois 61820

02-24(319)JC

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.

02-(319)BY

FFY 2003 FEDERALLY FUNDED SECTION 319 PROJECTS

- Title: Lake Arlann Silt Abatement Project
- **Purpose:** This project retrofitted an existing 25 year old sediment basin, stabilized 1,700 feet of eroding ravines by using check dams, rip rap, and vegetation. The project also included dredging 483,455 cubic yards of silt from the lake. The cost of dredging (\$2,494,428) was paid entirely with local funding and used only as match under the project.

Project Location: Tazewell County

Subgrantee: Lake Arlann Drainage District 2009 Alameda Ct. Pekin, Illinois 61554

BMP Implementation Summary:

			Es	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
007	Dredging	1 no.	?	?	?
350	Sediment Basin	1 no.	40.6	119	774
580	Streambank/Shoreline Protection	1,700 ft.	122	122	245

Title: Evaluation of N Management Practices

Purpose: A field scale experiment was established to evaluate the impact of best management practices (BMPs) on the potential for N loss from tile lines and the economic production of corn. A total of 54 tile lines (27 in each of 2 fields) were instrumented to allow for collection of tile flow volume and to allow for collection of flow regulated composite samples collected on a weekly bases for nitrate-N analysis. The selected fields were in a corn-soybean rotation, with one in corn each year and the other in soybean. A total of 9 treatments, in a randomized complete block design with 3 replications were applied when the field was in corn. The treatments consisted of 5 fall applications -0, 78, 157, and 235 lb N/acre as anhydrous ammonia, 157 lb N/acre as anhydrous ammonia with N-Serve, 3 spring pre-plant applications-78, 157, and 235 lb N/acre as anhydrous ammonia, and 1 side-dress treatment, 157 lb N/acre as anhydrous ammonia. Corn grain yield and total N uptake were collected from each individual treatment. Soil samples were collected from all 54 plots in 30 cm increments to a 120 cm depth in the fall after harvest and analyzed for nitrate-N. Soil samples were collected from each plot area to a depth of 30 cm for Illinois N Soil Test analysis. Data collected in this study was used to prepare educational materials, including power point presentations, fact sheets, and an article for the Illinois Corn and Soybean Classics publication.

Project Location:

Subgrantee: University of Illinois Urbana – Champaign 1102 S. Goodwin Avenue Urbana, Illinois 61801

Project Reports and Other Informational Materials:

"Evaluation of N Management Practices on the Environmental Fate of N and Corn Yield." May 12, 2006. University of Illinois.

03-02(319)ST (JC)

Title: Conservation Practices Mapping and Assessment

- **Purpose:** This project expanded the conservation mapping system of the Illinois Department of Natural Resources (IDNR) to include best management practices implemented with funding under Section 319 of the Clean Water Act. The previous system maps only CRP, CREP, WHIP, and EQIP. This project mapped conservation activities occurring within Prairie Rivers RC&D and estimated environmental impacts. The Recipient 1) reviewed and modified the Illinois Conservation Practices Tracking System (ICPTS) to allow the addition of 319 projects, BMPs, and related characteristics; 2) developed an on-line, interactive web tool that allows staff to identify locations of existing 319 projects, digitize their locations, enter relevant ID's and other information; 3) entered 319 projects and conservation practices into the modified ICPTS using the on-line web tool and trained local staff in its use; and 4) modified Illinois EPA's existing sediment and load reduction estimation process to fit the data being entered into ICPTS.
- **Project Location:** Counties of Bureau, LaSalle, Livingston, Marshall, Putnam, Peoria, Stark, Tazewell, and Woodford.

Subgrantee: Prairie Rivers RC&D 400 Edwards Street Henry, Illinois 61537

Project Reports and Other Informational Materials:

"Conservation Practices Mapping and Assessment Project – Final Report." August 15, 2005. Prairie Rivers Resource Conservation & Development.

03-03(319)CD

Title: Watershed Planning in Northeastern Illinois

Purpose: The Northeastern Illinois Planning Commission (NIPC) provided coordination and technical assistance to entities (local governments, soil and water conservation districts, planning committees, businesses, volunteer organizations, etc.) undertaking comprehensive watershed management initiatives in northeastern Illinois. NIPC assisted these entities with the development of "watershed based

plans" and Watershed Implementation Plans (WIPs), as defined by the Illinois EPA. Priority was given to those watersheds that contain nonpoint source pollution control projects funded by the Illinois EPA and those within Clean Water Act 303(d) listed waters as identified by the Illinois EPA. NIPC assisted these entities in the compilation and evaluation of resource inventory data, formulation of water quality objectives, selection and implementation of nonpoint source pollution control practices, dissemination of information/education materials for water quality protection, and evaluating program success.

Project Location: Counties of Cook, Lake, McHenry, DuPage, Will, and Kane

Subgrantee: Northeastern Illinois Planning Commission Suite 1800, 222 South Riverside Plaza Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Thorn Creek Watershed Based Plan." December 2005. Northeastern Illinois Planning Commission.

03-04(319)SR

Title: Northeastern Illinois Stream Restoration Inventory

Purpose: The Northeastern Illinois Planning Commission (NIPC), in cooperation with Chicago Wilderness, created a set of recommended practices for stream restoration in northeastern Illinois and publicized these recommendations through training workshops for regulators, consultants, and municipalities, and through the production of an educational DVD about how to use stream restoration practices to enhance biodiversity in the region. The first phase involved conducting a survey of firms, agencies, and groups that have been involved in stream restoration in order to understand what techniques have been used, where they have been used, their applicability under different conditions, and their costs. The following restoration practices of interest included: streambank stabilization, riparian buffer restoration, instream restoration, channel re-meandering, and dam modification and removal.

Project Location: Counties of Cook, Lake, McHenry, DuPage, Will, and Kane

Subgrantee: Northeastern Illinois Planning Commission Suite 1800, 222 South Riverside Plaza Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Analysis of Northeastern Illinois Stream Restoration Projects." (DVD) October 2004. U.S. Geologic Survey.

"Stream Restoration Inventory Final Report." April 2005. Northeastern Illinois Planning Commission.

Title: Mitchell Park Ravine Watershed Project – Phase 2

Purpose: This project focused on soil erosion control and water quality in an urban watershed tributary to the Mississippi River (ILM03). Soil erosion control was improved in six areas within the Mitchell Park ravine watershed. Water quality improvements in these areas were determined to be a high priority by the East Moline Stormwater Committee. This project utilized proven soil erosion and sediment control and stormwater management techniques as planned in consultation with USDA-NRCS. Practices include culvert extensions, cover and re-vegetation, streambank regrading, installation of a drop structure, and placement of rip rap. This project was a continuation of a project initiated with funding under Illinois FFY 1998 Section 319 grant.

Project Location: Rock Island County

Subgrantee: City of East Moline 912 – 16th Avenue East Moline, Illinois 61244

Project Reports and Other Informational Materials:

"Final Report for City of East Moline Mitchell Park Ravine Watershed Project." September 2006. Landmark Engineering Group, Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
410	Grade Stabilization	1 no.	695	695	1,391
580	Streambank/Shoreline Protection	52 ft.	26	26	55
910	Rock Outlet Protection	1 no.	135	135	271

03-06(319)ST

Title: <u>Roof Greening Project</u>

Purpose: This project addressed urban runoff nonpoint source impacts to Lincoln Park North Pond (ILQZK) and demonstrated innovative, infiltration based stormwater management approaches for highly impervious areas. Green roof systems were designed and constructed on The Peggy Notebaert Nature Museum's roofs to reduce runoff and associated nonpoint source pollutants; improve water quality, habitat quality, and the quality of recreational opportunities; and provide educational opportunities. The project absorbed and filtered rainfall, thereby decreasing nonpoint source pollution to the North Pond while demonstrating how green roofs can be adapted to existing buildings and explaining their benefits to encourage widespread application in other areas. Interpretive signage and exhibit components were installed to educate visitors about nonpoint source pollution, its effect on water quality, and the environmental benefits and cost-effectiveness of rooftop gardens. A computer kiosk allows visitors to gather data about the green roofs, including temperature, wind, and rainfall. Visitors are able to compare data to conventional roofs. Visitors are able to create their own green roof using the computer and see results in efficiency, environmental impact, and aesthetics. Information on this computer can also be accessed over the Web. A 360-degree web camera was installed to allow visitors to take a virtual/remote tour of the green roof. The camera tour highlights the variety of plants, data collecting instruments, and environmental benefits. Interpretive labels including pictorial information reference roof views, explain the process of creating rooftop gardens, and illustrate environmental benefits, including nonpoint source pollution control. A software presentation was also developed to document the installation process and explain the technical aspects of installation, nonpoint source benefits, and other cost-benefit considerations.

Project Location: Cook County

Subgrantee: The Peggy Notebaert Nature Museum 2430 Cannon Drive Chicago, Illinois 60614

BMP Implementation Summary:

-	-		Es	timated Load Re	duction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
011	Green Roof System	0.34 ac.	?	?	1
342	Critical Area Planting	0.21 ac.	?	?	?

03-08(319)SR

Title: Muddy Waters Pond Restoration

Purpose: This project included 1,240 feet of shoreline stabilization along with wetland and upper prairie restoration around an in-stream detention basin on St. Joseph's Creek, a tributary of the East Branch DuPage River. The Village of Westmont and the Westmont Park District restored and naturalized the pond at Muddy Waters Park. Native plants, natural materials and a man-made wetland zone stabilized the banks and improved water quality and aided in the reduction of eutrophic conditions that occur in the pond each summer. Public outreach and education activities were also implemented. East Branch DuPage River is included on Illinois 303d list. The TMDL and implementation plan for the East Branch DuPage River are nearly complete.

Project Location: DuPage County

Subgrantee: Village of Westmont 31 West Quincy Westmont, Illinois 60559

Project Reports and Other Informational Materials:

"Final Report for Muddy Waters Pond Restoration Project." June 2006. Conservation Design Forum

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	<u>(lbs/year)</u>	<u>(lbs/year)</u>
580	Streambank/Shoreline Protection	1,240 ft.	86	86	173
03-09(319)ST					

Title: Villa Park Urban BMP Demonstration

Purpose: This project reduced nonpoint source pollution from a new police station constructed on the site of an existing parking lot in downtown Villa Park, Illinois. A 3,410 square foot green roof system was constructed on top of the new police station. The project also included construction of a parking lot and plaza that uses a system of pervious pavement (8,057 square feet) and biofiltration swales and underground storage (7,176 square feet) to treat and infiltrate runoff from the site. Precipitation and runoff leaving the site was measured during the project period and a hydrologic model was constructed to estimate the long term runoff reduction from the site relative to more conventional stormwater systems. The project also included tours and a brochure. Salt Creek (ILGL09) was a Category 1 watershed in the Unified Watershed Assessment and is included on Illinois 303d list. The TMDL and implementation plan for Salt Creek is nearly complete.

Project Location: DuPage County

Subgrantee: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181

Project Reports and Other Informational Materials:

"Villa Park Police Station Urban BMP Demonstration Project – A Project to Demonstrate Integration of Green Roof, Permeable Paving, and Bioswale Urban Runoff Systems." July 19, 2005. Village of Villa Park.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
011	Green Roof System	0.08 ac.	?	?	?
835	Urban Filter Strip	0.17 ac.	?	?	?
890	Porous Pavement	0.19 ac.	?	?	2

03-10(319)SR

Title: Springbrook Creek Stream Meandering

Purpose: This project recreated two miles of meandering stream channel combined with wetland and floodplain restoration along a segment of Springbrook Creek (ILGB11) located in the Springbrook Prairie Forest Preserve in DuPage County. The project created a meandering stream channel that is connected with the historic floodplain that will serve to absorb large volumes of water and dissipate energy in large storm events. The project reduced the erosive force of water in the stream, stabilized streambanks, and enhanced riparian habitat. Springbrook Creek is a tributary of the DuPage River.

Project Location: DuPage County

Subgrantee: Forest Preserve District of DuPage County 3 S. 580 Naperville Road Wheaton, Illinois 60187-8761

Project Reports and Other Informational Materials:

"Springbrook Creek Stream Meander Project – Final Report." June 30, 2008. Forest Preserve District of DuPage County.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
009	Stream Channel Restoration	10,990 ft.	3,237	1,619	1,619
03-11(319)CD					

Title: Governor Bond Lake Stormwater Basin No. 4

project continued executing the nonpoint source pollution control **Purpose:** This recommendations of the Governor Bond Lake Total Maximum Daily Load (TMDL) implementation plan. Under this project, a rural stormwater wetland was constructed on Dry Branch, a tributary to Governor Bond Lake (ILRDP), to improve water quality, remove suspended and soluble nonpoint source pollutants, enhance habitat and aesthetics, and improve water retention and other beneficial hydrologic functions. This basin also provides access near a paved road to facilitate visitation from members of the public, and was constructed and operated in such a manner as to allow for development of a public education program. In particular, this facility contains all the standard components seen in the other basins such as a forebay, control structure which mimics a natural hydroperiod in the forebay's littoral zone, a receiving wetland/marsh with meanders and interspersed terrestrial and aquatic zones to remove nutrients and coincidently create high quality habitat. In addition, the paved road access was further enhanced by addition of a boardwalk and observation deck constructed to allow viewing of all pertinent features.

Project Location: Bond County

Subgrantee: City of Greenville 404 South 3rd Street Greenville, Illinois 62246

Project Reports and Other Informational Materials:

"Governor Bond Lake TMDL Implementation Stormwater Wetland Basin #4 (Dray Branch) – Final Report." December 1, 2005. Heartland Ecosystem Services, Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	1.85 ac.	679	?	?

03-12(319)ST

Title: Fox Point North – Flint Creek Streambank Stabilization

- **Purpose:** This project stabilized 2,600 feet of eroding streambanks along an 1,300 foot segment of Flint Creek (ILDTZS01), a tributary to Lake Louise & Fox River, through the clearing on non-native vegetation, minor re-grading, and installation of native plant communities, boulders, J-hooks, cross vanes, crib wall, and other bioengineering techniques. The Fox River is included on Illinois' 303(d) list. The "Flint Creek Drainage Basin Needs Assessment Report" and "Flint Creek Watershed Action Plan" were completed in 1993 and 1994, respectively. Flint Creek is also part of the 1997 "Integrated Management Plan for the Fox River Watershed in Illinois."
- Project Location: Lake County

Subgrantee: Village of Barrington 200 South Hough Street Barrington, Illinois 60010

Project Reports and Other Informational Materials:

"Fox Point North Subdivision – Flint Creek Restoration Project." March 11, 2005. Applied Ecological Services, Inc.

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BMP Implementation Summary:

			Es	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	2,600 ft.	124	124	250
03-13(319)SR					

- **Title:** Lake Springfield Watershed BMP Implementation
- **Purpose:** By assisting USDA Natural Resources Conservation Service's Conservation Reserve Program, this project resulted in the installation of 599.8 acres of new filter strips along feeder streams within the Lake Springfield (ILREF) watershed by providing an additional \$200/ac. one-time incentive payment to landowners for the fifteen-year commitment.
- **Project Location:** Sangamon County
- Subgrantee: Sangamon County Soil & Water Conservation District 40 Adloff Lane, Suite 7 Springfield, Illinois 62703-4441

Project Reports and Other Informational Materials:

"Lake Springfield Watershed Best Management Practice Implementation Filter Strip Incentive Program – Final Report." January 2007. Sangamon County Soil & Water Conservation District.

BMP Implementation Summary:

			Estimated Load Reduction			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
393	Filter Strip	599.8 ac.	5,375	7,577	14,934	

03-15(319)CD

Title: Addison Creek Riparian Restoration

Purpose: This project restored 1.29 acres of riparian wetlands and stabilized eroding streambanks along an approximately 1,300-foot segment of Addison Creek (ILGA02) located in Northlake, Illinois. The design included re-grading streambanks and establishing a thirty (30) foot wide wetland (1.29 acres total) on each side of the 1,300 foot long stream segment. The wetland included emergent vegetation, scrub shrub interspersed plantings, and wet-mesic prairie. Bioengineering streambank stabilization practices were used (i.e., selective tree removal for increased light penetration; clearing invasive and controlling exotic plant species by cutting and herbiciding; planting native forbs, grasses, and sedges; re-grading; stone toe protection; riffles).

Project Location: Cook County

Subgrantee: City of Northlake 55 East North Avenue Northlake, Illinois 60164

Project Reports and Other Informational Materials:

"Addison Creek Riparian Restoration Project." June 2006. Christopher B. Burke Engineering, Ltd.

BMP Implementation Summary:

•	•		Estimated Load Re		duction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	2,250 ft.	124	124	249
657	Wetland Restoration	1.29 ac.	75	75	149
03-16(319)SR					

Title: <u>Hillsboro Lake Stormwater Wetland No. 1 Project</u>

- **Purpose:** This project involved the construction of a sediment basin and seven rock check dams along with the enhancement of a stormwater wetland on a ravine tributary to Hillsboro Lake (ILROT). The practices were designed to improve water quality, remove suspended and soluble nonpoint source pollutants, enhance habitat and aesthetics, and provide water retention and other beneficial hydrologic functions.
- **Project Location:** Montgomery County
- Subgrantee: City of Hillsboro 447 South Main Street Hillsboro, Illinois 62049

Project Reports and Other Informational Materials:

"Hillsboro Lake, City of Hillsboro, Illinois Stormwater Wetland Basin #1 (Southwest Ravine Tributary to Hillsboro Lake) Final Report." July 14, 2005. Heartland Ecosystem Services, Inc.

BMP Implementation Summary:

	ementation oanmary.		Estimated Load Reduction		
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (Ibs/year)	Nitrogen (Ibs/year)
350	Sediment Basin	1 no.	162	160	319
410	Grade Stabilization Structure	7 no.	?	?	?
800	Urban Stormwater Wetland	1 no.	?	?	?
03-18(319)ST					

Title: Lake Vermilion Shoreline Stabilization Project

Purpose: This project installed shoreline stabilization best management practices (i.e., riprap, geotextile fabric, vegetation) on 9,414 linear feet of eroded shoreline on Lake Vermilion (ILRBD) to reduce nonpoint source pollution and enhance aquatic habitat.

