# Appendix 2 Closed Section 319 Grants – FFY 1990 - 1999 Completed Projects

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#### FFY 1990 FEDERALLY FUNDED SECTION 319 PROJECTS

**Title:** Stormwater Management Assistance Program

Purpose: General stream maintenance was performed under this project. Beaver dams were

removed from Klein Creek (ILGBK05). Debris removal, canopy thinning, and bank re-vegetation were performed on 0.98 miles of Sawmill Creek (ILGJ01) and 5.15 miles of Winfield Creek (ILGBK05). Biotechnical streambank stabilization (A-jacks, lunkers, willows, and rock weir) was performed on 500 feet of Glencrest Creek

(ILGBL10).

Project Location: DuPage County

**Subgrantee:** DuPage County Department of Environmental Concerns

DuPage Center, 421 North County Farm Road

Wheaton, Illinois 60187

#### **Project Reports and Other Informational Materials:**

"Final Report: DuPage County Stream Maintenance and Streambank Stabilization Demonstration Project." May 1993. DuPage County Department of Environmental Concerns.

"DuPage County Stream Maintenance Program Report." July 1991. DuPage County Stormwater Management Committee.

#### **BMP Implementation Summary:**

•	•		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	32,866 ft.	328	205	559
90-3(319)SR					

**Title:** Wetland Protection Program Development

Purpose: Two parcels of land, totaling approximately 242 acres, were acquired for wetland

protection in areas of the Cache River (ILIX04) basin.

**Project Location:** Johnson County

Subgrantee: Illinois Department of Conservation

524 South Second Street Springfield, Illinois 62707

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment Phosphorus 1		
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
006	Wetland Acquisition	242 ac.	NA	NA	NA

90-9(319)SR

Title: Stream Corridor Initiative

Purpose: Environmentally sound biotechnical practices were implemented to arrest

streambank erosion on a section of the Middle Fork of the Vermilion River

(ILBPK07).

**Project Location:** Vermilion County

**Subgrantee:** Illinois Department of Conservation

524 South Second Street Springfield, Illinois 62701

#### **Project Reports and Other Informational Materials:**

"Vegetative Restoration of Middle Fork Bank Erosion." December 1993. Illinois State Water Survey.

"Middle Fork Streambank Restoration Project." December 1993 (videotape). Illinois State Water Survey.

# **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,000 ft.	83	70	140
90-5(319)SR					

**Title:** Construction Erosion Control Initiative

**Purpose:** A multi-county implementation plan and ordinance was prepared which identified the inadequacies of existing regional soil erosion and sedimentation control programs, identified and evaluated experimental and innovative management alternatives and their applicability in the region, and recommended specific actions to reduce, eliminate, and regulate soil erosion. The project attempted to achieve agreement among local governments relating to the nature and scope of the implementation plan and ordinance.

**Project Location:** Counties of Peoria, Woodford, Tazewell, and Marshall

**Subgrantee:** Peoria County Department of Land Resources

Peoria County Court House

324 Main Street Peoria, Illinois 61602

### **Project Reports and Other Informational Materials:**

"Implementation Plan for a Soil Erosion and Sedimentation Control Program for Marshall, Peoria, Tazewell, and Woodford Counties." June 1992. Environmental Science & Engineering, Inc.

90-1(319)SR

Title: Butterfield Creek Urban Nonpoint Source Management Plan

**Purpose:** An assessment was prepared which defined the specific causes of nonpoint source impairment based on water quality and physical stream conditions. The significance of suspected nonpoint sources was identified and prioritized. A Preliminary Nonpoint Source Management Plan for Butterfield Creek (ILHBDB03) was prepared which recommended a control program addressing both structural and nonstructural

measures to mitigate existing problems and minimize future impacts.

**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:**

"Development of an Urban Nonpoint Source Management Plan for Butterfield Creek." October 1991. Northeastern Illinois Planning Commission.

90-2(319)SR

Title: Livestock Waste Regulation

Purpose: Livestock operation owners and operators were educated and advised on regulatory

restrictions, site design, land application practices, and utilization of management

practices such as filter strips.