Project Location: Vermilion County

Subgrantee: Consumers Illinois Water Company 1300 West Fairchild Street Danville, Illinois 61832

Project Reports and Other Informational Materials:

"Phase 2 Implementation Project Lake Vermilion Shoreline Stabilization – Project Evaluation and Final Report." June 2005. Cochran & Wilken, Inc.

BMP Implementation Summary:

P-	ementation ourmary.		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	9,414 ft.	2,039.7	1,755.8	3,511.9

03-19(319)SR (JC)

Title: North Fork Vermilion River Watershed Project

- **Purpose:** This project installed eight ponds and two water and sediment control basins in the Lake Vermilion watershed and implemented extensive information and education programs. A conservation tour of other best management practices (BMPs) was also held.
- **Project Location:** Vermilion County
- Subgrantee: Vermilion County Soil & Water Conservation District 1905 – A US Route 150 Danville, Illinois 61832

Project Reports and Other Informational Materials:

"North Fork Vermilion River Watershed Project – Phase III Final Report." December 2007. Vermilion County Soil & Water Conservation District

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
378	Pond	8 no.	889	417	832
638	Water & Sediment Control Basin	14,375 ft.	241	86	172

03-20(319)CD

Title: Charleston SCR Sedimentation Basin

Purpose: This project involved the installation of 431 feet of shoreline stabilization and construction of an in-lake sedimentation control structure in the northwest cove

of the Charleston Side-Channel Reservoir (ILRBC). The structure was designed to remove suspended and soluble nonpoint source pollutants, and enhance habitat and aesthetics. The TMDL and implementation plan for the Charleston Side-Channel Reservoir (ILRBC) is complete.

Project Location: Coles County

Subgrantee: City of Charleston 520 Jackson Avenue Charleston, Illinois 61920

Project Reports and Other Informational Materials:

"Charleston Side-Channel Reservoir Sediment Basin Project Final Report." July 10, 2007. City of Charleston.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	1 no.	899	563	1,125
580	Streambank/Shoreline Protection	431 ft.	27	27	55

03-21(319)CD

Title: <u>Salt Creek Streambank Stabilization – Elk Grove Village</u>

Purpose: This project reduced erosion and nonpoint source pollution through the stabilization of 4,497 feet of eroding streambanks along a segment of Salt Creek (ILGL09) located in Elk Grove Village, Illinois. Bioengineering techniques (i.e., A-jacks, selective tree removal, native vegetation planting, erosion control blankets) were used.

Project Location: Cook County

Subgrantee: Village of Elk Grove Village 901 Wellington Avenue Elk Grove Village, Illinois 60007-3499

Project Reports and Other Informational Materials:

"Salt Creek Streambank Stabilization – Elk Grove Village – Final Report." July 2006. Village of Elk Grove Village.

BMP Implementation Summary:

			Estimated Load Reduction			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
580	Streambank/Shoreline Protection	4,497 ft.	262	222	444	

03-22(319)SR

Title: Lyman Woods Streambank, Streambed & Gully Stabilization

- **Purpose:** This project installed best management practices (BMPs) to stabilize eroding streambanks, improve water quality, reduce nonpoint source pollution, and enhance aquatic habitat along 2,804 feet of streambank on Lacey Creek (ILGBL10), a tributary of the East Branch of the DuPage River. Bioengineering techniques (i.e., cobble toe, artificial riffles, streambank re-sloping, cross vanes, A-jacks, fiber roll, and vegetative stabilization) were used. The East Branch DuPage River is a Category 1 watershed in the Unified Watershed Assessment and is included on Illinois 303d list. The TMDL and implementation plan for the East Branch DuPage River is complete.
- **Project Location:** DuPage County
- Subgrantee: Downers Grove Park District 2455 Warrenville Road Downers Grove, Illinois 60515

Project Reports and Other Informational Materials:

"Lyman Woods Streambank Stabilization PSA 2, Phase 1 & 2 Tributary to the East Branch DuPage River – Section 319 Project Report." December 2007. Living Waters Consultants, Inc.

BMP Implementation Summary:

-	-		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	2,804 ft.	222	222	445
03-23(319)ST					

Title: Integrated Watershed Planning for Rayse Creek

The Recipient in conjunction with the Rayse Creek Watershed Planning Purpose: Committee developed a comprehensive Watershed Management Plan (Plan) for the Rayse Creek (ILNK01) watershed. The Plan includes a water resource specific description of all existing or potential water quality problems, their impacts, and the data used to identify said problems. The assessment also includes a water resource specific description of high quality waters in watershed. The Plan was developed to improve water quality by controlling nonpoint source pollution. The Plan contains a problem statement, goals and objectives, determinations of the type and location of causes and sources of impairments, alternatives for watershed protection, and the establishment of priorities for watershed improvements. The Plan includes site-specific Best Management Practices (BMPs) implementation recommendations for nonpoint source pollution control. Potential BMPs were identified for prevention, remediation, restoration, and maintenance to achieve water quality and natural resource objectives. The TMDL and implementation plan for Rayse Creek are complete.

Project Location: Jefferson County

Subgrantee: Southern Illinois University - Carbondale Department of Forestry Carbondale, Illinois 62901

Project Reports and Other Informational Materials:

"Rayse Creek Watershed Management Plan." October 2006. Department of Forestry, Southern Illinois University Carbondale.

03-24(319)ST

Title: Stream Restoration Phase 2 - Trib. 6 to E. Br. DuPage R.

Purpose: Approximately 731 feet of eroding streambank along an unnamed stream, tributary number 6 of the East Branch DuPage River (ILGBL10), were stabilized using bioengineering techniques (rip rap, A-jacks, rock riffles, re-grading, vegetated geogrid, fiber roll, vegetation) and a 1.13 acre riparian buffer was also established to improve water quality in the stream. The East Branch DuPage River is a Category 1 watershed in the Unified Watershed Assessment and is included on Illinois 303d list. The TMDL and implementation plan for the East Branch DuPage River is complete.

Project Location: DuPage County

Subgrantee: Hobson Creek Community Council 23W420 Country Court Naperville, Illinois 60540

Project Reports and Other Informational Materials:

"Hobson Creek Corridor Restoration Project, Phase 2. Tributary 6 to the East Branch DuPage River – Final Report." November 2005. Ted Gray & Associates, Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	731 ft.	53	53	106
657	Wetland Restoration	1.13 ac.	?	?	?
03-25(319)ST					

Title: <u>RiverWorks Exhibit</u>

Purpose: This project will educate museum visitors about Illinois rivers and allow them to explore the many jobs that rivers take on, discover the ways in which humans try to

make rivers work for us, experiment with different river projects, and find out about the many changes that have been made to the Chicago River.

Project Location: Cook County

Subgrantee: The Peggy Notebaert Nature Museum 2430 Cannon Drive Chicago, Illinois 60614

03-26(319)BL

Title: <u>A Sustainable Community Based Approach to Reducing NPS Pollution</u>

Purpose: This project demonstrated the value of using green infrastructure in Addison Creek (ILGLA01) to address nonpoint source pollution. The project installed and monitored a 240 square foot rain garden of native plants and a 220 square foot rain garden of turf grass to demonstrate cost-effective, community based best management practices (BMPs) to reduce nonpoint source pollution in urban and urbanizing areas.

Project Location: Cook County

Subgrantee: Center for Neighborhood Technology 2125 West North Avenue Chicago, Illinois 60647

Project Reports and Other Informational Materials:

"A Sustainable Community-Based Approach to Reducing Non-Point Source Pollution." January 2009. Center for Neighborhood Technology.

Dim implementation ourmary.			Estimated Load Reduction		
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/vear)	Nitrogen (lbs/year)
013	Rain Garden	2 no.	?	?	?
03-27(319)JC					

BMP Implementation Summary:

Title: Northeastern Illinois Stream Restoration Inventory

Purpose: The U.S. Geological Survey conducted an inventory of stream restoration projects (i.e., streambank stabilization, riparian buffer restoration, in-stream restoration, channel re-meandering, and dam modification and removal) implemented in northeastern Illinois with funding under Section 319 of the Clean water Act. Information was collected from thirty-four restoration projects installed before the major flooding that occurred in the summer of 2007. Sites were selected to represent a sample of each restoration and stabilization practice in both urban and urbanizing watersheds, and under different geomorphic settings.

The inventory included thorough photographic documentation, compilation and investigation of design plans, and an examination of flow records.

Project Location: Statewide

Subgrantee: U.S. Geological Survey 1201 W. University Ave., Suite 100 Urbana, Illinois 61801

Project Reports and Other Informational Materials:

"Illinois Stream Restoration and Stabilization Projects – An Inventory of Illinois Stream Best Management Practices." September 2008. U.S. Geological Survey.

03-28(319)SR

Title: Watershed Planning to Protect the Kishwaukee River Basin

Purpose: This project produced watershed-based plans in three subwatersheds of the Kishwaukee River Basin. The subwatersheds included the Upper Kishwaukee River (ILPQ13), Lawrence Creek (ILPQEC-A), and Beaver Creek (ILPQD07). These watershed-based plans addressed USEPA's 9 minimum elements of a watershed-based plan. This project also addressed the recommendations found in "Framework for a Basin-wide Planning and Protection Pilot" developed by the Basinwide Management Advisory Group, May 30, 2004.

Project Location: Counties of McHenry and Boone

Subgrantee: Chicago Metropolitan Agency for Planning 233 South Wacker Drive, Suite 800 Chicago, Illinois 60606

Project Reports and Other Informational Materials:

"Upper Kishwaukee River Watershed Plan – Technical Report." November 2008. Chicago Metropolitan Agency for Planning.

"Lawrence Creek Watershed Plan – Technical Report." September 2008. Chicago Metropolitan Agency for Planning.

"Beaver Creek Watershed Action Plan – Technical Report." September 2008. Chicago Metropolitan Agency for Planning.

03-29(319)JC

Title: Hyacinth Place: Model Permeable Paver System

Purpose: This project constructed a permeable pavement parking lot to reduce nonpoint source pollution to Lake Michigan from the 500 Hyacinth Place development in

Highland Park, Illinois. The new permeable parking lot (7,392 square feet) and underground storage was designed to filter runoff so as to remove suspended sediment, heavy metals, oil and grease, nutrients, and other suspended and soluble nonpoint source pollutants as well as reduce runoff volume and velocity while providing other beneficial hydrologic functions. The permeable pavement was designed so as to retain smaller rain events within the voids of the porous paving drainage layer and evaporated over time.

Project Location: Lake County

Subgrantee: Hyacinth Place LLC 666 Dundee Road, Suite 1102 Northbrook, Illinois 60062

Project Reports and Other Informational Materials:

"500 Hyacinth Place, Highland Park, Illinois: A Model for Sustainable Affordable Development – Final Report. August 28, 2008. Brinshore Development LLC.

BMP Implementation Summary:

			Estimated Load Reduction		
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (Ibs/year)	Nitrogen (Ibs/year)
890	Porous Pavement	0.17 ac.	?	0	2
03-30(319)SR	1				

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.

03-(319)BY

FFY 2004 FEDERALLY FUNDED SECTION 319 PROJECTS

- **Title:** Priority Lake & Watershed Implementation Program
- Purpose: Section 319 funding was used to supplement the existing State funded (Conservation 2000) Priority Lake and Watershed Implementation Program (PLWIP). PLWIP is a reimbursement grant program designed to support lake protection, restoration, and enhancement activities at "priority" lakes where causes and sources of problems are apparent, project sites are highly accessible, project size is relatively small, and local entities are in a position to quickly implement needed treatments. Funding is provided for in-lake BMPs (i.e., shoreline stabilization, aerator/destratifier installation) and near-lake BMPs (i.e., dry dams, filter strips) that reduce nonpoint source pollution or mitigate their impacts. The first round of PLWIP projects stabilized eroding shorelines of Cedar Lake (200 ft.), Highland Old City Lake (500 ft.), Pana Lake (1,100 ft.), and Walton Park Lake Also, stabilization utilizing an aggregate breakwater to create an (1.000 ft.). intermediate wetland on Kinkaid Lake and planting 20,000 aquatic plant seedlings at Paradise Lake. The second round of PLWIP projects stabilized eroding shorelines of McLeansboro City Reservoir (200 ft.), Greenfield Lake (1,000 ft.), and Walton Park Lake (1,000 ft.). And 25,000 cubic yards of sediment were removed from Lake Charlie Brown.
- Project Location: Counties of Jackson, Madison, Shelby, Montgomery, Coles, Clay, Hamilton, & Greene

BMP	Implementation Summary:	
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					Reduction	
			Sediment	Phosphorus	Nitrogen	
BMP Code E	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
580 5	Streambank/Shoreline Protection	6,200 ft.	109	95	185	
657 \	Wetland Restoration	0.2 ac.	?	?	?	
007	Dredging	1 no.	?	?	?	

04-01(319)AW

Title: Of Time and the River

Purpose: This educational project combined archaeology, ethnohistory, several biological sciences, geology, and economics to survey the 12,000-year history of human use of the Illinois River. A web-based exhibit was developed to 1) educate the public about the 12,000 year history of the Illinois River, 2) increase public awareness of nonpoint source pollution and associated problems and how these have adversely impacted the Illinois River through time, 3) highlight what has been done to resolve these problems, and 4) discuss what still needs to be done. The historical background provides a context for understanding changes that have occurred through time due to human activities in and around the river, specifically how nonpoint source pollution began and developed, the consequences of nonpoint source pollution for aquatic populations and those who rely on aquatic resources, and how the 1972 Clean Water Act and subsequent amendments initiated on-going programs to correct nonpoint source pollution.

Project Location: Sangamon County

Subgrantee: Illinois State Museum Society 502 South Spring Street Springfield IL 62702

Project Reports and Other Informational Materials:

04-02 (319)BL

Title: Green Roof Project on the McKessen Building, Rock Island

Purpose: River Action, Inc. installed a green roof system on the roof (10,100 square feet) of the McKessen Building in downtown Rock Island. The project addressed urban runoff impacts to the Mississippi River and demonstrated innovative, infiltration based stormwater management approaches for highly impervious areas to address pollution problems and reduce flooding. Access to the rooftop was provided for tours and case studies. Public workshops and seminars were held for adults and school-age children. Street side and rooftop interpretive signage was installed. A runoff measurement system was designed and installed on both the green roof and a control roof.

Project Location: Rock Island County

Subgrantee: River Action, Inc. Post Office Box 964 Davenport, Illinois 52805-0964

Project Reports and Other Informational Materials:

"A Green Roof Project on the McKesson Building by River Action: A green Roof System to Reduce Urban Runoff – Final Report." September 2008. River Action, Inc.

BMP Implementation Summary:

-	-		Estimated Load Reduction		
		A	Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	<u>(lbs/year)</u>	<u>(lbs/year)</u>
011	Green Roof	0.23 ac.	?	11	0
04-03 (319)ST					

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

Subgrantee: Not Applicable

04-04 (319)CD

Title: North Fork Embarras River Watershed Project – Phase 4

Purpose: This project protected and improved the water quality of the North Fork Embarras River (ILBEF05) watershed by reducing nonpoint source pollution through a continuation of the efforts initiated with Section 319 funding under federal fiscal years 1996, 2000, and 2002. A comprehensive program of sediment and nutrient reduction was implemented that included watershed protection, information, and education efforts. Best management practices were installed for both upland watershed protection and streambank protection.

Project Location: Counties of Jasper and Clark

Subgrantee: North Fork Conservancy District Post Office Box 7, 110 East Main Casey, Illinois 62420

Project Reports and Other Informational Materials:

"North Fork Embarras River Watershed Project – Phase 4 – Final Report." November 8, 2007. North Fork Conservancy District.

BMP Implementation Summary:

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			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
378	Pond	11 no.	724	120	245
410	Grade Stabilization Structure	4 no.	70	16	33
412	Grassed Waterway	7.5 ac.	49	49	93
580	Streambank/Shoreline Stabilization	4,584 ft.	1,355	1,219	2,437
600	Terrace	2,900 ft.	38	12	26
638	Water & Sediment Control Basin	990 ft.	34	16	32
04-05(319)SR	. (JC)				

Title: <u>Protecting Water Quality in Urban Centers of Illinois</u>

Purpose: This project maintained and improved water quality in urbanized areas by creating a partnership between urban soil and water conservation districts (SWCDs) and Illinois EPA. Section 319 funds, in combination with local matching dollars or inkind services, were used to undertake special nonpoint source pollution prevention education/information projects aimed at local government land use decision makers and the development community. Grant funds to SWCDs were used to develop the technical capabilities of SWCD staffs to develop and deliver technical educational materials or to conduct educational workshops or seminars.

Project Location: Statewide

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

Project Reports and Other Informational Materials:

"Protecting Water Quality in Urban Centers Project – Final Report." July 2007. Association of Illinois Soil & Water Conservation Districts.

04-06(319)CD

Title: Greater Eliza Watershed Project – Phase 3

Purpose: The purpose of this project was to protect and improve the water quality of the Greater Eliza Creek (ILMWD01) watershed by reducing nonpoint source pollutants. The project provided cost-share assistance to watershed landowners to implement a variety of upland and floodplain best management practices (ponds, grassed waterways, water and sediment control basins, and critical area planting). An educational program was developed to educate the public about the importance of streambank stabilization and nonpoint source pollution. This project was a continuation of an effort initiated with FFY 1998 and FFY 2001 Section 319 funding.

Project Location: Mercer County

Subgrantee: Mercer County Soil & Water Conservation District 308 Southeast 8th Avenue Aledo, Illinois 61231

Project Reports and Other Informational Materials:

"Greater Eliza Watershed Project – Phase III – Final Report." December 2007. Mercer County Soil & Water Conservation District.