**Project Location:** Statewide

Subgrantee: Not Applicable

#### **Project Reports and Other Informational Materials:**

"Utilizing Livestock Waste Efficiently." June 1991. Illinois Environmental Protection Agency.

"Understanding the Pollution Potential of Livestock Waste." June 1991. Illinois Environmental Protection Agency.

"Tax Certification Program for Livestock Waste Management Facilities." June 1991. Illinois Environmental Protection Agency.

"Livestock Waste Management Program - General Slide Presentation." August 1991. Illinois Environmental Protection Agency.

"Livestock Waste Management Program - Technical Slide Presentation." August 1991. Illinois Environmental Protection Agency.

"Vegetative Filter Systems - Slide Presentation." August 1991. Illinois Environmental Protection Agency.

"A Systematic Approach to Best Management Practices for Illinois Livestock Waste-Handling Facilities." 1991. Illinois Environmental Protection Agency.

90-7(319)SR

**Title:** Pesticide Monitoring Survey

Purpose: The United States Geological Survey (USGS), as part of the Toxic Substances Hydrology Program, in cooperation with the Illinois EPA installed automatic samplers for the collection of surface water samples in three watersheds in Illinois. The samples were used to determine the magnitude and duration of concentrations of triazine herbicides during the first runoff event following the application of herbicides in 1990. The three sites were selected to represent different areas of the state and different size drainage basins. The predominate land use in the selected sites is agricultural with a crop rotation of corn and soybeans.

**Project Location:** Counties of Iroquois, Piatt, and St. Clair

**Subgrantee:** U.S. Geological Survey

102 East Main Street Urbana, Illinois 61801

#### **Project Reports and Other Informational Materials:**

"U.S. Geological Survey Toxic Substances Hydrology Program -- Proceedings of the Technical Meeting, Monterey, California, March 11-15, 1991." U.S. Geological Survey.

90-8(319)SR

**Title:** Biological Data Management

Purpose: The Illinois EPA enhanced its watershed assessment capabilities, including

improved data management, assessment of key nonpoint source pollution indicators, and greater utilization of biological indicators through the use of the

Biological Data System (BIOS).

**Project Location:** Statewide

Subgrantee: Not Applicable

Title: Regional Ground Water Protection Program and Needs Assessment

Purpose: Well site surveys were utilized to identify specific locations for maximum setback zones and initiate regulating procedures to restrict land use activities within those zones as a demonstration of the setback initiative as a ground water protection practice. Cost-share assistance was provided for demonstration purposes to a geographically select group of municipal water supply authorities to conduct needs assessments for long term protection of ground water.

Project Location: Counties of McHenry, Boone, Winnebago, Peoria, and Tazewell

Subgrantee: Not Applicable

# **Project Reports and Other Informational Materials:**

"Illinois Groundwater Protection Program: Pilot Groundwater Protection Needs Assessment for Pekin Public Water Supply Facility Number 1795040." November 1992. Illinois Environmental Protection Agency.

90-6(319)RM

#### FFY 1991 FEDERALLY FUNDED SECTION 319 PROJECTS

Title: Butterfield Creek Detention Basin Retrofit

Purpose: A stormwater detention basin was redesigned and retrofitted to provide water quality

benefits to Butterfield Creek (ILHBDB03). Documentation was provided for the retrofit of the basin, the effectiveness of the basin, and the estimated cost and

impact of a watershed wide retrofit program.

**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:**

"Flossmoor Stormwater Detention Basin Retrofit: A Demonstration of Detention Basin Modifications to Improve Nonpoint Source Pollution Control." August 1995. Northeastern Illinois Planning Commission.

"Stormwater Detention Basin Retrofitting: Techniques to Improve Stormwater Pollutant Removal and Runoff Rate Control." 1995 (brochure). Northeastern Illinois Planning Commission.