BMP Implementation Summary:

			Es	eduction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
342	Critical Area Planting	5 ac.	19	21	42
378	Pond	8 no.	585	339	674
412	Grassed Waterway	0.4 ac.	31	31	61
638	Water & Sediment Control Basin	22,525 ft.	1,371	814	1,629

04-07(319)SR (JC)

- **Title:** Kaskaskia River Watershed Hypoxia Analysis
- **Purpose:** This project utilized existing water quality data, which had been previously collected by state and federal sources, to develop a GIS that will allow for a greater understanding of the sources of entry for nutrients (nonpoint source) into the watershed. The advantages of GIS include the ability to incorporate additional data; such as current and historical land use, as well as the ability to develop information at local, regional, subwatershed or watershed levels. This project produced paper and electronic maps, with associated data, that allows local soil and water conservation districts to better understand the impact that their region is having on the overall hypoxia phenomenon. The data developed as a component of this project can be incorporated into the development and implementation of TMDLs, which will lead to an overall reduction in the factors that cause hypoxia.
- Project Location: Counties of Bond, Clinton, Madison, Monroe, Randolph, St. Clair, & Washington.
- Subgrantee: Southwestern Illinois Resource Conservation and Development, Inc. 406 East Main Street Mascoutah, Illinois 62258

Project Reports and Other Informational Materials:

"Kaskaskia River Watershed Hypoxia Analysis. January 2007. Southwestern Illinois Resource Conservation and Development, Inc.

04-09(319)CD

Title: Watershed Based Planning

Purpose: This project coordinated the development of four (4) watershed-based plans designed to improve water quality by controlling nonpoint source pollution. The four watersheds included Evergreen Lake (ILSDA), Salt Fork Vermilion River (ILBPJ10), Clinton Lake (ILREI)/Salt Creek, and lower part of Upper Sangamon River. The Association of Illinois Soil & Water Conservation Districts (AISWCD) provided oversight and review to ensure consistency with Illinois EPA and USEPA guidance. The project also included the installation of a 7,900 square foot porous pavement drive and parking lot system at the AISWCD office to be used for information/education and outreach purposes to local SWCD staff and other entities interested in parking lot improvement projects.

Project Location: Sangamon, McLean, Champaign, Dewitt, and Macon Counties

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

Project Reports and Other Informational Materials:

"Watershed Based Planning Initiative – Final Report." March 2009. Association of Illinois Soil & Water Conservation Districts

"Watershed Implementation Plan for the Upper Salt Fork of the Vermilion River." May 2007. Champaign County Soil and Water Conservation District.

"Evergreen Lake Watershed Plan." 2008. Evergreen Lake Watershed Planning Committee - McLean County Soil and Water Conservation District.

"Lower Part of the Upper Sangamon River Watershed Resource Plan." June 25, 2008. Macon County Soil and Water Conservation District.

"Clinton Lake Watershed Management Plan." June 29, 2007. Clinton Lake Planning Committee - DeWitt County Soil and Water Conservation District.

04-10(319)CD

Title: Homer Lake: Making it Clear.. One Household, One field at a Time

Purpose: The Champaign County Forest Preserve District (CCFPD) and Champaign County Soil and Water Conservation District (CCSWCD) worked cooperatively to inform agricultural and urban landowners within the Homer Lake watershed how they can cost-effectively reduce nonpoint source pollution inputs to the lake. In addition to informing large groups in workshops, an effort was made to individually contact all agricultural producers to help them plan and implement the practices best suited for their operation. Incentive payments were offered to implement agricultural practices (nutrient management, variable rate application technology, deep placement of phosphorus, vegetative buffers, and strip till) that will provide the greatest benefit to the lake. A specialized toolbar was made available for deep-placement of phosphorus on agricultural fields.

Project Location: Champaign County

Subgrantee: Champaign County Soil & Water Conservation District 2110 W. Park Court, Suite C Champaign, Illinois 61821

Project Reports and Other Informational Materials:

"Homer Lake: Making it Clear.. One Household, One field at a Time – Final Report." May 1, 2007. Champaign County Soil & Water Conservation District.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
329	Conservation Tillage	437.8 ac.	1,277	1,328	2,560
393	Filter Strip	26.9 ac.	59	80	153
590	Nutrient Management	4,155.2 ac	. 36,522	29,971	58,897

Title: <u>Water Quality Strategic Research Initiative</u>

Purpose: This research project was headed by the Illinois Council on Food and Agricultural Research (C-FAR) Strategic Research Initiative (SRI) for Water Quality. The project helped fund continued research for four projects: 1) Effects of phosphorus mediated through algal biomass in Illinois streams; 2) Spatial and temporal relationships between biotic integrity of Illinois streams, dissolved oxygen, and nutrients (including controls on dissolved reactive and particulate phosphorus); 3) Seasonal dynamics of nutrients, algae and dissolved oxygen in agriculturally dominated headwater streams: the link between land-use and water quality; and 4) The impact of sediments on the potential bioavailability of phosphorus in Illinois streams. These four projects directly impact Illinois EPA's nutrient standards and TMDL development programs.

Project Location: Statewide

Subgrantee: The Board of Trustees of the University of Illinois 1901 South First Street, Suite A Champaign, Illinois 61820

Project Reports and Other Informational Materials:

"Water Quality Strategic Research Initiative – Final Report." November 21, 2008. University of Illinois – Extension.

04-12(319)JC

Title: <u>Watershed Based Plan Upgrades in Northeastern Illinois</u>

Purpose: This project coordinated the upgrade and development of watershed-based plans in northeastern Illinois. The Northeastern Illinois Planning Commission (NIPC) sent out a Request for Proposals to northeastern Illinois watershed planning groups. The proposals were reviewed and ranked for completeness and cost-effectiveness and funding was distributed to the watershed planning groups for the upgrade of their watershed plan. NIPC was a member of each watershed planning team and provided GIS support and technical oversight and review to ensure consistency with Illinois EPA and USEPA guidance. Plans were developed for Tyler Creek (ILDTZP02), Bull Creek/Bulls Brook, Indian Creek, Fish Lake Drain, N. Br. Chicago River, Nippersink Creek (ILDTK04), and E. Br. DuPage River and W. Br. DuPage River.

Project Location: Counties of Lake and DuPage

Subgrantee: Northeastern Illinois Planning Commission 222 South Riverside Plaza, Suite 1800 Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Indian Creek Watershed Plan." Draft - June 2006. Applied Ecological Services, Inc. & Lake County Stormwater Management Commission.

"The Nippersink Creek Watershed Plan." February 2008. Watershed Resource Consultants, Inc. & The Nippersink Creek Watershed Planning Committee.

"The Tyler Creek Watershed Plan." March 2008. Watershed Resource Consultants, Inc. & The Conservation Foundation.

"Bull Creek/Bull's Brook Watershed-Based Plan." Final Draft, March 31, 2008. Applied Ecological Services, Inc. & Lake County Stormwater Management Commission.

"Fish Lake Drain Watershed Management Plan." April 2008. Conservation Design Forum & Lake County Stormwater Management Commission.

"North Branch Chicago River Watershed-Based Plan for Lake and Cook Counties, Illinois." May 22, 2008. Lake County Stormwater Management Commission.

"Upper DuPage River Watershed Plan. 2007 Update." December 2007. The Conservation Foundation.

04-13(319)SR

Title: Fox River Watershed Planning, Restoration, & Protection

Purpose: This project continued the implementation of the "Integrated Management Plan for the Fox River Watershed in Illinois." The project included eight watershed restoration and protection projects as well as watershed-wide project coordination and technical assistance. Lake Run Habitat Restoration Project restored a 3,350foot segment of Long Run, a tributary of Blackberry Creek (ILDTD02), and 41.79 acres of wetlands. Otter Creek Stream Restoration Project stabilized 3,095 feet of eroding streambanks along Otter Creek (ILDTF02), a tributary to Ferson Creek and the Fox River. St. Charles Stormwater Outfall Treatment Basin project constructed a wetland basin to receive and treat stormwater runoff prior to discharge to 7th Avenue Creek, a tributary of the Fox River. Poplar Creek Streambank Restoration Project stabilized 200 feet of eroding streambanks along Poplar Creek (ILDTG02), a tributary of the Fox River. Restoration of Lake Antioch Wetlands & Feedstream project constructed a stone filter check fence with wetland planting and stabilized 515 feet of eroding streambanks tributary to Lake Antioch. Presbury Lake Shoreline Restoration Project stabilized 925 feet of eroding shoreline along Presbury Lake. Woods Creek Nonpoint Source Control project retrofitted three existing dry bottom detention basins into wetland detention basins, installed native vegetation in ponds and adjacent areas upstream of Woods Creek to enhance pollutant removal,

conduct storm drain stenciling, and installed educational signage. Long Lake Shoreline Stabilization Project stabilized 1,667 feet of eroding shoreline along Long Lake (ILRTJ). The Fox River is included on Illinois' 303(d) list. This project executed nonpoint source pollution control recommendations of a watershed-based plan for the Fox River.

Project Location: Counties of Cook, Kane, & Lake

Subgrantee: Northeastern Illinois Planning Commission 222 South Riverside Plaza, Suite 1800 Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Fox River Watershed Planning, Restoration, & Protection – Final Report." December 2007. Chicago Metropolitan Agency for Planning.

Estimated Load Deduction

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Stabilization	5,887 ft.	451	421	839
584	Stream Channel Stabilization	3,865 ft.	54	53	106
657	Wetland Restoration	41.79 ac.	?	14	84
800	Urban Stormwater Wetland	4 no.	?	104	352
840	Grass-Lined Channel	0.55 ac.	?	67	191
910	Rock Outlet Protection	1 no.	?	?	?
04-14(319)SR					

Title: Upper DesPlaines River WRAS Implementation

Purpose: This project continued the implementation of the Upper DesPlaines River Watershed Restoration Action Strategy as prepared by the Upper DesPlaines River Ecosystem Partnership. The project included two watershed restoration and protection projects as well as watershed-wide project coordination and technical assistance. Ryerson Conservation Area - Visitors Center Site Work project installed stormwater BMPs (porous pavement, bioswales, cisterns, and rain garden) during construction of a new visitor's center and implemented educational activities (interpretive signs, exhibit panels, and brochures). Ravinia and Indian Creek Parks Project included 1,401 feet of streambank stabilization and upland slope stabilization, vegetation management and planting, 0.48 acres of floodplain restoration, stormwater wetland, and interpretive signage along improved trails. The DesPlaines River is included on Illinois' 303(d) list.

Project Location: Lake County

Subgrantee: Northeastern Illinois Planning Commission 222 South Riverside Plaza, Suite 1800 Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Upper DesPlaines River WRAS Implementation – Final Report." July 2007. Chicago Metropolitan Agency for Planning.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
012	Cistern	2 no.	?	?	?
013	Rain Garden	1 no.	0	1	8
580	Streambank/Shoreline Protection	1,401.5 ft.	22	22	42
657	Wetland Restoration	0.48 ac.	?	?	?
800	Urban Stormwater Wetland	1 no.	?	49	261
845	Infiltration Trench	4 no.	?	0	0
890	Porous Pavement	0.95 ac.	?	1	20
04-15(319)SR					

Title: Conservation Reserve Enhancement Program (CREP) Assistance

Purpose: The Association of Illinois Soil & Water Conservation District (AISWCD) subcontracted with SWCDs to hire staff to facilitate the enrollment process of the Conservation Reserve Enhancement Program (CREP) by setting appointments with producers to discuss CREP and conduct field visits to determine program eligibility. The SWCDs completed the Conservation Reserve Program - 2 form, type the Conservation Plan of Operations, obtained the necessary producer signatures on required documents, and completed all state CREP enrollment forms. The SWCDs coordinated activities associated with land surveys, producer signatures on easements, and recording easements with the local abstract office. Field assistance was provided to the survey and design teams as well as construction assistance by evaluating the construction expenses and completing form AD-862.

Project Location: Statewide

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

BMP Impl	ementation Summary:		Es	timated Load Re	duction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
393	Filter Strip	9,300 ac.	500	500	500
04-16(319) JC					

Title: North Branch Watershed Project - Ongoing Implementation Phase

Purpose: This project continued implementation of additional Best Management Practices (BMP) in accordance with the North Branch Watershed Management Plan in Lake

and Cook Counties. Lake County Stormwater Management Commission continued watershed plan implementation in the North Branch Chicago River Watershed. The North Branch Chicago River is included on Illinois' 303(d) list. This project executed nonpoint source pollution control recommendations of a watershed-based plan for the North Branch Chicago River.

Project Location: Counties of Lake & Cook

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

Project Reports and Other Informational Materials:

"North Branch Watershed Project Implementation - Phase 4 Final Report." July 27, 2007. Lake County Stormwater Management Commission.

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BMP Implementation Summary:

			Estimated Load Reduction			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
580	Streambank/Shoreline Protection	11,434 ft.	1,297	1,191	2,384	
657	Wetland Restoration	34 ac.	?	3	5	
800	Urban Stormwater Wetland	3 no.	?	131	493	
835	Urban Filter Strip	0.092 ac.	?	2	7	
	·					
04-17(319)CD						

Title: NPS Program Implementation Assistance - Phase 2

Purpose: This project allowed for continued technical, educational, and informational assistance to, and through the county soil and water conservation districts. This position provided assistance to Illinois EPA regarding water quality issues, program outreach and implementation. Continuing the existence of the Watershed Liaison position allowed for the initiatives/programs developed thus far to be improved upon and expanded.

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:

"Nonpoint Source Program Implementation Assistance - Phase 2." May 2008. Association of Illinois Soil & Water Conservation Districts.

04-19(319) CD

- **Title:** Conservation Practices Mapping and Assessment
- **Purpose:** This project continued development 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. In cooperation with the Illinois EPA, the Recipient identified and implemented proposed enhancements to the interface, database, and design.

Project Location: Statewide

Subgrantee: University of Illinois 109 Cobble Hall, 801 South Wright Street Champaign, Illinois 61820

04-20(319)SR

Title: Farm Progress Show Site BMP Project

Purpose: The Illinois Land Improvement Contractors Association held a Conservation Expo at the permanent Farm Progress Show site in Decatur, Illinois. The three day expo was designed to provide current information and demonstrations of proper installation techniques of best management practices to conservation contractors; local, state, and federal employees (such as SWCD, CES, and NRCS); and landowners interested in conservation on their land.

Project Location: Macon County

Subgrantee: Illinois Land Improvement Contractors Association, Inc. 2060 Timberbrook Drive Springfield, Illinois 62702

Project Reports and Other Informational Materials:

"Farm Progress Show Site BMP Project – Final Report." September 26, 2006. Illinois Land Improvement Contractors Association, Inc.

04-21(319)CD

Title: <u>Regional Stormwater BMP Park</u>

Purpose: The City of Elgin updated the conceptual master plan for the new recreational park to be located on a 224-acre parcel at the intersection of Muirhead Road and Plank Road in Elgin, Illinois to include a state-of-the-art stormwater management system, which emphasizes hydrologic approaches to nonpoint source pollution control by reducing both the volume of runoff and the concentrations of pollutants through infiltration, evaporation, and sedimentation. A fact sheet was published for each selected BMP that included basic information about the BMP. A monitoring program was prepared to evaluate the effectiveness of the selected proposed BMPs. A preliminary site plan was prepared to identify the proposed facilities and the proposed BMPs at the site, which is in the Tyler Creek (ILDTZP02) watershed.

Project Location: Kane County

Subgrantee: City of Elgin 100 Symphony Way Elgin, IL 60120

Project Reports and Other Informational Materials:

"City of Elgin Regional Stormwater BMP Park." September 30, 2008. City of Elgin.

04-22(319)SR

Title: Flint Creek Watershed Based Plan

Purpose: This project developed a watershed-based plan for the Flint Creek watershed that is 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), Illinois EPA draft "Guidance for Developing Watershed Implementation Plans in Illinois" (IEPA/BOW/98-002 – March 1998), total maximum daily load (TMDL) implementation plan requirements, and current watershed planning principles. The Flint Creek Watershed Partnership worked with local stakeholders to develop an integrated watershed plan for the Flint Creek watershed that included watershed data evaluation and resource inventory along with site specific Best Management Practices recommendations designed to improve water quality by reducing suspended sediment, nutrients and other pollutants while enhancing habitat and aesthetics.

Project Location: Counties of Cook & Lake

Subgrantee: Citizens for Conservation Flint Creek Watershed Partnership 459 West Highway 22 Barrington, Illinois 60010

Project Reports and Other Informational Materials:

"Flint Creek Watershed-Based Plan." December 2007. Applied Ecological Services, Inc.

04-23(319)SR

Title: <u>Watershed Capacity Building</u>

Purpose: A survey was developed and mailed to determine the specific additional tools and knowledge that Illinois' various watershed groups need in order to improve the effectiveness of their water quality protection and restoration programs. A training

session was held. Data from the survey was compiled, reviewed, and analyzed. A Watershed Capacity Building Strategy (Strategy) was developed that documents and considers the survey results and recommends specific actions to be taken to satisfy the identified deficiencies.

Project Location: Statewide

Subgrantee: Prairie Rivers Network 1902 Fox Drive, Suite G Champaign, Illinois 61820

Project Reports and Other Informational Materials:

"A Strategy for Building Capacity in Illinois Watersheds." May 2009. Prairie Rivers Network.

04-24(319)AW

Title: Waukegan River Restoration Project

Purpose: This project restored 450 feet of failed streambank stabilization practices installed on the Waukegan River (ILQ01). Restoration was designed to arrest streambank erosion and reduce nonpoint source pollution through the installation of environmentally sound practices while protecting or enhancing habitat, ameliorating damage from peak flows, reducing velocity of peak flows, and enhancing aesthetic qualities.