# **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
800	Urban Stormwater Wetland	1 (no.)	?	68	278
91-1(319)SR					

**Title:** Sealing of Abandoned Water Wells and Mine Holes

**Purpose:** 180 abandoned mine holes and/or water wells in JoDaviess County were sealed in accordance with procedures and specifications developed by the Illinois Department

of Public Health. In cooperation with the Cooperative Extension Service and County Health Department, demonstrations on the proper sealing of mine holes and water

wells were conducted.

**Project Location:** JoDaviess County

Subgrantee: JoDaviess County Soil & Water Conservation District

227 North Main Street Elizabeth, Illinois 61028

# **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
005	Well Sealing	180 (no.)	N/A	?	?
91-2(319)CD					

**Title:** Urban Site Drainage Training Course

Purpose: A three day training course was developed and presented which was designed to educate consulting engineers, landscape architects, contractors, permit reviewers and inspectors, and other governmental agency staff in the incorporation of nonpoint source control best management practices into urban drainage design. The course focused on minimizing the impacts of development on stream uses caused by decreased low flows, increased high flows, increased duration of high flows, and increased pollutant loadings.

Cationata d Land Dadwatian

**Project Location:** Statewide

Subgrantee: Northeastern Illinois Planning Commission

222 South Riverside Plaza, Suite 1800

Chicago, Illinois 60606-6097

#### **Project Reports and Other Informational Materials:**

"Urban Stormwater Best Management Practices for Northeastern Illinois - Course Notebook." April, 1993. Northeastern Illinois Planning Commission.

91-4(319)ME

**Title:** Construction Site Erosion Control Video

Purpose: A videotape was prepared and produced describing the basic concepts and procedures for minimizing the effects of erosion through construction site planning and design, soil stabilization, sediment and runoff controls, and site inspection and The videotape provides guidance on control practices and maintenance. recommends more detailed references for designing and implementing specific controls.

**Project Location:** Statewide

**Subgrantee:** Northeastern Illinois Planning Commission

222 South Riverside Plaza, Suite 1800

Chicago, Illinois 60606-6097

#### **Project Reports and Other Informational Materials:**

"Erosion and Sediment Control - Procedures and Practices for Construction Sites." 1993 (18 min. videotape). Northeastern Illinois Planning Commission.

**Title:** Sequoit Creek Watershed Management Project (Phase 1)

**Purpose:** Information was compiled for the preparation of a nonpoint source analysis of the Sequoit Creek watershed along with specific nonpoint source management plans to address identified problems. Technical assistance was provided to local governments in reviewing soil erosion and sedimentation control plans. Baseline monitoring water quality data for lakes in the Sequoit Creek watershed were collected and compiled.

Project Location: Lake County

Subgrantee: Lake County Soil & Water Conservation District

70 South U.S. Highway 45, Suite 205 Grayslake, Illinois 60030-2208

Grayslake, Illinois 00030-2200

91-5(319)ME

**Title:** Sequoit Creek Watershed Management Project (Phase 2)

Purpose: Building upon the information collected under Phase 1, a nonpoint source analysis of

the Sequoit Creek watershed was prepared along with specific nonpoint source

management plans to address identified problems.

**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:**

"Sequoit Creek Watershed Management Project - Final Report." January 1995. Northeastern Illinois Planning Commission.

"Sequoit Creek Watershed Management Project - Watershed Inventory Reports." January 1995. Northeastern Illinois Planning Commission.

91-5(319)ME

**Title:** Siloam Springs Riparian Protection Project

**Purpose:** Vegetative grade controls were constructed in the Siloam Springs Lake (ILRDB) watershed which were designed to trap and treat pollutants in the water prior to its discharge to the lake as well as to enhance and protect recreation and wildlife resources of the watershed.

**Project Location:** Adams County

**Subgrantee:** Illinois State Water Survey

c/o University of Illinois 506 South Wright Street Urbana, Illinois 61801

#### **Project Reports and Other Informational Materials:**

"Watershed Restoration in Siloam Springs State Park." November 4, 1994 (videotape). Illinois State Water Survey.

"Preservation of Siloam Springs State Park by the Stabilization of Its Wooded Ravines." December 1, 1994. Illinois State Water Survey.

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
410	Grade Stabilization Structure	23 (no.)	?	?	?
91-3(319)GE					

**Title:** Ground Water Ecotoxicity Assessment

Purpose: This project supported the scientific development of a ground water ecotoxicity

assessment and field sampling protocol. The development process targeted testing

sites to evaluate nonpoint source contributions.

**Project Location:** Statewide

Subgrantee: Not Applicable

91-9(319)RM

Title: Ground Water Setback Zones

Purpose: This project continued the Illinois EPA's efforts directed at identifying and regulating certain activities around community wells by proposing maximum setback zones. The Illinois EPA used available hydrogeologic information, monitoring, survey, and needs assessment data to propose maximum zones in priority areas where no local action has been taken. The process considered nonpoint source impacts and assessments. Additionally, the Illinois EPA evaluated wells utilizing alluvial aquifers that are 1,000 feet from public waters for the purpose of proposing maximum zones. Section 14.3(f) of the Illinois Groundwater Protection Act provides authority to establish maximum setback zones up to 2,500 feet from the wellhead. Maximum setback zones established in these settings prohibit new potential routes. New

potential routes include drainage wells of all kinds. Three maximum setback zones were proposed.

**Project Location:** Statewide

Subgrantee: Not Applicable

91-7(319)RM

Title: Northeastern Illinois Community Assistance Project

Purpose: Funding was provided to help establish the Northeastern Illinois Community Assistance Office to serve the six county northeastern Illinois area. This office provides nonpoint source pollution control related technical assistance to the soil and water conservation districts, planning commissions, county departments, townships and municipalities. In addition to direct technical assistance, the staff of this office are an expansion of the existing effort to develop the Urban Best Management Practices Standards and Specifications Field Office Technical Office Guide. The major focus of the office is on erosion/sediment control, water quality, and natural resource management.

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

Subgrantee: USDA Soil Conservation Service

1902 Fox Drive

Champaign, Illinois 61820

94-27(319)ME

# FFY 1991 FEDERALLY FUNDED SECTION 319 GREAT LAKES SET ASIDE PROJECTS

**Title:** Waukegan River Bank Stabilization and Management

Purpose: Vegetative (grasses, dogwoods, and willows) and structural (A-jacks and lunkers)

streambank stabilization was performed on the Waukegan River (ILQCA01) at Washington Park and Powell Park. City and Park District personnel were trained in

practice implementation. Nonpoint source regulations were also developed.

**Project Location:** Lake County

Subgrantee: Waukegan Park District

2000 Belvidere Street

P.O. Box 708

Waukegan, Illinois 60079

#### **Project Reports and Other Informational Materials:**

"Nonpoint Pollution Control in Urban Streams." November 1992 (5.42 min. videotape). Illinois State Water Survey.

"Nonpoint Source Control." September 1993 (videotape). Illinois State Water Survey.

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	780 ft.	64	55	109
91-9(319)SR					

**Title:** Waukegan River Rock Riffle Restoration Project

Purpose: Six stone weirs (riffles) were created on the Waukegan River (ILQCA01) in

Washington Park which were designed to reduce channel incision (erosion of the streambed), enhance habitat, improve stream stability, and increase water aeration.

**Project Location:** Lake County

**Subgrantee:** Illinois State Water Survey

Post Office Box 697 Peoria, Illinois 61652-0697

#### **Project Reports and Other Informational Materials:**

"Pool and Riffle Restoration on the Waukegan River." December 1996. Illinois State Water Survey.

## **BMP Implementation Summary:**

			Edilliated Edad Reduction			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
584	Stream Channel Stabilization	600 ft.	58	49	98	

91-10(319)SR

**Title:** Nonpoint Source Pollution & Stream Ecology Exhibit

Purpose: An exhibit was designed, constructed, and placed on display at the Shedd Aguarium in Chicago. The exhibit includes a divided aquarium with one half designed to resemble a healthy stream environment and the other half illustrating polluted stream conditions. Both halves were stocked with fish species of an appropriate pollutant tolerance level and native to Illinois. The qualities indicative of a healthy and degraded stream environment were identified and described. The exhibit also presents information concerning the nonpoint sources of pollution which threaten the quality of Illinois' streams and the methods by which those threats may be minimized. The purpose of this project is to enhance the public's understanding of the value and function of streams, nonpoint source pollution and its impact on water quality, and what can be done to protect Illinois' water resources.