Project Location: Lake County

Subgrantee: Waukegan Park District 2211 Erine Kruger Circle Waukegan, Illinois 60087

Project Reports and Other Informational Materials:

"Powell Park/Waukegan River Restoration Project." September 2009. Waukegan Park District.

BMP Implementation Summary:

I.			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	450 ft.	86	73	147
04-25(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.

Project Location: Statewide

04-(319)BY

FFY 2005 FEDERALLY FUNDED SECTION 319 PROJECTS

- **Title:** City of Chicago Best Management Practices Implementation
- **Purpose:** This project addressed nonpoint source pollution urban runoff impacts to the Chicago River (ILHCC08) and Lake Michigan and demonstrated innovative, infiltration based stormwater management approaches for highly pervious areas. The project included construction of the following practices at the Household Hazardous Waste Collection Facility: a vegetated roof, a gravel infiltration trench along the employee parking area, gravel driving strips, a bioretention swale, and two cisterns. The City of Chicago partnered with Friends of the Chicago River to provide a public outreach campaign that included signage and brochures, press releases and presentations to the public. The North Branch Chicago River and Lake Michigan are included on Illinois' 303(d) list. This project executed nonpoint source pollution control recommendations of a watershed-based plan for the North Branch Chicago River.

Project Location: Cook County

Subgrantee: City of Chicago, Department of General Services 30 North La Salle Chicago, Illinois 60602

Project Reports and Other Informational Materials:

"City of Chicago Best Management Practices Implementation – Final Report." July 17, 2007. City of Chicago.

BMP Implementation Summary:

			Estimated Load Reduction		
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (Ibs/year)	Nitrogen (Ibs/year)
012	Cistern	2 no.	?	?	?
011	Green Roof	0.14 ac.	?	?	?
835	Urban Filter Strip	0.08 ac.	?	1	2
845	Infiltration Trench	2 no.	?	1	2

05-01(319)CD

Title: Nonpoint Source Pollution Control Program Evaluation

Purpose: This project developed a strategy for the creation of social indicators to use to help determine the effectiveness of Illinois EPA's Section 319 program and other conservation programs and projects. Implementation of the strategy resulted in a list of potential indicators and potential tools, a set of final indicators including a core subset consistent with USEPA indicators, and a "tool kit."

Project Location: Statewide

Subgrantee: Board of Trustees of University of Illinois Office of Sponsored Programs and Research Administrators 1901 South First Street (Suite A) MC-685 Champaign, Illinois 61820-6242

Project Reports and Other Informational Materials:

"Nonpoint Source Pollution Control Program Evaluation (Social Indicators) – Final Report." June 30, 2008. University of Illinois.

05-02(310)CD

- **Title:** Lincoln Park Zoo South Pond Environmental Education Project
- **Purpose:** This project used the South Pond to educate visitors of the Lincoln Park Zoo about the issues related to water quality and non-point source pollution. The project included programs that range from highly interactive projects (Education Kits for teachers) to family oriented (story books for children) to fascinating multi-media projects (video and curiosity carts). 'Curiosity Carts' are rolling activity carts, designed around a specific theme. Zoo docents take a cart on to Zoo grounds and engage the public in hands-on activities for brief but meaningful interpersonal education about water quality issues. Educational Loan Kits are for take-away education projects extending lessons from the Zoo to classrooms or homes outside the Zoo. Teachers, parents, or other group leaders who visit the Pond can check out a kit and take it with them to use with other classes or groups at home. A children's book was developed to tell the story of the ecological history of the shoreline and the pond from the point of view of a 250-year-old tree on the bank of the south pond. Additionally, to reach a somewhat older audience, a short educational video was produced on the ecological history of the South Pond.

Project Location: Cook County

Subgrantee: Lincoln Park Zoo 2001 North Clark Street Chicago, Illinois 60614

05-03(319)BL

Title: Streambank Erosion Control in the Lake Galena Watershed

Purpose: This project reduced nonpoint source (NPS) pollution delivery to Lake Galena (ILRMM) through the installation of best management practices (BMPs) adjacent to the lake and within the watershed. BMPs were used to stabilize 7,130 feet of streambank, 200 feet of stream channel, and 1,585 feet of roadway culverts and drainage ditches. Two stormwater wetlands and one sediment basin were also constructed.

Project Location: JoDaviess County

Subgrantee: Galena Territory Association 2000 Territory Drive Galena, Illinois 61036

Project Reports and Other Informational Materials:

"Lake Galena Watershed Project - Phase II - Final Report." July 2009. Galena Territory Association.

05-04(319)ST

Title: Working with the Amish

Purpose: The Douglas County Soil and Water Conservation District assisted and educated the Amish Community in the use of non-till conservation practices to reduce nonpoint source pollution and improve water quality. Specialty farm equipment for implementing no-till farming practices was purchased and made available on a rental basis to the Amish community. The project also included a community outreach initiative to create contacts with the Amish community in and around the Arthur-Arcola communities to educate them on the use of no-till practices and how it will help reduce nonpoint source pollution, enhance water quality, improve and protect habitat, and improve the quality of life.

Project Location: Douglas County

Subgrantee: Douglas County Soil & Water Conservation District 900 South Washington Street Tuscola, Illinois 61953

Project Reports and Other Informational Materials:

"Working with the Amish – Final Report." September 2009. Douglas County Soil & Water Conservation District.

05-05(310)ST

Title: Manure Management Options for Swine Producers to Reduce NPS Pollution

Purpose: This project completed and fully operationalized a production-scale integrated livestock waste management demonstration site. The project demonstrated improved best management practices that result in reduced nonpoint source pollution and improved water quality. Educational materials were designed to inform farmers, educators, and the general public about the impacts of nonpoint source pollution originating from the land application of manure on ground and surface water and how and how it can be reduced. The project reduced the nonpoint source pollution potential of the Illinois State University Farm-Lexington livestock operation of (1,000 A.U. approximately) to Turkey Creek, a tributary to the Mackinaw River.

Project Location: McLean County

Subgrantee: Illinois State University (LUW Team) 5020 AGR Normal, Illinois 61790-5020

Project Reports and Other Informational Materials:

"Combining Separation, Nitrification/Denitrification, Composting and Irrigation as a Manure Management Option for Swine Produces to Reduce NPS Pollution." May 30, 2008. Illinois State University.

05-06(319)JC

Title: Bringing Wetlands to Life Through Restoration and Public Communication

Purpose: This project restored a portion of the floodplains of the Des Plaines River (ILG07) and researched significant ecological elements (i.e., hydrologic conditions, water chemistry, and vegetation reestablishment). Wetlands Research, Inc. (WRI) created 6.8 acres of wetland and enhanced 4.22 acres of existing wetland. The performance of the restored wetland was monitored to determine if water quality, hydrology and vegetation characteristics evolved in a manner reflective of a natural wetland. WRI also executed a public communications campaign to educate the public about the values of wetlands, particularly in minimizing non-point source pollution.

Project Location: Lake County

Subgrantee: Wetland Research, Inc. 53 West Jackson Boulevard, #1015 Chicago, Illinois 60604

Project Reports and Other Informational Materials:

"Bringing Wetlands to Life Through Wetland Restoration and Public Communication." June 2009. Wetland Research, Inc.

"Growing Wetlands for Clean Water." (Video) 2008. Wetland Research, Inc.

05-07(319) ST

Title: NRCS Urban Office Technical Assistance

Purpose: The Recipient maintained the Community Assistance and Watershed Planning Office to serve the six county northeastern Illinois area. This office provided nonpoint source pollution control related technical assistance to the soil and water conservation districts, planning commissions, county departments, townships and municipalities in northeastern Illinois. In addition to direct technical assistance, the staff of this office provided information/education and training assistance. The major focus of the office was on erosion/sediment control, water quality and natural resource management. Funding under this Agreement was used by the Recipient to support the activities of the Community Assistance and Watershed Planning Office.

Project Location: Counties of Cook, Lake, McHenry, DuPage, Will, and Kane

Subgrantee: USDA - Natural Resources Conservation Service 2118 West Park Court Champaign, Illinois 61820

05-08(319)SR

Title: Patriot's Park Lake Phase 2 Implementation

Purpose: The Kingsbury Park District implemented recommendations of the Phase 1 Diagnostic/Feasibility Study completed for Patriot's Park Lake (ILROY). Implementation included dredging the lake and lake forebay, rehabilitation of the forebay dam, stabilization of 150 feet of streambank, installation of one water and sediment control basin, and stabilization of 1,900 feet of eroding shoreline. Patriot's Park Lake is tributary to East Fork Shoal Creek (ILOID05).

Project Location: Bond County

Subgrantee: Kingsbury Park District 114 North 2nd Street Greenville, Illinois 62246

Project Period: 07/28/05 through 07/15/09

Project Reports and Other Informational Materials:

"Illinois EPA Phase 2 Implementation Project for Patriot's Park Lake, Bond County, II. – Final Completion Report." March 2009. HDR CWI.

05-09(319)JC

Title: Springdale Cemetery Restoration Project

Purpose: This project stabilized 1,905 feet of eroding streambank on Springdale Creek, a tributary to Illinois River (ILD30), through the installation of riprap, gabions, log barbs, rock check dams, stone pool and riffle structures, and the installation of native vegetation. The project also included an education component.

Project Location: Peoria County

Subgrantee: Tri-County Regional Planning Commission 411 Hamilton Blvd., Suite 201 Peoria, Illinois 61602

Project Reports and Other Informational Materials:

"Springdale Cemetery Restoration Project – Final Report." December 2008. Tri-County Regional Planning Commission.

05-10(319)ST

Title: Stream Corridor Restoration Project - Phase 3 (Trib. 6)

Purpose: This project installed streambank stabilization best management practices (BMPs) to improve water quality, reduce nonpoint source pollution, and enhance aquatic habitat along a section of Tributary # 6 (Hobson Creek), a tributary of the East Branch of the DuPage River (ILGBL10). The project involved the installation of approximately 858 linear feet of BMPs (i.e., A-jacks, rock vortex weirs, bank re-shaping, cobble, fiber roll, and vegetation) on Tributary # 6 to stabilize eroded streambanks, reduce nonpoint source pollution, establish a 0.37 acre riparian buffer, enhance habitat and aesthetics, and provide other beneficial hydrologic functions. The East Branch DuPage River was a Category 1 watershed in the Unified Watershed Assessment and is included on Illinois 303d list. The TMDL and implementation plan for the East Branch DuPage River are complete.

Project Location: DuPage County

Subgrantee: Hobson Creek Community Council 23W420 Country Court Naperville, Illinois 60540

Project Reports and Other Informational Materials:

"Hobson Creek Corridor Restoration Project, Phase 3 Tributary 6 to the East Branch DuPage River – Section 319 Project Report." December 2008. Living Waters Consultants, Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	858 ft.	49	49	100

05-11(319)ST

Title: Poplar Creek Watershed Planning, Restoration, & Protection

Purpose: This project developed a watershed-based plan for the Poplar Creek (ILDTG02) watershed that was 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), Illinois EPA draft "Guidance for Developing Watershed Implementation Plans in Illinois" (IEPA/BOW/98-002 – March 1998), total maximum daily load (TMDL) implementation plan requirements, and current watershed planning. Poplar Creek is a tributary of the Fox River.

Project Location: Cook County

Subgrantee: Northeastern Illinois Planning Commission 222 South Riverside Plaza, Suite 1800 Chicago, Illinois 60606-6097

Project Reports and Other Informational Materials:

"Poplar Creek Watershed Action Plan." July 2007. Chicago Metropolitan Agency for Planning.

05-13(319)SR

Title: Armitage Creek Streambank Stabilization

Purpose: This project stabilized approximately 6,200 feet of eroding streambanks along a 4,100 foot segment of Armitage Creek, a tributary of the East Branch DuPage River (ILGBL10), located between Placid Road and Winthrop Avenue in Glendale Heights, Illinois. Streambanks were stabilized using stone toe stabilization, gabion, timber wall, slope re-grading, minor clearing of non-native vegetation, and re-vegetation of banks with native wetland plugs and seed.

Project Location: DuPage County

Subgrantee: Village of Glendale Heights 300 Civic Center Plaza Glendale Heights, Illinois 60139

Project Reports and Other Informational Materials:

"Armitage Creek Stabilization Project Final Report." November 2007. Christopher B. Burke Engineering West, Ltd.

BMP Implementation Summary:

-	•		Es	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	6,200 ft.	170	144	290
05-14(319)SR					

Title: <u>Watershed Based Plan Development for 303(d) Listed Waters</u>

Purpose: This project assisted watershed groups in preparing or upgrading six (6) watershed based plans to improve water quality by controlling nonpoint source pollution. The watershed based plans were designed to meet USEPA's nine minimum elements. Plans were prepared for Bear Creek (ILKI02), Lake Vermilion (ILRBD), Eagle Creek (ILATE01), Spring Lake (ILRDR), Lake Bloomington (ILRDO), and Big Bureau Creek (ILDQ01).

Project Location: Adams, Bureau, Hancock, Gallatin, McDonough, & McLean Counties

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

Project Reports and Other Informational Materials:

"Greater Bear Creek Area Watershed Plan." July 2008. Greater Bear Creek Area Watershed Local Planning Committee, Adams County SWCD, and Hancock County SWCD.

"Big Bureau Creek Watershed Based Plan." August 5, 2008. Bureau County SWCD.

"Lake Bloomington Watershed Plan." June 17, 2008. McLean County SWCD.

"Watershed Implementation Plan for Lake Vermilion and the North Fork Vermilion River, Vermilion County, Illinois." June 2008. Vermilion County SWCD.

"Spring Lake Watershed Plan." July 2008. McDonough County SWCD.

"Eagle Creek Watershed Plan." August 11, 2007. Gallatin County SWCD.

05-15(319)CD

Title: Carlinville Lake Watershed Plan

Purpose: This project conducted a Phase I diagnostic-feasibility study of Carlinville Lake (ILRDG) and developed a watershed-based plan for the Carlinville Lake watershed 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), Illinois EPA draft "Guidance for Developing Watershed Implementation Plans in Illinois" (IEPA/BOW/98-002 – March 1998), total maximum daily load (TMDL) implementation plan requirements, and current watershed planning principles.

Project Location: Macoupin County

Subgrantee: City of Carlinville 550 North Board Carlinville, Illinois 62626

Project Reports and Other Informational Materials:

"Watershed Plan & Phase 1 Diagnostic/Feasibility Study for Lake Carlinville, Macoupin County, Illinois." HDR/CWI Consulting Engineers & Scientists.

05-16(319)ST

Title: <u>Governor Bond Lake Shoreline Stabilization No. 1</u>

Purpose: This project installed best management practices along 4605 linear feet of shoreline on Governor Bond Lake (ILROP) to arrest shoreline erosion and reduce nonpoint source pollution while protecting or enhancing habitat and aesthetic qualities. The installation of shoreline stabilization practices was consistent with the recommendations of the Clean Lakes Diagnostic/Feasibility Study and the Governor Bond Lake Total Maximum Daily Load (TMDL) implementation plan. Shoreline stabilization practices included revetments and offshore breakwaters using riprap and vegetation.

Project Location: Bond County

Subgrantee: City of Greenville 404 South 3rd Street Greenville, Illinois 62246

Project Reports and Other Informational Materials:

Project Evaluation and Final Report - Governor Bond Lake Shoreline Stabilization No. 1." February 2007. City of Greenville.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	4,605 ft.	203	172	344
05-17(319)ST					

Title: Jackson Creek Watershed Planning

Purpose: This project assisted the Will County Stormwater Management Planning Committee in compiling a comprehensive watershed resource inventory and developing a watershed-based plan for the Jackson Creek (ILGC02) watershed, a sub-watershed of the Des Plaines River. This inventory assessed the use impairments of water resources along with the causes and sources of the impairments. The watershedbased plan was designed to reduce nonpoint source pollution, enhance water

quality, improve and protect habitat, and improve the quality of life.

Project Location: Will County

Subgrantee: Will County Stormwater Management Planning Committee 302 North Chicago Street Joliet, Illinois 60432

Project Reports and Other Informational Materials:

"Jackson Creek Watershed Plan – Technical Report." April 2009. Chicago Metropolitan Agency for Planning.

05-18(319)ST

Title: <u>Technical Assistance for Green Infrastructure Projects</u>

Purpose: This project developed two web-based models and a valuation model that encourage the strategic use of green infrastructure (wetlands, trails, greenways, trees, mature landscaping, etc.) to reduce costs for stormwater management and improve water quality, as well as improved habitat for native flora and fauna and increased recreation and open space opportunities.

Project Location: Cook County

Subgrantee: Center for Neighborhood Technology 2125 West North Avenue Chicago, Illinois 60647

Project Reports and Other Informational Materials:

"Technical Assistance for Green Infrastructure Projects – Final Report." December 12, 2006. Center for Neighborhood Technology.

05-19(310)JC

Title: <u>Salt Creek Streambank Stabilization</u>

Purpose: This project stabilized eroding streambanks along a segment of Salt Creek (ILGL09) located between State Route 53 and Algonquin Road and a segment located at Fox Lane in Rolling Meadows, Illinois. Approximately 3,278 feet of streambank was stabilized using stone toe with vegetated slopes, stone toe with emergent deep rooted vegetation, and clearing of non-native vegetation, minor regarding and revegetation of banks with native deep-rooted grasses and forbes.

Project Location: Cook County

Subgrantee: City of Rolling Meadows 3600 Kirchoff Road Rolling Meadows, Illinois 60008

Project Reports and Other Informational Materials:

"Salt Creek Streambank Stabilization Stage 3 – Project Final Report." May 2009. Wills Burke Kelsey Associates, Ltd.