Estimated Load Reduction

**Project Location:** Cook County

**Subgrantee:** John G. Shedd Aquarium

1200 South Lake Shore Drive

Chicago, Illinois 60605

91-11(319)SR

**Title:** Waukegan River Habitat Evaluation Project

Purpose: This project created a process to establish a quantifiable habitat index for the Waukegan River rehabilitation project and to enhance the Waukegan River National Monitoring Strategy. A habitat index was established for the Waukegan River related to existing and proposed water quality conditions. A report was prepared documenting utilization of the habitat index on a local and regional scale.

**Project Location:** Lake County

Subgrantee: Not Applicable

91-12(319)SR

**Title:** The Environment Exhibit

Purpose: This Environment Exhibit was designed to present key concepts and principles of

environmental science and technology and thereby help people examine,

understand, and affect environmental issues. Information on nonpoint source pollution and related water quality issues was incorporated into the exhibit. The exhibit communicates the impacts of nonpoint source pollution, the importance of water quality protection, and what can be done to minimize nonpoint source pollution and protect water quality.

**Project Location:** Cook County

**Subgrantee:** Museum of Science and Industry

57th Street and Lake Shore Drive Chicago, Illinois 60637-2093

91-15(319)SR

#### FFY 1992 FEDERALLY FUNDED SECTION 319 PROJECTS

**Title:** Assessment Procedures for Rural Ground Water

Purpose: A series of site assessment and information documents were prepared to assist farmers in identifying potential farmstead sources of ground water contamination and in prioritizing management and structural changes to minimize the risk of ground water pollution. The Illinois Department of Agriculture (IDOA) developed ground water protection materials tailored to Illinois' needs, conducted a pilot program utilizing these materials, printed and distributed copies of the materials to farmers wishing to participate, and held three regional training workshops for soil and water conservation district staff using the developed materials.

**Project Location:** Statewide

Subgrantee: Illinois Department of Agriculture

State Fairgrounds, P.O. Box 19281 Springfield, Illinois 62794-9281

92-1(319)JC

Title: Regional Ground Water Vulnerability Assessment

Purpose: A program was established to identify those regions of the state that are vulnerable to agricultural chemical ground water contamination, and determine what management practices are the most effective for reducing the threat of The Illinois Department of Agriculture (IDOA) correlated contamination. geologic/hydrologic data with pesticide-soil interaction data and agricultural chemical use to identify those regions of Illinois with high potential for ground water IDOA also researched and reviewed ongoing management strategies and recommended management practices for reducing the threat of aguifer contamination.

**Project Location:** Statewide

**Subgrantee:** Illinois Department of Agriculture

State Fairgrounds, P.O. Box 19281 Springfield, Illinois 62794-8281

## **Project Reports and Other Informational Materials:**

"Identification of Areas Vulnerable to Groundwater Contamination in Illinois, and Recommended Management Practices." July 1995. Illinois Department of Agriculture.

92-2(319)JC

Title: Lake Pittsfield 314/319 Restoration Project

Purpose: This project demonstrated the cumulative effectiveness in reducing sediment

transport to Lake Pittsfield (ILRDP) of a single sediment basin on the upper end of Lake Pittsfield and a series of small settling basins (ponds) located on minor tributaries prior to their discharge into Blue Creek. This project supplements the implementation of recommendations contained in the Phase I report funded under

Section 314 and to be achieved through Phase II.

**Project Location:** Pike County

Subgrantee: Pike County Soil & Water Conservation District

1319 West Washington Street

Pittsfield, Illinois 62363

#### **BMP Implementation Summary:**

			ES.	luction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	1 (no.)	?	?	?
378	Pond	29 (no.)	?	?	?
92-3(319)GE					

**Title:** National Monitoring Strategy

Purpose: This project demonstrated the effects of land management on Lake Pittsfield

(ILRDP) sedimentation and water quality.

Project Location: Pike County

**Subgrantee:** Illinois State Water Survey

c/o University of Illinois

109 Coble Hall, 801 S. Wright St. Champaign, Illinois 61820

#### **Project Reports and Other Informational Materials:**

"Effects of Land Management on Lake Pittsfield Sedimentation and Water Quality." September 1993. Illinois State Water Survey.

92-4(319)GE

**Title:** Big Hollow Creek Watershed Management Project

Purpose: Both structural grade control and vegetative stabilization were implemented in the

urban Big Hollow Creek watershed to control stream and bluff erosion.

**Project Location:** Peoria County

Subgrantee: Heartland Water Resources Council of Central Illinois

Commerce Bank Building 416 Main Street, Suite 828 Peoria, Illinois 61602-1116

# **Project Reports and Other Informational Materials:**

"Big Hollow Creek Watershed Management Project." (videotape) 1995. Heartland Water Resources Council of Central Illinois.

# **BMP Implementation Summary:**

_	-		Es	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,200	127	108	216
92-5(319)ME					

#### FFY 1993 FEDERALLY FUNDED SECTION 319 PROJECTS

**Title:** Nature Preserves Ground Water Quality Protocol

**Purpose:** The primary objectives of this project were to design, develop, and demonstrate a methodology to determine potential threats to groundwater and the detection of potential damage to Nature Preserves due to off-site activities from agricultural practices and urbanization. This was accomplished by determining where sites occur in relation to sensitive aquifers and developing geohydrologic information on those Nature Preserves which are estimated to contain unique habitats related to ground water discharge. On one site, a detailed geologic/hydrologic characterization

was conducted.

**Project Location:** Statewide

**Subgrantee:** Illinois Nature Preserve Commission

524 South Second Street Springfield, Illinois 62701-1787

93-1(319)ST

**Title:** Paris Twin Lakes Restoration and Management

**Purpose:** This project demonstrated a holistic approach to in-lake and watershed treatment to enhance the water quality and recreational uses of Paris Twin Lakes (ILRBL, ILRBX) through the coordination of the Section 314 Federal Clean Lakes Program and the Section 319 Nonpoint Source Management Program. This was accomplished utilizing 319 funds to implement 8 grassed waterways, 4,800 feet of terraces, 500 feet of waterway diversions, 1 rock chute, 2 concrete block chutes, rip rap

streambank stabilization, 1 concrete crossing, 5.2 acres of buffer zones, and 1 sediment retention basin.

**Project Location:** Edgar County

Subgrantee: Edgar County Soil & Water Conservation District

R.R. # 6, Post Office Box 89C

Paris, Illinois 61944

# **Project Reports and Other Informational Materials:**

"Paris Twin Lakes Restoration and Management – Final Report." November 1, 1998. Edgar 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)
412	Grassed Waterway	13.9 ac.	?	?	?
638	Water & Sediment Control Basin	1 (no.)	?	?	?
378	Pond	1 (no.)	?	?	?
410	Grade Stabilization Structure	3 (no.)	?	?	?
580	Streambank/Shoreline Protection	200 ft.	?	?	?
600	Terrace	4,800 ft.	?	?	?
329	Conservation Tillage	4,206 ac.	?	?	?
93-2(319)JC					

**Title:** Lake Taylorville Wetland Demonstration/Education

Purpose: The city of Taylorville implemented a public education program highlighting Lake

Taylorville (ILREC) and its water quality. Five sediment basins and five wetlands were designed, constructed, and vegetated to reduce sedimentation to the lake and to improve water quality through the additional nutrient uptake. Wetland training workshops were held concerning topics such as wetland construction, wetland vegetation, and/or wetland maintenance. News releases were also issued

Estimated Load Reduction

concerning project implementation.