05-20(319)SR

Title: Kinkaid Lake TMDL Best Management Practices Implementation

Purpose: This project involved the construction of three sediment/nutrient detention basins, stabilization of 900 lineal feet of gully erosion, and the stabilization of 3,000 lineal feet of shoreline erosion in the Kinkaid Lake (ILRNC) watershed. All practices were designed to reduce nonpoint source pollution and improve water quality. A public outreach and education campaign was also implemented to create citizen awareness of actions that can positively affect local water quality.

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 & Final Report – Kinkaid Lake TMDL Best Management Practices Implementation." August 2007. Kinkaid-Reed's Creek Conservancy District.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	3 no.	637	6	13
410	Grade Stabilization Structure	15 no.	309	309	617
580	Streambank/Shoreline Protection	3,000 ft.	1147.9	1147.9	2295

05-21(319)CD

Title: DuPage R. & Salt Cr. TMDL Implementation Project

Purpose: This project collected additional data to facilitate implementation of total maximum daily loads (TMDL) developed for Salt Creek (ILGL09) and the East and West Branches of the DuPage River (ILGBL02 & ILGBK01). A full time staff person was hired to act as the nonpoint source (NPS) TMDL coordinator for the project. Multi-parameter probes were purchased and deployed to expand dissolved oxygen monitoring activities. Monitoring data was entered into Illinois EPA's Assessment Data Base (ADB) and USEPA's STORET. A baseline study of the fish, macroinvertebrates, and habitat features was conducted on Salt Creek, the East and West Branches of the DuPage River, and their tributaries. A feasibility study was performed to evaluate the removal or modification of dams, or the construction and operation of in-stream aeration projects or other non-structural process for the

purpose of reaching the water quality target of the TMDLs. The need for a NPS phosphorus reduction study, chlorine reduction study, and stormwater management study was also investigated.

Project Location: DuPage and Cook Counties

Subgrantee: The Conservation Foundation 10S 404 Knoch Knolls Road Naperville, Illinois 60565

Project Reports and Other Informational Materials:

"Stream Dissolved Oxygen Improvement Feasibility Study for the East Branch of the DuPage River." December 2008. HDR Engineering, Inc.

"Biological and Water Quality Study of the East and West Branches of the DuPage River and Salt Creek Watersheds." December 2008. Center for Applied Bioassessment and Biocriteria - Midwest Biodiversity Institute.

"DuPage River and Salt Creek TMDL Implementation Project – Final Report." September 15, 2009. DuPage River Salt Creek Workgroup.

05-22(319)CD

Title: Monroe County Recharge Area Delineation

Purpose: This project developed a monitoring strategy for groundwater tracing investigations, including background sampling, sampling schedules, equipment and materials to be used and proposed sampling stations. The monitoring strategy was implemented to delineate the recharge areas for Frog Spring, Luhr Spring, Dual Spring and Annbriar Spring, north of Fountain Creek (ILJH03). Recharge delineation maps were developed and other information provided, as found during the delineation process, to help regional and local land-use planners on where nonpoint source pollution is potentially entering the groundwater system. Two one-day Karst short course workshops for local resource managers as well as community and county officials were held to refresh attendees on basic karst concepts, disseminate the results and implications found in the recharge area delineations, present the recent designation of Class III Groundwater and the need for and ways and means of protecting groundwater systems.

Project Location: Monroe County

Subgrantee: Southwestern Illinois RC&D, Inc. 406 East Main Street Mascoutah, Illinois 62258

Project Reports and Other Informational Materials:

"Monroe County Recharge Area Delineations – Final Report." June 2009. Ozark Underground Laboratory.

05-23(319)CD

Title: Four Winds Way Creek Rehabilitation

Purpose: This project restored 500 feet of failed streambank stabilization practices installed on Four Winds Way Creek, a tributary of the Fox River (ILDT20). Rehabilitation was designed to arrest streambank erosion and reduce nonpoint source pollution through the installation of environmentally sound practices while protecting or enhancing habitat, ameliorating damage from peak flows, reducing velocity of peak flows, and enhancing aesthetic qualities.

Project Location: Kane County

Subgrantee: Kane County Department of Environmental Management 719 Batavia Avenue Geneva, Illinois 60134

Project Reports and Other Informational Materials:

"Project Report for the Four Winds Way Creek Rehabilitation Project." August 28, 2008. Kane County Department of Environmental Management.

BMP Implementation Summary:

•			Es	duction	
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	Nitrogen (Ibs/year)
580	Streambank/Shoreline Protection	500 ft.	0	0	0
05-24(319)SR					

Title: Green Roof Installation Project

Purpose: This project installed a 3,092 square foot green roof on the building located at 8 West Monroe in Chicago, Illinois to reduce stormwater runoff and nonpoint source pollution. The green roof reduces the amount and the rate of stormwater runoff entering the combined sewer system thereby reducing the potential for stormwater surges to exceed sewer system capacity and discharge untreated stormwater and municipal sewage into the South Branch Chicago River (ILHC01). The green roof technology used for this project was GreenGrid, 2'x2'x4" module containers containing a growing medium and plant material. An outdoor sign, educational display, and on-line and paper flyers were also developed.

Project Location: Cook County

Subgrantee: Metropolis Condominium Association 8 West Monroe Chicago, Illinois 60603

Project Reports and Other Informational Materials:

"Final Report - Green Roof Installation Project - 8 West Monroe Chicago, Illinois." June 12, 2009. Metropolis Condominium Association.

05-25 (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.

05-(319)AW

FFY 2006 FEDERALLY FUNDED SECTION 319 PROJECTS

- **Title:** Otter Lake BMP Effectiveness Monitoring Project
- **Purpose:** This study was designed to assess the effectiveness of the low-flow dam as a best management practice to reduce non-point source inputs to the main body of Otter Lake (ILRDF). The project provided estimates of 1) the amounts of suspended sediment, nitrogen, and phosphorus entering Otter Lake from the West Fork of Otter Creek, 2) the amounts of these constituents that are deposited behind the low flow dam, 3) the amounts of these constituents that are transported through the connection pipe in the dam, 4) and the amounts of these constituents that are transported over the crest of the low-flow dam during high flow events. The quantities of suspended sediment and chemical constituents measured in West Fork Otter Creek were extrapolated to derive an estimate of the total amounts of these constituents entering the lake upstream of the low-flow dam and from all of the watersheds contributing to Otter Lake that have geologic, hydrologic, and topographic characteristics similar to West Fork Otter Creek. From these estimates, the trapping efficiency and long-term retention capability provided by the low-flow dam were estimated.

Project Location: Macoupin County

Subgrantee: U.S. Geological Society

06(319)AW

Title: <u>Waukegan River Water Quality Monitoring</u>

Purpose: The Lake County Health Department developed and implemented a monitoring strategy for the Waukegan River to assist in the implementation and update of a comprehensive watershed plan for the Waukegan River (ILQ01). The strategy continued monitoring of flow conditions on the Waukegan River. In-stream monitoring efforts were accomplished by the deployment of Sondes that collected temperature, conductivity, pH, DO, DO percent saturation, and turbidity data. Additional flow monitoring equipment, automatic samplers and collection of water and sediment samples were utilized to provide background information for current and future planning efforts.

Project Location: Lake County

Subgrantee: Lake County Health Department & Community Health Center 3010 Grand Avenue Waukegan, Illinois 60085

06-01(319)ST

Title: Animal Waste BMP Program

Purpose: This project provided technical and financial assistance to dairy producers in six northwestern Illinois counties: Carroll, JoDaviess, Stephenson, Whiteside, Ogle, and Lee. This region of the state has many small watersheds and dairy operations spread over a large area. The project implemented a variety of best management practices (BMPs) to reduce polluted runoff from feedlots, adjacent lands, contributing roofs and milk house waste from tank cleaning. Practices included tanks, excavation, electrical, plumbing, and pumps to control milk house waste as well as implementation of clean water diversions, clean water roof gutters, critical area shaping and seeding, and spreaders.

Project Location: Counties of Carroll, JoDaviess, Stephenson, Whiteside, Ogle, and Lee

Subgrantee: Blackhawk Hills RC&D Council 102 East Route 30, Suite 2 Rock Falls, Illinois 61071

Project Reports and Other Informational Materials:

"Northwest Illinois Livestock Project." September 2009. Blackhawk Hills RC&D Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
558	Roof Runoff Management	3 no.	?	873.8	4,367.7
559	Roofing for Runoff Control	2 no.	?	338.2	1,693.2
570	Runoff Management System	1 no.	?	6.1	33.2
634	Wash Water Recovery	4 no.	?	738.6	28.6

06-02(319)JC

Title: <u>Streambank Cleanup And Lakeshore Enhancement (SCALE)</u>

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. The project removed over 350 tons of trash from almost 1,500 miles of streams and 350 acres of lakes in Illinois.

Project Location: Statewide

Subgrantee: Not Applicable

Project Reports and Other Informational Materials:

"Stream Cleanup and Lakeshore Enhancement (SCALE) Program." April 2009. Illinois Environmental Protection Agency.

Title: <u>Watershed Protection, Restoration, and Education</u>

- Purpose: This project included four watershed restoration and protection projects as well as watershed-wide project coordination and technical assistance. The Dixie Briggs Fromm Stream Corridor Restoration Project stabilized 2.929 feet of eroding streambanks and bed along a 1,850-foot segment of a small, unnamed stream using 16 riffles, 3 augmented riffles, 10 rock checks, 2 stepped pools, 11 log habitat structures, 4 tree root balls, vegetated geogrid, brush layering, vegetated rock toe, fiber roll, re-shaping of bank slopes. The White's Creek Stabilization Project stabilized eroding streambed and banks along a 1,350-foot segment of White's Creek (ILDTP01), a tributary of the Fox River (IIDT69) located at Espring Park in Geneva, Illinois. The project involved streambed and bank stabilization (coir fiber mat, vegetated geogrid, fiber logs, re-grading, and re-vegetation), establishing a wider natural stream buffer, re-establishing meanders in the low flow channel, creating floodplain terraces that are more accessible to stream flows, and installation of in-stream habitat features such as riffles and gravel substrate. The City of Aurora constructed a stormwater wetland bio-swale, five rain gardens, and a bio-filtration facility to receive and treat runoff before discharging into the Fox River. The City of Aurora also developed a Naturalized Stormwater Management Corridor Plan to control nonpoint source pollution and conducted education and outreach efforts to inform the community about nonpoint source pollution and to encourage residents and land owners to seek technical assistance for stormwater best management practices. The Village of Wheeling stabilized 6,260 feet of eroding streambank along the northern third of Buffalo Creek/Wheeling Drain Ditch (ILGS01), a tributary of the Des Plaines River.
- Project Location: Counties of Kane & DuPage
- Subgrantee: Northeastern Illinois Planning Commission 233 South Wacker Drive, Suite 800 Chicago, Illinois 60606

Project Reports and Other Informational Materials:

"Fox River and Des Plaines River Watershed Protection, Restoration & Education." July 2010. Chicago Metropolitan Agency for Planning.

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
013	Rain Garden	5 no.	?	0	5
800	Urban Stormwater Wetland	1 no.	?	3	10
845	Infiltration Trench	1 no.	?	2	0
580	Streambank/Shoreline Protection	6,260 ft.	639	639	1,278
584	Stream Channel Stabilization	4,279 ft.	256	256	504

BMP Implementation Summary:

06-04(319)SR

Title: Metra Parking Lot Expansion BMPs

Purpose: This project installed best management practices (BMPs) to reduce nutrient and pollutant loading to Lake Sedgewick (ILRGZZ). The BMPs included a stormwater wetland polishing system and street sweeping. As part of the project, an interpretive sign was created and installed to enhance the public's knowledge of non-point source pollution and the BMPs. Lake Sedgewick is included on Illinois 303d list. The installation of BMPs was consistent with the recommendations of the Clean Lakes Diagnostic/Feasibility Study prepared for Lake Sedgewick.

Project Location: Cook County

Subgrantee: Village of Orland Park 14700 S. Ravinia Avenue Orland Park, Illinois 60462

Project Reports and Other Informational Materials:

"Metra Parking Lot Expansion Sequenced Best Management Practices – Final Report." February 2010. Village of Orland Park.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
017	Street Sweeping	1 no.	?	1	0
800	Urban Stormwater Wetland	1 no.	?	4	31

06-05(319)CD

Title: North Branch Watershed Project – Phase 5

Purpose: This project implemented additional Best Management Practices (BMPs) in accordance with the North Branch Watershed Management Plan in Lake County. BMPs included streambank stabilization, wetland restoration, gully stabilization, bioswales, and permeable paving. The North Branch of the Chicago River is composed of three forks: the West Fork, Middle Fork, and the Skokie River. All three forks as well as six lakes and ponds in the watershed are listed as impaired waters on Illinois' 303(d) list. This project executed nonpoint source pollution control recommendations of a watershed-based plan for the North Branch Chicago River.

Project Location: Lake County

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

Project Reports and Other Informational Materials:

North Branch Watershed Project Implementation – Phase 5 – Final Report." March 30, 2010. Lake County Stormwater Management Commission.

BMP Implementation Summary:

•			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
890	Porous Pavement	0.19 ac.	?	1	6
410	Grade Stabilization Structure	7 no.	63	53	107
835	Urban Filter Strip	0.37 ac.	?	3	5
580	Streambank/Shoreline Protection	610 ft.	23	23	46
657	Wetland Restoration	4.77 ac.	?	68	234
06-06(319)CD					

Title: Permeable Lot Best Practices Project

Purpose: The Peggy Notebaert Nature Museum constructed a porous pavement parking lot that will be used to teach the public that this practice is an effective way to minimize nonpoint source (NPS) pollution. This project was part of a larger greening initiative at the Museum and built on past Section 319 projects. Interpretive signage was developed and installed to educate the public about nonpoint source pollution and the benefits of porous pavement. Lincoln Park North Pond is included on Illinois' 303(d) list. The installation of porous pavement was consistent with the recommendations of the Clean Lakes Diagnostic/Feasibility Study prepared for Lincoln Park North Pond (ILQZX).

Project Location: Cook County

Subgrantee: The Peggy Notebaert Nature Museum 2430 Cannon Drive Chicago, Illinois 60614

Project Reports and Other Informational Materials:

"Permeable Lot Best Practices Project – Final Report." July 2008. The Chicago Academy of Sciences and its Peggy Notebaert Nature Museum.

BMP Implementation Summary:

p-			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment	Phosphorus	Nitrogen	
DIVIP Code	DIVIP INAME	Amount	(tons/year)	(lbs/year)	(lbs/year)	
890	Porous Pavement	0.19 ac.	?	0	2	

06-07(319)ST

Title: Adventures with Aqua

Purpose: The Zoological Society created a new exhibit to provide Brookfield Zoo's visitors with a hands-on experience that will help them learn about watersheds and nonpoint source pollution. Adventures with Aqua is an outdoor adventure game that makes people think about how their daily routines impact their watersheds. The activity provides a learning experience for the whole family. Salt Creek is a Category 1 watershed in the Unified Watershed Assessment and is included on Illinois 303d list. The TMDL and implementation plan for Salt Creek are complete.

Project Location: Cook County

Subgrantee: Chicago Zoological Society 3300 South Golf Road Brookfield, Illinois 60513

Project Reports and Other Informational Materials:

"Adventures with Aqua – Final Report." January 2008. Chicago Zoological Society.

06-08(319)BL

Title: Implementing BMPs in the Mossville Bluffs Watershed

Purpose: Best management practices (BMPs) were installed to improve water quality, reduce nonpoint source pollution, and enhance aquatic habitat in urban and forested areas in the Mossville Bluffs watershed, a tributary of the Upper Peoria Lake on the Illinois River (ILD30) in Mossville, Illinois. The project included installation of 14 urban stormwater BMPs (i.e., vegetated buffer strips, rain gardens, etc.), 26,068 feet of biotechnical ravine stabilization BMPs (i.e., log check dams, gabions, etc.), and the application of forest BMPs (i.e., thinning of invasive species and prescription woodland burning) on approximately 278.46 acres.

Project Location: Peoria County

Subgrantee: Tri-County Regional Planning Commission 411 Hamilton Boulevard, Suite 201 Peoria, Illinois 61602

Project Reports and Other Informational Materials:

"Implementing Best Management Practices in the Mossville Bluffs Watershed – Final Report and Project Evaluation." September 2009. Tri-County Regional Planning Commission.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
013	Rain Garden	5 no.	?	3	16
350	Sediment Basin	3 no.	?	2	11
408	Forest Land Erosion Control System	278.46 ac.	16,259	12,252	24,615
410	Grade Stabilization Structure	193 no.	34,221	34,221	68,448
800	Urban Stormwater Wetland	1 no.	?	1	6
835	Urban Filter Strip	0.76 ac.	?	1	6
840	Grass Lines Channels	0.3 ac.	?	0	1
845	Infiltration Trench	1 no.	?	1	9
06-09(319)ST					
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Title: Updating the La Moine River Watershed Management Plan

- **Purpose:** This project coordinated the upgrade and development of a watershed-based plan for the La Moine River (ILDG06). Elements included in the update included streambank erosion and livestock. A streambank and gully erosion study along with a livestock inventory were conducted. Additionally, a prioritization model was field verified to identify critical locations for the placement of best management practices. The watershed-based plan addresses the 9 minimum elements required by Section 319 of the Clean water Act. The LaMoine River is included on Illinois' 303(d) list.
- Project Location: Counties of Adams, Brown, Hancock, McDonough, and Schuyler
- Subgrantee: Two Rivers RC & D 110 East Fayette Street, P.O. Box 87 Pittsfield, Illinois 62363

Project Reports and Other Informational Materials:

"La Moine River Watershed Ecosystem Partnership – Updating the La Moine River Watershed Implementation Plan." July 31, 2008. Two Rivers RC & D.

06-10(319)JC

Title: Water Quality Testing at Countryside Lake Association

Purpose: This project allowed the Countryside Lake Association to continue monitoring and assessment activities on Countryside Lake (ILRGQ). This monitoring program continued and enhanced ongoing sampling efforts to document water quality conditions of the lake. Data from this monitoring program was used to access the impacts and changes occurring in the watershed and in and around the lake, which will assist in guiding future best management practices designed to improve water quality by reducing sediment, nutrients and other pollutants while enhancing habitat and aesthetics.