**Project Location:** Christian County

**Subgrantee:** City of Taylorville

Municipal Building 115 North Main

Taylorville, Illinois 62568

#### **Project Reports and Other Informational Materials:**

"Water Quality Improvement of Lake Taylorville through Construction of Sediment Basins and Wetland Sites." August 1995. Christian 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)
350	Sediment Basin	10 (no.)	?	?	?
93-3(319)CD					

Title: National Monitoring Strategy on Lake Pittsfield

**Purpose:** This project identified sources of sediment and the efficiency of sedimentation control practices on the tributary watershed of Lake Pittsfield. This project was initiated with Section 319 funding in FFY92. The project is a cooperative Section 314/319 effort for lake restoration and water quality improvement.

**Project Location:** Pike County

Subgrantee: Illinois State Water Survey

1320 S.W. Monarch Peoria, Illinois 61

#### **Project Reports and Other Informational Materials:**

"Effects of Land management on Lake Pittsfield Sedimentation and Water Quality." September 30, 1994. Illinois State Water Survey.

93-4(319)GE

**Title:** Skokie River Restoration Project

Purpose: Through the implementation of bank stabilization and restoration techniques, this project mitigated nonpoint source pollution to the Skokie River (ILHCCD09) and downstream lagoons. The project also enhanced the aquatic habitat and uses of the Skokie River. Restoration measures applied include: prairie buffer plantings, created oxbow excavations, restored floodplain wetlands, bank stabilization through brush layering with willows and dogwoods, bank toe protection and redirected thalweg through use of biologs with prairie cord grass and emergent wetland plants, willow posts for protection of rip rap and outlet pipes and weir wall, in-stream habitat structure (riffles), and bank stabilization through 3 foot buffer along entire stream. A multi-faceted educational program was also implemented as part of the project.

Project Location: Cook County

**Subgrantee:** Chicago Botanic Gardens

Post Office Box 400 Glencoe, Illinois 60022

#### **Project Reports and Other Informational Materials:**

"Restoration of the Skokie River: Natural Techniques at Work." 1996 (videotape). Chicago Botanic Garden.

"Skokie River Restoration Project." May 1996. Chicago Botanic Garden.

#### **BMP Implementation Summary:**

			Est	eduction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	9,550 ft.	263	223	446
657	Wetland Restoration	1.1 ac.	?	?	?
93-5(319)SR					

**Title:** Constructed Wetlands & Sustainable Agriculture

Purpose: This project constructed three small wetlands within the small watershed of a

tributary of Richland Creek – South (ILOC04) to filter contaminants from surface water. The project was designed to determine the effects sustainable agricultural practices have on reducing nitrate and pesticide levels in surface water and also

established an education and information program.

**Project Location:** St. Clair County

**Subgrantee:** Illinois Department of Agriculture

Division of Natural Resources State Fairgrounds, P.O. Box 19281 Springfield, Illinois 62794-8281

#### **Project Reports and Other Informational Materials:**

"Wetlands – Natural Resource Wonders." 1998. Illinois Department of Agriculture.

"Constructed Wetlands and Sustainable Agriculture – Final report." August 1, 1998. Illinois Department of Agriculture.

#### **BMP Implementation Summary:**

_	-		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	6.3 ac.	?	?	?
93-6(319)JC					

Title: Areawide Animal Waste Team

**Purpose:** Additional technical assistance was provided to livestock producers to reduce the backlog of requests. Operators were informed of best management practices (BMP)

for animal waste management, and assisted in exploring and developing innovative

technology to solve waste handling and runoff problems.

**Project Location:** 15 counties within the Southwestern Illinois RC & D

Subgrantee: Southwestern Illinois Resource Conservation and Development

406 East Main Street Mascoutah, Illinois 62258

#### **Project Reports and Other Informational Materials:**

"Improving Rural Water Quality – An Areawide Animal Waste Team – Final Report." March 1996. Southwestern Illinois Resource Conservation and Development, Inc.