Project Location: Lake County

Subgrantee: Countryside Lake Association 27045 North Maple Road Mundelein, Illinois 60062

Project Reports and Other Informational Materials:

"Countryside Lake Water Quality Monitoring Program – Final Report." November 2009. AECOM.

06-12(319)ST

Watershed-Based Plan Development for Aux Sable Creek

Purpose: This project updated the Watershed Management Plan for Aux Sable Creek (ILDW01). The Conservation Foundation and the Aux Sable Watershed Coalition worked with local partners to make sure that the updates address the local concerns. The existing plan (developed in 2001) was updated, expanded, and strengthened to address water quality needs and land use changes occurring in the area. It included a watershed open space plan to assist in land protection to maintain green infrastructure that will lead to restoration and protection of Aux Sable Creek. The project provided education and outreach to elected officials, planning commissions, municipal and county staff, developers and the public to emphasize protection of green infrastructure, promote sustainable development, encourage conservation design, and implement stormwater best management practices to protect water quality.

Project Location: Counties of Kendall and Grundy

Subgrantee: The Conservation Foundation 10 S 404 Knoch Knolls Road Naperville, Illinois 60565

Project Reports and Other Informational Materials:

"Watershed Based Plan Development for Aux Sable Creek – Project Report." June 30, 2009. The Conservation Foundation.

"Aux Sable Creek Watershed Plan." June 1, 2009. Wills Burke Kelsey Associates, Ltd.

06-13(319)CD

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 revegetation, and 5) effectiveness of floodplain wetland restoration in capturing residential runoff after the housing development has been constructed. Data collection and analysis will also include 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: City of Bloomington 109 East Olive Street Bloomington, Illinois 61701-5219

06-14 (319)JC

Title: Silver Creek Stabilization

Purpose: This project stabilized 1,309 feet of eroding streambanks along a segment of Silver Creek (ILGM01), a tributary of the DesPlaines River, located in Melrose Park, Illinois. Streambanks were stabilized using stone toe protection, vegetated geogrid, slope re-grading, minor clearing of non-native vegetation, re-vegetation with native wetland plugs and seed, and riffles.

Project Location: Cook County

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

Project Reports and Other Informational Materials:

"Silver Creek Streambank Stabilization Project, Phase 2 Tributary to the Des Plaines River – Section 319 Project Report." June 2009. Living Waters Consultants, Inc.

BMP Implementation Summary:

	······································		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,309 ft.	202	202	403
06-15 (319)SR					

Title: La Moine River Watershed Targeting for NPS Control

Purpose: This project provided for the targeting of watersheds to address specific total maximum daily load (TMDL) and resource concerns in the La Moine River (ILDG06) watershed, including East Fork/Spring Lake, Bureau Creek Watershed and the high quality stream segments that needed riparian areas and easements for permanent protection.

Project Location: Counties of Adams, Brown, Hancock, McDonough, and Schuyler

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

Project Period: 05/28/08 through 09/01/10

06-16 & 06-20(319)SR

Title: Clinton Lake Watershed Social Indicator Effort

Purpose: This project developed a strategy to implement a social indicator effort in the Clinton lake Watershed in DeWitt, McLean, and Piatt Counties. In coordination with the Social Indicator Workgroup, the use of social indicators was fine tuned to better document success of Section 319 project implementation. A watershed outreach program was also conducted to facilitate project implementation. Clinton Lake (ILREI) is included on Illinois' 303d list.

Project Location: Counties of DeWitt, McLean, and Piatt

Subgrantee: DeWitt County Soil & Water Conservation District Rural Route 4, Post Office Box 344a Clinton, Illinois 61727

Project Reports and Other Informational Materials:

"Clinton Lake Watershed Social Indicator Effort – Final Report." December 10, 2009. DeWitt County Soil & Water Conservation District.

06-17(319)CD

Title: Cermak/Blue Island BMP Demonstration Project

Purpose: The project installed 30,000 square feet of permeable pavers and 756 square feet of bioswales in the South Branch Chicago River (ILHC01) watershed. The project included an outreach component that focused on rainfall events in urban areas, stormwater runoff and best management practices to reduce nonpoint source and stormwater runoff for the protection of urban waterways.

Project Location: Cook County

Subgrantee: Chicago Department of Transportation 30 North La Salle Street, Suite 500 Chicago, Illinois 60614

Project Reports and Other Informational Materials:

"Cermak/Blue Island BMP Demonstration Project – Final Project Report." September 1, 2010. The Chicago Department of Transportation.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
845	Infiltration Trench	1 no.	?	0	1
890	Porous Pavement	0.69 ac.	?	0	2
06-18(319)CD)				
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Title: La Moine River Outreach Program

Purpose: This project informed the La Moine River (ILDG04) watershed community about nonpoint source pollution and encouraged residents and land owners to implement nonpoint source pollution control best management practices (e.g., buffer and filter strips, livestock exclusion, cover crops, nutrient management). The project promoted best management practice implementation and educated the public on the various forms of nonpoint source pollution, their impacts on the environment, methods for reducing nonpoint source pollution, the importance of water quality protection, and watershed principles.

Project Location: Counties of McDonough, and Warren

Subgrantee: Purdue University Department of Forestry and Natural Resources 195 Marsteller Street West Lafayette, Indiana 47907-2093

06-19(319)SR

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.

06-(319)AW

FFY 2007 FEDERALLY FUNDED SECTION 319 PROJECTS

Title: Low Impact Development Techniques in Madison County, Illinois

Purpose: This project served as a model for developers and municipalities who are interested in implementing Low Impact Development (LID) Best Management Practices (BMPs) within the county. A complementary project funded by the IDNR C2000 program and introduced by the Southwestern Illinois RC&D developed a Guidance Document for the implementation of Conservation Subdivision design. Using this document, staff provided technical assistance to developers and municipal staff to lead toward the implementation of demonstrative BMPs. This project provided funding to developers to implement LID practices to offset costs over and above traditional design.

Project Location: Madison County

Subgrantee: Southwestern Illinois Resource Conservation and Development, Inc. 406 East Main Mascoutah, Illinois

Project Reports and Other Informational Materials:

"Low Impact Development Techniques in Madison County, Illinois – Final Report & Project Evaluation." December 31, 2009. Southwestern Illinois Resource Conservation and Development, Inc.

Estimated Load Deduction

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,647 ft.	472	1	8
012	Cistern	3 no.	?	?	?
013	Rain Garden	4 no.	?	0	0
800	Urban Stormwater Wetland	2 no.	?	0	2
835	Urban Filter Strip	0.04 ac.	?	0	1
840	Grassed Lined Channel	0.2 ac.	?	0	0
845	Infiltration Trench	3 no.	?	0	0
890	Porous Pavement	0.05 ac.	?	0	3
07-01(319) ST	-				
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Title: Illinois LICA 2007 and 2008 Conservation Expos

Purpose: Best management practices (BMPs) were installed at the Illinois Land Improvement Contractors Association's 2007 and 2008 Conservation Expo. The BMPs installed demonstrated cost-effective techniques that contractors and landowners can use to reduce nonpoint source pollution.

Project Location: Counties of McLean and Macon.

Subgrantee: Illinois Land Improvement Contractors Association, Inc. 118 E. Knoxville Street, P.O. Box 474 Brimfield, Illinois 61617-0474

Project Reports and Other Informational Materials:

"Illinois LICA 2007 and 2008 Conservation Expos – Final Report." October 24, 2008. Illinois Land Improvement Contractors Association, Inc.

07-02(319) CD

Title: Conservation Reserve Enhancement Program (CREP) Assistance

Purpose: The Association of Illinois Soil & Water Conservation District (AISWCD) subcontracted with SWCDs to hire staff to facilitate the enrollment process of the Conservation Reserve Enhancement Program (CREP) by setting appointments with producers to discuss CREP and conduct field visits to determine program eligibility. The SWCDs completed the Conservation Reserve Program - 2 form, type the Conservation Plan of Operations, obtained the necessary producer signatures on required documents, and completed all state CREP enrollment forms. The SWCDs coordinated activities associated with land surveys, producer signatures on easements, and recording easements with the local abstract office. Field assistance was provided to the survey and design teams as well as construction assistance by evaluating the construction expenses and completing form AD-862.

Project Location: Statewide

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

Project Reports and Other Informational Materials:

"Illinois River Basin CREP Assistance IEPA 319 Grant Final Report. August 2011. Association of Illinois Soil & Water Conservation Districts.

BMP Implementation Summary:

	ementation outmany.		Estimated Load Reduction		
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (Ibs/year)	Nitrogen (Ibs/year)
612	Tree Planting (612)	1,074 ac.	511	814	1,625
880	Permanent Seeding (880)	1,418 ac.	653	1,049	2,095
657	Wetland Restoration (657)	52 ac.	36	54	109
07-03(319) JC					

Title: Protecting Water Quality in Urban Centers of Illinois-Phase 2

Purpose: This project maintained and improved water quality in urbanized areas by creating a partnership between urban soil and water conservation districts (SWCDs) and

Illinois EPA. Section 319 funds, in combination with local matching dollars or inkind services, were used to undertake special nonpoint source pollution prevention education/information projects aimed at local government land use decision makers and the development community. Grant funds to SWCDs were used to develop the technical capabilities of SWCD staffs to develop and deliver technical educational materials or to conduct educational workshops or seminars.

Project Location: Statewide

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

Project Reports and Other Informational Materials:

"Protecting Water Quality in Urban Centers of Illinois-Phase 2 – Final Report." September 16, 2009. Association of Illinois Soil & Water Conservation Districts.

07-04(319) CD

Title: Libertyville Facility BMP Demonstration Project

Purpose: This project installed a 180 linear foot bioswale (4,830 sq. ft.), three rain gardens (42,337 sq. ft.), 1,395 linear feet of native plant swales (26,831 sq. ft.), and two stormwater wetlands (10.43 acres) at the Lake County Central Permit Facility. This project implemented and displayed nonpoint source pollution control best management practices at the facility to demonstrate good development practices while protecting Bull Creek (ILGV01).

Project Location: Lake County

Subgrantee: Lake County Administrator's Office 18 North County Street Waukegan, Illinois 60085

Project Reports and Other Informational Materials:

"Lake County Libertyville Facility BMP Demonstration Project." July 22, 2010. Lake County Stormwater Management Commission.

BMP Implementation Summary:

p.			Es	timated Load Re	duction
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
013	Rain Garden	3 no.	?	2	13
800	Urban Stormwater Wetland	2 no.	?	24	86
835	Urban Filter Strip	0.61 ac.	?	2	16
845	Infiltration Trench	1 no.	?	0.5	4

07-05(319)CD

Title: Fox River Stabilization Project

Purpose: This project stabilized approximately 2,306 feet of eroding streambanks along a segment of the Fox River (ILDT58) at two highly visible park locations in St. Charles, Illinois. These are Boy Scout Island and St. Mary Park. Streambanks were stabilized with dense, deep-rooted native vegetation and rip rap. Vegetated buffers were also established. Eight "limestone-steppers" were constructed to allow controlled public access to the river and stabilize the eroded paths to the water's edge. Interpretive signage was installed at each site.

Project Location: Kane County

Subgrantee: St. Charles Park District 8 North Avenue St. Charles, Illinois 60174

Project Reports and Other Informational Materials:

"Fox River Stabilization Project – Final Report." December 2009. Kabbes Engineering, Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	2,306 ft.	138	138	277

07-06(319)SR

Title: DuPage River, Salt Creek TMDL Implementation Phase II

Purpose: This project contributed to reductions of chloride from urban runoff, increased awareness and implementation of sediment and erosion control and stormwater best management practices at both the professional and residential level and completed the design phase for two projects to improve dissolved oxygen through dam removal/modification and in-stream aeration. This project also continued the funding of a watershed coordinator. The DuPage River and Salt Creek are included on Illinois 303(d) list. The TMDL and implementation plan for the DuPage River and Salt Creek are complete.

Project Location: Counties of DuPage & Cook

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

Project Reports and Other Informational Materials:

"DuPage River and Salt Creek TMDL Implementation Phase II – Final Report." October 31, 2010. The DuPage River Salt Creek Workgroup.

Title: North Branch Watershed Project - Implementation Phase 6

Purpose: This project implemented additional best management practices (BMPs) in accordance with the North Branch Watershed Management Plan in Lake County. The North Branch of the Chicago River is composed of three forks: the West Fork, Middle Fork, and the Skokie River. All three forks as well as six lakes and ponds in the watershed are listed as impaired waters on Illinois' 303(d) list. This project executed nonpoint source pollution control recommendations of a watershed-based plan for the North Branch Chicago River.

Project Location: Lake County

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

Project Reports and Other Informational Materials:

"North Branch Chicago River Watershed Project Phase 6 – Final Report." November 30, 2010. Lake County Stormwater Management Commission.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
011	Green Roof	0.22 ac.	?	?	?
012	Cistern	1 no.	?	?	?
013	Rain Garden	5 no.	?	0	77
580	Streambank/Shoreline Protection	13,992 ft.	2,414	871	1,652
657	Wetland Restoration	4.51 ac.	?	44	237
800	Urban Stormwater Wetland	3 no.	?	41	179
840	Grassed Lined Channel	1.08 ac.	33	51	101
890	Porous Pavement	0.18 ac.	?	11	103
07-08(319) CE)				

Title: Otter Lake Shoreline Erosion Control

Purpose: This project continued efforts to stabilize Otter Lake (ILRDF) shoreline by dealing with the most eroded areas first using a barge equipped with a conveyor belt to distribute rip rap in these areas. Approximately 14,657 feet of shoreline were stabilized with rip rap and approximately 1,433 feet of shoreline were protected by planting 800 bald cypress trees and 400 hardwood trees along the shoreline. Otter Lake is on Illinois' Section 303(d) list. Currently the lake and watershed are involved in TMDL development. A watershed-based plan has been developed which identifies the pollutants causing water quality impairments and describes BMPs to be implemented to solve water quality problems.

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 Project." November 3, 2009. Otter Lake Water Commission.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	16,090 ft.	370	370	744

07-09(319) CD

Title: LaMoine Livestock Exclusion

Purpose: This project focused on livestock management and associated habitat restoration activities on the LaMoine River (ILDG-04). Producers were selected for the purpose of excluding livestock from critical stream corridors. Each of the stream segments selected fell within a "priority" implementation list from the LaMoine River Watershed Implementation Plan, April 2006. Best management practices included fencing, livestock exclusion, grassed waterways, water and sediment control basins, water source/watering facilities, comprehensive nutrient management planning, pasture/hay planting, and streambank stabilization and wetland restoration.

Project Location: McDonough County

Subgrantee: Prairie Hills RC &D, Inc. 321 University Drive Macomb, Illinois 61455

Project Reports and Other Informational Materials:

LaMoine River Livestock Exclusion Project – Final Report." October 26, 2011. Prairie Hills RC & D, Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
412	Grassed Waterway	4 ac.	70	70	140
638	Water and Sediment Control Basin	25,550 ft.	700	384	771
580	Streambank/Shoreline Protection	600 ft.	71	71	143
382	Fencing	10,509 ft.	37	33	66
472	Livestock Exclusion	182.8 ac.	70	66	128
556	Planned Grazing Systems	710.9 ac.	383	507	993

Title: Stabilization of White Pine Drainage Channel

Purpose: This project stabilized 3,635 feet of eroding streambanks along a 1,818 foot segment of the White Pine Drainage Channel which discharges into Buffalo Creek (ILGST), a tributary of the Des Plaines River, located between Sycamore Road and Bernard Drive in Buffalo Grove, Illinois. The project stabilized banks and dissipated the energy of water entering the channel. Existing sediment deposits were removed from stream bed to produce a more consistent flow gradient. The channel was lined with an erosion control blanket and turf reinforcement mat with an 18" boulder lining at the toe of slope. The banks and stream edge were re-vegetated with native plants. Sump pump outfalls were lowered and rip rap placed at storm sewer and sump pump outfalls to reduce scour.

Project Location: Cook County

Subgrantee: Village of Buffalo Grove 51 Raupp Blvd. Buffalo Grove, Illinois 60089

Project Reports and Other Informational Materials:

"Stabilization and Naturalization of White Pine Drainage Channel." August 5, 2009. Bonestroo, Inc.

BMP Implementation Summary:

•			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	3,635 ft.	130	130	262
07-11(319) JC					

Title: Kickapoo Creek Corridor Restoration

Purpose: The project initiated the restoration of Kickapoo Creek (ILEIE03) and its riparian corridor within the limits of the "Grove on Kickapoo Creek" residential development. The project involved re-meandering and bank stabilization of 2,800 feet of Kickapoo Creek north of Ireland Grove Road, installation of 4.5 acres of riparian wetlands, and revegetation of a 40 acre riparian corridor for Kickapoo Creek designed to stabilize soils, slow runoff and erosion, and prevent stormwater pollutants from entering the creek. The restoration site is in HUC 071300090502 and upstream of a TMDL segment.

Project Location: McLean County

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

Project Reports and Other Informational Materials:

"Kickapoo Creek Project – Phase 1 – Final Report." July 24, 2009. Farnsworth Group Inc.

07-13(319) JC

Title: Glacial Park Center Stormwater BMPs

Purpose: This project implemented BMPs to reduce nonpoint source pollution to Nippersink Creek (ILDTK-04) and Wonder Lake (ILRTZC) from the new Glacial Park Center for Environmental Research and Exploration in McHenry County, Illinois. The project included the construction of a 75,983 square foot permeable parking lot and drop off area, a system of rain gardens (10,339 square feet), infiltration trenches (1,100 square feet), level spreaders (221 square feet), and approximately four acres of native prairie/woodland restoration. Interpretive signage, an interpretive display (video), and an informational brochure were developed and installed at the site to educate the public about nonpoint source pollution and the BMPs. Nippersink Creek and Wonder Lake are included on Illinois' 303d list. A watershed-based plan has been completed.

Project Location: McHenry County

Subgrantee: McHenry County Conservation District 18410 U.S. Highway 14 Woodstock, Illinois 60098

Project Reports and Other Informational Materials:

"McHenry County Conservation District Glacial Park Center Stormwater BMPs – Project Report." May 2011. Conservation Design Forum.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
013	Rain Garden	3 no.	?	0.2	0.9
666	Woodland Improvement	4.1 ac.	?	1	2.8
845	Infiltration Trench	2 no.	?	0.5	1.6
870	Level Spreader	4 no.	?	?	?
890	Porous Pavement	1.74 ac.	?	1.6	16.3

07-14(319)SR

Title: <u>Clean Water: The Role of Trees and Vegetation</u>

Purpose: A one-day forum was held in Moline, Illinois to inform the public about the effective use of trees to filter and absorb nonpoint source pollution. A presentation was also made at three conferences across the state to promote the use of trees for nonpoint source pollution control.

Project Location: Statewide

Subgrantee: Trees Forever 770 7th Avenue Marion, Iowa 52302

Project Reports and Other Informational Materials:

"Clean Water: The Role of Trees and Vegetation – Final Report." March 2011. Trees Forever

07-15(319) BL

Title: Mid-Illinois River TMDL Education

- **Purpose:** This project involved the compilation of a comprehensive social resource inventory for the Lower Illinois River-Senachwine Lake Watershed, Hydrologic Unit Code 07130001, that described the ability and willingness of landowners, farmers, local units of governments, and other stakeholders to implement specific best management practices recommended by Illinois EPA and USEPA through the TMDL process. The inventory was designed to help guide the Illinois EPA and USEPA in the development of the Illinois River (Peoria Area) TMDL implementation plan to maximize opportunities for plan implementation. The project also implemented a watershed-based education strategy to engage local stakeholders in the TMDL planning process and result in locally derived guidance for Illinois EPA and USEPA to establish problem statements, goals and objectives for the Illinois River TMDL.
- Project Location: Counties of Lee, LaSalle, Bureau, Putnam, Marshall, Peoria, Woodford, & Tazewell
- Subgrantee: Tri-County Regional Planning Commission 211 Fulton Street, Suite 207 Peoria, Illinois 61602

07-16(319) ME

Title: <u>Geomorphic and In-channel Habitat Assessment of South Kickapoo Creek</u>

Purpose: This project conducted detailed geomorphic and biological assessments to target and prioritize the in-stream problems in the main stem and three major tributaries of the South Kickapoo Creek (ILDZ3B) at the Marseilles State and Wildlife Area near Marseilles, Illinois. Assessment activities followed the 2009 Illinois River Basin Ecosystem Restoration Geomorphic Watershed Assessment (IRBGWA) Protocols.

Project Location: LaSalle County

Subgrantee: University of Illinois 2204 Griffith Drive Champaign, Illinois 61820

Project Reports and Other Informational Materials:

"South Kickapoo Creek Restoration Project and Addendum - Geomorphic and In-channel Habitat Assessment of South Kickapoo Creek." November 2011. University of Illinois, Prairie Research Institute, State Water Survey, Center for Watershed Science.

07-17 (319)ST

Title: Mackinaw Riverbank Stabilization - Waibel Project

Purpose: This project stabilized 400 feet of eroding streambank along a segment of the Mackinaw River (ILDK-12). Streambanks were stabilized using a combination of stone toe protection and stream barbs.

Project Location: Tazewell County

Subgrantee: Tazewell County Soil and Water Conservation District 1440 Valle Vista Blvd., Suite B Pekin, Illinois 61554

Project Reports and Other Informational Materials:

"Mackinaw Riverbank Stabilization - Waibel Project." September 6, 2011. Maurer-Stutz, Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	400 ft.	299	299	598
07-18(319) CE)				

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.

07-(319) AW

FFY 2008 FEDERALLY FUNDED SECTION 319 PROJECTS

Title: Illinois Urban Manual Update & NPS Program Assistance

Purpose: This project allowed for continued technical, educational, and informational assistance to, and through the county soil and water conservation districts. A Watershed Liaison provided assistance to Illinois EPA regarding water quality issues, program outreach and implementation. This project also systematically updated twenty-five (25) nonpoint source pollution control practice standards contained in the Illinois Urban Manual. The Illinois Urban Manual was updated through the revision of standards that were currently out of date, deletion of those that were obsolete, and inclusion of new standards that had been developed in the growing fields of urban watershed protection and soil erosion and sediment control and water quality research.

Project Location: Statewide

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

Total Project Cost:	\$438,501.00	Cumulative Expenditure:	\$474,011.13
Federal:	\$263,101.00	Federal:	\$263,101.00
State and Local:	\$175,400.00	State and Local:	\$210,910.13

Project Reports and Other Informational Materials:

"Final Report - Illinois Urban Manual Update & NPS Program Assistance." April 2012. Nelson Land Management LLC.

08-01(319)SR

Title: <u>Streambank Cleanup And Lakeshore Enhancement (SCALE)</u>

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

Subgrantee: Not Applicable

Project Reports and Other Informational Materials:

Streambank Cleanup And Lakeshore Enhancement (SCALE). February 2011. Illinois Environmental Protection Agency.

Title: <u>Resource Management Mapping Service</u>

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. 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 database and enable new analytic geo-processing functions of the data, funding was also be used to update and expand Resource Management Mapping Service (RMMS), a website maintained at the University of Illinois to aid public stakeholders in watershed management.

Project Location: Statewide

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

08-03(319)SR

Title: South Pond Enhancement Demonstration & Education Project

Purpose: This project restored the South Pond (ILQZL) at Lincoln Park Zoo in Chicago, Illinois. Existing asphalt walkways and concrete retaining walls, which have deteriorated, were removed and 3,850 feet of pond edge was re-graded and vegetated with pollutant filtering plants. A 10 to 20 foot buffer strip of prairie grasses and other plants was installed between the park and the pond's shoreline. Asphalt walkways were replaced with a porous boardwalk made of recycled plastic. This project also used South Pond to educate visitors about water quality and non-point source pollution. Educational activities include hiring a part-time South Pond Program Assistant, development and delivery of teacher training workshops, support for the 4th and 5th annual Build and Grow South Pond Science and Project Fairs in 2008 and 2009, a mobile display booth on the South Pond and clean water issues displayed at events around Chicago and the state by staff and volunteers, and presentations at two conferences. Finally, Integrated Lakes Management trained volunteer naturalists and analyzed the results of a water quality monitoring program.

Project Location: Cook County

Subgrantee: Lincoln Park Zoo 2001 North Clark Street Chicago, Illinois 60614

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	3,850 ft.	8	9	19
890	Porous Pavement	0.25 ac.	?	1	2
08-04(319)BL					

Title: Watershed Capacity Building

Purpose: This project provided capacity-building support to a broad audience of watershed organizations to meet a number of their information and training needs. Illinois specific topics were identified by surveying the major stakeholders addressing Illinois water quality issues such as SWCDs, municipalities, Ecosystem Partnerships, watershed groups, universities and others. The list of topics was broken down into three categories: information needs, training, and technology transfer. Additionally, the survey helped determined the best avenue for information distribution for each type of watershed organization and information type being disseminated. A current list of watershed groups/organizations in Illinois was developed. Ten workshops, covering six different topics, were held in various parts of the state.

Project Location: Statewide

Subgrantee: Prairie Rivers Network 1902 Fox Drive, Suite G Champaign, Illinois 61820

Project Reports and Other Informational Materials:

"Watershed Capacity Building – Strategy Implementation." April 2011. Prairie Rivers Network.

08-05(319)CD

Title: Fox River Watershed Restoration and Education

Purpose: This project included four watershed restoration and protection projects as well as watershed-wide project coordination and technical assistance. Under the West Dundee Bioinfiltration BMPs project, two bioretention facilities were installed at the end of Oregon Street and Fay Avenue in the Village of West Dundee to receive and treat urban runoff before discharge into the Fox River (ILDT-20). The Norris Woods Creek Stabilization and Water Quality Improvement project stabilized 1,518 feet of eroding streambed in Norris Woods Creek, a tributary to the Fox River (ILDT-58), located in the Norris Woods Nature Preserve in Kane County through the incorporation of small boulders and large cobble into the bed and banks to form a step/pool system that provides secure grade control for the streambed. Consistent with the Poplar Creek watershed-based plan, the South Branch Poplar Creek Action Plan Implementation project stabilized approximately 2,036 feet of eroding streambanks along a 1,080 foot segment of the south branch of Poplar Creek, a tributary of the Poplar Creek (ILDTG02) and the Fox River in Steamwood, Illinois

through the use of gabion baskets, coir logs at the toe, slope re-grading, and revegetation of banks with native prairie plugs and seed. The Jelkes Creek Reclamation Project restored a 160-acre site on Jelkes Creek (ILDTZQ-01), a tributary of the Fox River and a "Measure W" watershed, located southwest of the Village of Sleepy Hollow in Kane County, Illinois through the use of best management practices, including vegetated bio-swales, native plant filter strips, wetland filtration basins, and naturalized infiltration basins. The project also included various education components.

Project Location: Counties of Kane & Cook

Subgrantee: Chicago Metropolitan Agency for Planning 233 South Wacker Drive, Suite 800 Chicago, Illinois 60606

Project Reports and Other Informational Materials:

"Fox River Watershed Restoration and Education." December 2011. Chicago Metropolitan Agency for Planning.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	2,036 ft.	130	130	260
584	Stream Channel Stabilization	1,518 ft.	143	143	287
13	Rain Garden	2 no.	?	1	6
600	Terrace	4,000 ft.	?	0	1
800	Urban Stormwater Wetlands	8 no.	?	3	9
845	Infiltration Trench	8 no.	?	1	2

08-06(319)SR

Title: Clinton Lake Watershed

Purpose: This project began implementation of best management practices (BMPs) to reduce nonpoint source pollution as recommended in the Clinton Lake (ILREI) watershedbased plan. BMPs implemented under this project included approximately 5,290 feet of lake shoreline stabilization using rip rap breakwater with transitional wetland.

Project Location: DeWitt County

Subgrantee: DeWitt County Soil & Water Conservation District Rural Route 4, Post Office Box 344a Clinton, Illinois 61727

Project Reports and Other Informational Materials:

"Clinton Lake Watershed – Final Report." February 2012. DeWitt County Soil & Water Conservation District.

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	5,290 ft.	2,116	2,116	4,232

08-07(319) ST

Title: Clinton County Livestock Nutrient Management Project

Purpose: This project provided cost share assistance to livestock producers to implement best management practices (BMPs) to reduce nitrogen and phosphorus from entering Shoal Creek and Sugar Creek within Clinton County. The Southwestern Illinois RC&D retained the services of a Livestock Waste Technician to work with producers within these watersheds to design BMPs to reduce nutrient loading. Shoal Creek (ILOI08) and Sugar Creek (ILOH01) were included on Illinois' 303d list. A Total Maximum Daily Load (TMDL) is being prepared for Shoal Creek.

Project Location: Clinton County

Subgrantee: Southwestern Illinois Resource Conservation and Development, Inc. 406 East Main Street Mascoutah, Illinois 62258

Project Reports and Other Informational Materials:

"Clinton County Livestock Nutrient Management Project." June 13, 2012. HeartLands Conservancy.

Estimated Load Reduction

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
590	Nutrient Management	766 ac.	?	843	4,567
312	Waste Management System	5 no.	?	2,015	9,589
558	Roof Runoff Management	2 no.	?	1,124	6,090
08-08(319) JC					

Title: Bull Cr./Bull's Brook and Indian Cr. Watershed-Based Plan Implementation

Purpose: This project implemented a variety of nonpoint source pollution control projects within the Indian Creek (ILGU02), Bull Creek and Bull Brook (ILGV01) watersheds. Best management practices were identified in the corresponding approved watershed based plans. All practices were designed to reduce nonpoint source pollution and improve water quality. The Lake County Stormwater Management Commission provided project coordination and oversight.

Project Location: Lake County

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

Project Reports and Other Informational Materials:

"Bull Cr./Bull's Brook and Indian Cr. Watershed-Based Plan Implementation – Final Report." November 2011. Lake County Stormwater Management Commission.

BMP Implementation Summary:

MP Name		Sediment	Discourse a service	
MD Nama		Ocument	Phosphorus	Nitrogen
	Amount	(tons/year)	(lbs/year)	(lbs/year)
treambank/Shoreline Protection	14,914 ft.	962.6	617	1,231
itch Stabilization	150 ft.	16	16	32
etland Restoration	0.5 ac.	?	1	2
il and Grit Separator	3 no.	?	1	24
ain Garden	4 no.	?	77	45
rban Filter Strip	0.8 ac.	?	28	180
arass-Lined Channels	0.02 ac.	?	0	3
orous Pavement	0.035 ac.	?	0	1
	itch Stabilization /etland Restoration il and Grit Separator ain Garden rban Filter Strip irass-Lined Channels	itch Stabilization150 ft./etland Restoration0.5 ac.iil and Grit Separator3 no.ain Garden4 no.rban Filter Strip0.8 ac.irass-Lined Channels0.02 ac.	itch Stabilization150 ft.16/etland Restoration0.5 ac.?iil and Grit Separator3 no.?ain Garden4 no.?rban Filter Strip0.8 ac.?irass-Lined Channels0.02 ac.?	itch Stabilization150 ft.1616/etland Restoration0.5 ac.?1iil and Grit Separator3 no.?1ain Garden4 no.?77rban Filter Strip0.8 ac.?28irass-Lined Channels0.02 ac.?0

Title: BMP Implementation Addressing Highland Silver Lake TMDL

Purpose: This project developed a Watershed Based Plan that meets the 9 minimum elements and stabilized 4,130 linear feet of moderate to severely eroded shoreline on Highland Silver Lake (ILROZA), a 550 acre public water supply and recreational lake. Although not financed with Section 319 funding, fencing and alternate watering sources (2 ponds) were installed to prevent livestock from accessing to the lake. These best management practices are consistent with the recommendations of the Clean Lakes Diagnostic/Feasibility Study and the Highland Silver Lake Total Maximum Daily Load (TMDL).

Project Location: Madison County

Subgrantee: City of Highland P.O. Box 218 Highland, Illinois 62249

Project Reports and Other Informational Materials:

"Project Evaluation and Completion Report for Highland Silver Lake." July 2011. HDR Engineering, Inc.

"Watershed Plan for Highland Silver Lake Watershed." July 2011. HDR Engineering, Inc.

			Estimated Load Reduction		
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (Ibs/year)	Nitrogen (Ibs/year)
580	Streambank/Shoreline Protection	4,100 ft.	657	657	1315
08-10(319) JC					

Title: <u>BMP Implementation Addressing Kinkaid Lake Sedimentation & TMDL</u>

Purpose: This project constructed one sediment/nutrient detention basin and stabilized 7,495 lineal 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:

"Kinkaid Lake TMDL Best Management Practices Implementation – Project Evaluation and Final Report." November 2010. HDR.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	1 no.	249	51	102
580	Streambank/Shoreline Protection	7,495 ft.	1,900	1,900	3,795

08-11(319) JC

Title: Barrington Area Community Outreach Program

Purpose: Working with local partners, this project was designed to support implementation of the Flint Creek (ILDTZS01) watershed-based plan by providing the resources for a series of educational outreach programs for the community. Four, free to the public sessions were hosted that included short presentations on green gardening, low impact development, how local water protection issues have global ramifications, improving the watershed, what homeowners can do to reduce nonpoint source pollution, lake and riparian water protection, and living next to and in harmony with water resources.

Project Location: Counties of Cook & Lake

Subgrantee: Barrington Hills Conservation Trust 17 Oakdene Road East Barrington Hills, Illinois 60010

08-12(319) BL

Title: TMDL/Watershed Based Plan Adaptive Implementation Demonstration Project

Purpose: This project developed Total Maximum Daily Loads (TMDL) for the Prairie Creek (ILDGZN01), Indian Creek (ILDJFC), and Dago Slough (ILILDJFCA) watersheds. A monitoring strategy was implemented to collect additional flow and water quality data to supplement existing Illinois EPA water quality information for the project area to identify and locate sources of water quality stressors and to serve as a foundation to develop TMDLs. TMDLs were then developed for the watersheds. This project also developed design specifications for the stabilization of 3,740 feet of eroding streambanks on a segment of South Kickapoo Creek (ILDZ3B).

Project Location: Counties of Hancock and Knox

Subgrantee: The Board of Trustees of the University of Illinois 1901 South First Street, Suite A Champaign, Illinois 61820

Project Reports and Other Informational Materials:

Load Reduction Strategy and TMDL Final Approved Report - Indian Creek, Dago Slough and Prairie Creek. December 16, 2010. Illinois Environmental Protection Agency.

08-13(319) TS

Title: North Mill Creek Water Quality Study and Watershed Plan

Purpose: This project completed a watershed-based plan for the North Mill Creek (ILGWA) watershed, a tributary of Mill Creek and the Upper DesPlaines River. Water quality monitoring was also performed to aid in the decision making process of targeting critical areas for best management practice implementation to reduce nonpoint source pollution. The assessment also acted as the baseline for measuring future changes in water quality. At the time the plan was developed, 11 assessed waterbodies in the watershed were impaired for aesthetic use and/or aquatic life use and were listed on the 303(d) Impaired Waters List. The completed watershed-based plan meets the nine minimum elements.

Project Location: Lake County

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

Project Reports and Other Informational Materials:

"North Mill Creek-Dutch Gap Canal Watershed-Based Plan." November 2011. Lake County Stormwater Management Commission.

08-14(319)ST

Title: Embarras River Watershed Based Planning

- **Purpose:** This project developed a watershed-based plan for the Embarras River (ILBE01) (Hydrologic Unit Code 05120112) that is 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 City of Charleston worked with local stakeholders to develop an integrated watershed plan for the Embarras River watershed that includes watershed data evaluation and resource inventory along with site specific Best Management Practices recommendations designed to improve water quality by reducing suspended sediment, nutrients and other pollutants while enhancing habitat and aesthetics.
- **Project Location:** Counties of Champaign, Douglas, Edgar, Coles, Clark, Cumberland, Jasper, Crawford, Richland, and Lawrence
- Subgrantee: City of Charleston 520 Jackson Avenue Charleston, Illinois 61920

Project Reports and Other Informational Materials:

"Embarras River Watershed Management Plan." October 2011. V3 Companies, LTD and Northwater Consulting.

08-15(319)JC

Title: <u>Clear Creek Watershed Plan Update</u>

Purpose: This project developed a watershed-based plan for Clear Creek (ILPZU), a tributary of the Rock River (ILP20), 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 Lost Nation-New Landing River Conservancy District worked with local stakeholders to develop an integrated watershed plan for the Clear Creek watershed that includes watershed data evaluation and resource inventory along with site specific Best Management Practices recommendations designed to improve water quality by reducing

suspended sediment, nutrients and other pollutants while enhancing habitat and aesthetics.

Project Location: Counties of Ogle and Lee

Subgrantee: The Lost Nation-New Landing River Conservancy District 205 Cuyahoga Drive Dixon, Illinois 61021

Project Reports and Other Informational Materials:

"Clear Creek Watershed Action Plan." September 30, 2011. Olson Ecological Solutions, LLC.

08-16(319)SR

Title: <u>Watershed Liaison</u>

Purpose: Conservation Technology Information Center acted as a liaison between stakeholders, agricultural producers, federal and local partners, and the Illinois EPA in developing and implementing a project that demonstrated the efficacy, value and impact of conservation systems on watersheds and the Illinois' Nonpoint Source Management Program. The project addressed sedimentation and nutrient loading to the Indian Creek (ILDSPA) watershed in Livingston County through the implementation nutrient management planning and education and outreach activities.

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 Watershed Project – Final Report." July 15, 2013. Conservation Technology Information Center.

08-17 (319) TS

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.

08-(319) AW

FFY 2009 FEDERALLY FUNDED SECTION 319 PROJECTS

Title: North Fork Vermilion River Project - Phase 4

Purpose: This project addressed sedimentation and nutrient loading to the North Fork Vermilion River (ILBPG05) through the implementation of upland best management practices (i.e., grassed waterways and water and sediment control basins) and through the implementation of streambank stabilization. Approximately 2,935 feet of eroding streambank were stabilized using a variety of practices (i.e., longitudinal peaked stone toe protection, critical area seeding and bank re-shaping, root wad installation, stream barbs, and bendway weirs). An educational component of the project included newsletters, media, and tours to inform residents about the water quality impacts of nonpoint source pollution.

Project Location: Vermilion County

Subgrantee: Vermilion County SWCD 1905-A US Rte 150 Danville, Illinois 61832

Project Reports and Other Informational Materials:

"North Fork Vermilion River Project - Phase IV Final Report." October 2013. Vermilion County Soil and Water Conservation District.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
412	Grassed Waterway	17.75 ac.	905	871	1,742
580	Streambank/Shoreline Protection	2,935 ft.	1,426	1,350	2,699
638	Water and Sediment Control Basin	600 ft.	125	125	250

09-01 (319)JC

Title: In-stream Restoration and Monitoring of Kickapoo Creek near Charleston, Illinois

Purpose: This project restored 2,000 feet of bank and channel stability in combination with the establishment of deep pool habitats and riffles along a segment of Kickapoo Creek (ILBEN01) near Charleston, Illinois. Post-construction assessment and monitoring activities was performed to evaluate 1) the effectiveness of the installed streambank and channel stabilization measures, 2) bed load sediment transport and in-stream habitat diversity, 3) hydrologic flow, and 4) fish and macroinvertebrates.

Project Location: Coles County

Subgrantee: Illinois Department of Natural Resources Office of Realty and Environmental Planning One Natural Resources Way Springfield, Illinois 62702

Project Reports and Other Informational Materials:

"Kickapoo Creek Restoration Project, Charleston, Illinois." July 1, 2012. Illinois Department of Natural Resources.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	2,000 ft.	720	612	1,224
09-02 (319)JC					

Title: <u>Silver Creek Stabilization</u>

Purpose: This project stabilized 2,155 feet of eroding streambanks along a segment of Silver Creek (ILGM01), a tributary of the DesPlaines River, located in Melrose Park, Illinois. Streambanks were stabilized using stone toe protection, vegetated geogrid, slope re-grading, fiber roll toe, minor clearing of non-native vegetation, re-vegetation with native wetland plugs and seed, rock points, and two riffles.

Project Location: Cook County

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

Project Reports and Other Informational Materials:

"Silver Creek Streambank Stabilization Project, Phase 3." November 2010. Living Waters Consultants, Inc.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	2,155 ft.	296	296	593
09-03 (319)SF	R				

Title: Joliet Junior College Lake Clean-up and Management

Purpose: This project installed a variety of best management practices (BMPs) to reduce nutrient and pollutant loading to Joliet Junior College Lake and improve water quality. The project included a 2,050 ft. vegetated bioswale, a 350 ft. wetland swale with stone check dams, and a 1.9 acre stormwater wetland at the downstream end of the bioswales. Fore bays were installed at the entry points to the wetland and also at the wetland outfall. Separators were installed in three locations to treat runoff from parking lots and buildings before it enters the lake. The project also included dredging 7,458 cubic yards of sediment from the lake. The cost of dredging

(\$268,125) was paid entirely with local funding and used only as match under the project. Joliet Junior College Lake (ILWGZX) is tributary to Rock Run (ILGBAA-01).

Project Location: Will County

Subgrantee: Joliet Junior College 1215 Houbolt Road Joliet, Illinois 60431-8938

Project Reports and Other Informational Materials:

"Joliet Junior College Lake Clean-up and Management Project." July 2011. Joliet Junior College.

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
007	Dredging	1 no.	?	?	?
010	Oil and Grit Seperator	3 no.	?	?	7
800	Urban Stormwater Wetlands	1 no.	?	12	55
814	Bioswale	2.5 ac.	?	?	?
09-04 (319)SR	R				

Title: Holiday Shores Lake Watershed Sediment and Nutrient Reduction Project

Purpose: This project installed best management practices (BMPs) to reduce nutrient and sediment pollutant loading to Holiday Shores Lake (ILRJN) and improve water quality. Approximately 4,000 feet of eroding streambank in the lake's watershed were stabilized. Two sediment basins were constructed on land owned by Holishor Association above the lake on Joulter's Creek. And 8,000 cubic yards of sediment were dredged from an existing sediment pond located at the north end of the lake. Holiday Shores Lake is included on Illinois' 303d list and a TMDL for Holiday Shores Lake has been completed.

Project Location: Madison County

Subgrantee: Holishor Association, Inc. 1 Holiday Point Parkway Edwardsville, Illinois 62025

Project Reports and Other Informational Materials:

Holiday Shores Lake Watershed Sediment and Nutrient Reduction Project. August 30, 2011. Heneghan and Associates, P.C.

			Estimated Load Reducti		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	2 no.	1,250	1,065	2,130
7	Dredging	2 no.	?	?	?
580	Streambank and Shoreline Protection	4,000 ft.	95	81	162
09-05 (319)JC	;				

Title: Flint Creek Watershed Plan Implementation Projects

Purpose: This project retrofitted an existing detention basin located at the Lake Barrington Village Hall by replacing existing turf grass with wet and mesic prairie vegetation and constructing vegetated swales along the east side of the parking lot to collect and filter runoff. Signage was placed at the site to explain the water quality and infiltration benefits of the project. Also, an existing three acre pond (pond 4) in the Braymore Hills subdivision was converted into a stormwater wetland through the addition of floating islands of wetland plants to reduce nutrients in the water. Turf grass along the shoreline was replaced with native vegetation to create a 0.4 acre prairie buffer. Enzyme B504 was applied to the entire 20 acre pond system, of which pond 4 is a part, to break down the organic material on the bottom of the ponds, which is a major source of nutrients. Ultrasonic algae control was also used in pond 4.

Project Location: Counties of Lake & Cook

Subgrantee: Citizens for Conservation Flint Creek Watershed Partnership 459 West Highway 22 Barrington, Illinois 60010

Project Reports and Other Informational Materials:

"Flint Creek Watershed Plan Implementation Projects – Final Report." December 2010. Citizens for Conservation Flint Creek Watershed Partnership.

BMP Implementation Summary:

		Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	Nitrogen (Ibs/year)
019	Aquatic Herbicide Application	3 ac.	?	?	?
027	Nutrient Inactivation	1 no.	?	?	?
800	Urban Stormwater Wetland	2 no.	?	3	21
09-06(319)SR					

Title: Early Childhood Center Water Quality Improvement Project

Purpose: This project installed a variety of best management practices (BMPs) at the Early Childhood Center, a new school in Naperville, Illinois, to reduce nonpoint source pollutant loading to the West Branch of the DuPage River (ILGBK02) and improve

water quality. BMPs included rain gardens (20,000 square feet), parking lot bioswales (9,023 square feet), permeable paver bus turn-around area (15,000 square feet), green roofs on portions of the school (1,240 square feet), and a dry bottom detention basin vegetated with native grasses (78,500 square feet). The project also included an education component.

Project Location: DuPage County

Subgrantee: Naperville Community Unit School District 203 203 West Hillside Road Naperville, Illinois 60540

Project Reports and Other Informational Materials:

"Early Childhood Center Water Quality Improvement Project." February 2011. Wight & Company.

Ender stand to and Deducation

BMP Implementation Summary:

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
011	Green Roof	0.03 ac.	?	?	?
013	Rain Garden	6 no.	?	3	9
350	Sediment Basin	1 no.	?	3	28
845	Infiltration Trench	3 no.	?	3	9
890	Porous Pavement	0.35 ac.	?	8	80

09-08(319) CD

Title: <u>West Branch of the DuPage River Improvement Project</u>

Purpose: This project reconnected a 4,900 foot section of the West Branch of the DuPage River (ILGBK09) to its floodplain. The stream channel was raised approximately 2.75 feet over the entire project area. In addition, a series of step pool structures were constructed at the downstream end to provide a transition to the existing lower bed elevations off of the project site. Buried rock sills and grade control structures were installed in the stream and were extended out into the flood plain for long-term grade stabilization. The project site is a one mile section of river within the 20 square mile watershed.

Project Location: DuPage County

Subgrantee: Forest Preserve District of DuPage County 3 S. 580 Naperville Road Wheaton, Illinois 60187-8761

Project Reports and Other Informational Materials:

"West Branch DuPage River Improvement Project – Final Report." March 1, 2014. Forest Preserve District of DuPage County.

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
009	Stream Channel Restoration	4,900 ft.	2,166	2,166	4,332
09-09(319) CI)				

Title: Lake Sara Shoreline Protection Project

Purpose: This project stabilized 2,967 feet of eroding shoreline along the northern boundary of the Post Oaks Flatwoods Heritage Landmark on Lake Sara (ILRCE), a public water supply lake in Effingham County, Illinois. The shoreline and bluff areas were impacted by severe erosion due to excessive slopes, saturated upland soils and chronic wave actions. Stabilization of the shoreline was accomplished using transitional wetland breakwaters. This project also developed a watershed assessment study to guide future monitoring and planning decisions.

Project Location: Effingham County

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

Project Reports and Other Informational Materials:

""Lake Sara Watershed Assessment Study." July 15, 2011. Lake Sara Erosion Committee.

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

BMP Implementation Summary:

			Est			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
580	Streambank and Shoreline Protection	2,967 ft.	1,454	1,454	2,907	

09-10(319) ST

Title: Implementation of BMPs Addressing Cedar Lake

Purpose: This project stabilized 2,184 feet of eroding gullies and 10,786 feet of moderately to severely eroding shoreline along Cedar Lake (ILRNE). A water and sediment control basin (WASCB) was also constructed as recommended in the Phase I Diagnostic/Feasibility Report.

Project Location: Jackson County

Subgrantee: City of Carbondale 200 South Illinois Avenue Carbondale, Illinois 62974-9276

Project Reports and Other Informational Materials:

"Watershed Needs Evaluation, Cedar Lake Watershed, Union and Jackson Counties, Illinois." August 2011. HDR Engineering.

"Project Evaluation and Final Report for the Cedar Lake Implementation Projects, Carbondale, Illinois." August 2011. HDR Engineering.

BMP Implementation Summary:

			Es	eduction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
410	Grade Stabilization Structure	61 no.	434	434	869
638	Water and Sediment Control Basin	180 ft.	39	24	49
580	Streambank and Shoreline Protection	10,786 ft.	2,446	2,446	4,893
		-,	, -	, -	,
09-11(319) ST	-				

Title: Nippersink Watershed Assessment / Watershed Manager

Purpose: This project funded a part-time watershed manager in the Nippersink Creek (ILDTK04) watershed. This part-time manager provided technical assistance, planned and coordinated pertinent watershed information, identified potential watershed stakeholders for the project to implement best management practices (BMPs), and organized and coordinated meetings. This project also involved a university administered watershed survey/social science study to guide and assess watershed implementation efforts in the Nippersink Creek and Wonder Lake watersheds. Through voluntary actions of groups and individuals at the local level improvements to water quality through nonpoint source pollution (NPS) control will occur. The watershed survey/social science study will guide the local watershed planning committee to further water quality improvement in this 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 Creek Watershed FY2009 Grant Cycle." February 2012. Nippersink Watershed Association.

09-13(319) SR

Title: <u>BMP Implementation in Fulton and McDonough Counties</u>, Illinois

Purpose: This project improved water quality by significantly reducing sediment and nutrient loads from gully erosion in two targeted La Moine River Ecosystem Partnership sub-

watersheds. Sixteen water and sediment control basins and one diversion were implemented in Fulton and McDonough counties on gullies contributing high sediment and nutrient loadings in Otter Creek (ILDI02) and Camp Creek (ILDGI01) watersheds.

Project Location: Fulton and McDonough Counties

Subgrantee: Two Rivers RC & D Post Office Box 87 Pittsfield, Illinois 62363

Project Reports and Other Informational Materials:

"BMP Implementation in Fulton & McDonough Counties, Illinois." July 2012. Two Rivers RC&D Area.

BMP Implementation Summary:

			Es	eduction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
362	Diversion	300 ft.	6.9	7	14
638	Water and Sediment Control Basin	6,521 ft.	196.9	211	419
		,			
09-14(319) ST	-				

Title: Kickapoo Creek Corridor Restoration Phase 2

Purpose: This project continued the restoration of Kickapoo Creek (ILEIE04) and its riparian corridor within the limits of the "Grove on Kickapoo Creek" residential development. The project involved re-meandering and bank stabilization of 5,065 feet of Kickapoo Creek north of Ireland Grove Road, installation of 6.5 acres of riparian wetlands, and re-vegetation of a 39 acres of riparian corridor for Kickapoo Creek designed to stabilize soils, slow runoff and erosion, and prevent stormwater pollutants from entering the creek. The restoration site is in HUC 071300090502 and upstream of a TMDL segment.

Project Location: McLean County

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

Project Reports and Other Informational Materials:

"Kickapoo Creek Project - Phase 2 – Final Report." July 14, 2011. Farnsworth Group Inc.

			Es			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
009	Stream Channel Restoration	5,065 ft.	130	130	258	
800	Urban Stormwater Wetlands	5 no.	?	77	290	
09-15(319) JC						

Title: <u>Roosevelt Park Stormwater BMPs and Education</u>

Purpose: This project constructed a 6,900 sq. ft. permeable parking lot and a rain garden to reduce the discharge of nonpoint source pollution into the South Branch of the Waukegan River (ILQCA01) from Roosevelt Park. An interpretive exhibit describing the BMPs was placed at the parking lot. A 350 foot educational boardwalk with three interpretive exhibits was added to the path around the restored wetland in Roosevelt Park to allow access while avoiding impact on sensitive flora and fauna. The interpretive exhibits will inform the public about nonpoint source pollution, the Waukegan River watershed, and what the public can do to improve water quality. Community workdays were held to involve the public in river cleanups and educate them about the watershed. Maintenance and enhancement measures were also implemented on the restored wetland and woodland areas in Roosevelt Park.

Project Location: Lake County

Subgrantee: Waukegan Park District 2211 Ernie Krueger Circle Waukegan, Illinois 60087

Project Reports and Other Informational Materials:

"Roosevelt Park Stormwater BMPs and Education Project." December 2011. Waukegan Park District.

BMP Implementation Summary:

			Estimated Load Reduction		
		• •	Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
575	Stock Trails and Walkways	350 ft.	?	?	?
13	Rain Garden	1 no.	?	0	3
890	Porous Pavement	0.16 ac.	?	0	6
09-16(319)ST					

Title: East Branch South Branch Kishwaukee River Watershed-Based Plan

Purpose: This project developed a watershed-based plan for the East Branch Kishwaukee River (IL_PQCL-02) watershed (HUC 070900060501, 070900060502, 070900060503, 070900060504), a tributary of the South Branch Kishwaukee River (IL_PQC-02), 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. The East Branch Kishwaukee River (IL_PQCL-02) watershed contains Sycamore Lake (IL_RPZG), which was on the 303d list. The South Branch Kishwaukee River (IL_PQC-02) was also on the 303d list.

Project Location: DeKalb County

Subgrantee: County of DeKalb 110 East Sycamore Street Sycamore, Illinois 60178

Project Reports and Other Informational Materials:

"East Branch of the South Branch Kishwaukee River Watershed-Based Plan." July 2014. Hey and Associates, Inc.

09-17(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.

09-(319) AW