93-7(319)JC

Title: Nonpoint Source Control on Richland & Senachwine Creeks

Purpose: To promote local control of nonpoint source pollution, a program of public education was conducted within the rural watersheds of Richland and Senachwine Creeks. The widespread implementation of biotechnical streambank stabilization projects was encouraged through 1) press releases in local news media, 2) construction of a mobile stream table which demonstrates erosion processes and its use at public events, 3) development of model operation and maintenance plans for potential streambank stabilization projects, and 4) outreach to local landowners.

Counties of Woodford & Marshall Project Location:

**Subgrantee:** Heartland Water Resources Council of Central Illinois

Commerce Bank Building 416 Main Street, Suite 828 Peoria, Illinois 61602-1116

93-8(319)CD

Title: Charleston Side Channel Reservoir

Purpose: This project involved the application of an innovative shoreline erosion control program including willow planting posts, a raft wave barrier test program, rip rap and gabions where needed, and selective lakeshore tree removal on Charleston Side Channel Reservoir (ILRBC). In addition, the city conducted an educational program through Eastern Illinois University and the Charleston High School. A watershed landowner survey was done, with the information being used to create an educational brochure.

**Project Location:** Coles County

**Subgrantee:** City of Charleston

520 Jackson Avenue Charleston, Illinois 61920

#### **Project Reports and Other Informational Materials:**

"Charleston Side Channel Reservoir Section 319 Grant, Non-point Sources Pollution Control Final Report." July 1996. City of Charleston.

Catimated Load Daduation

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	5,300 ft.	219	186	372

93-9(319)CD

**Title:** Shabbona Lake Shoreline & Watershed Protection

Purpose: This project protected Lake Shabbona (ILVTU) from further sedimentation by

constructing a wetland (sediment basin) in a portion of the lake's watershed. No-till practices were promoted and a no-till drill made available for rental by farmers in the watershed. Shoreline stabilization (4,000 feet) on the lake was also implemented.

**Project Location:** DeKalb County

Subgrantee: DeKalb County Soil & Water Conservation District

315 North Sixth Street Dekalb, Illinois 60115

#### **BMP Implementation Summary:**

			Est	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	1 (no.)	2,200	?	?
580	Streambank/Shoreline Protection	4,000 ft	264	224	449
93-10(319)CD					

**Title:** Shallow Water Wetland Creation on Canyon Creek

**Purpose:** Construction of an embankment across the Illinois Canyon Creek created a one acre

shallow pool designed to reduce stream velocities, trap sediment, and develop a shallow water wetland. Efforts were made during planning and design to increase the water retention time to maximize water quality benefits. A field day was held for

the public once the practice was installed.

**Project Location:** LaSalle County

Subgrantee: LaSalle County Soil & Water Conservation District

Route 23 & Dayton Road Ottawa, Illinois 61350

# **Project Reports and Other Informational Materials:**

"Illinois Canyon Creek Project – An EPA 319 Non-Point Pollution Reduction Project – LaSalle County SWCD." November 1995. LaSalle 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)
350	Sediment Basin	1 (no.)	?	?	?

93-11(319)JC

Title: Chain-O-Lakes Fox River Shoreline & Bank Protection

Purpose: This project implemented bio-technical methods of shoreline and bank protection,

giving significant emphasis to more natural or vegetative solutions and non-structural management solutions. Three sites, totaling 461 feet of on-stream lake shoreline on the Fox River (ILDT22) were stabilized using A-Jacks, fiber roll, erosion control

blankets, Fiberdam, and vegetation.

**Project Location:** McHenry County

**Subgrantee:** Chain-O-Lakes Fox River Waterway Management Agency

64 East Grand, P.O. Box 451 Fox Lake, Illinois 60020

#### **Project Reports and Other Informational Materials:**

"Protecting Your Shore - Alternatives to Seawalls." (Brochure) January 1995. Fox Waterway Agency.

"Chain O' Lakes Fox River Shoreline and Bank Protection Project – Final Report." Fall 1995. Fox Waterway Agency.

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	461 ft.	71	61	120

93-12(319)ME

**Title:** Palatine Streambank Stabilization Project

Purpose: Approximately 285 linear feet of streambank were stabilized along Salt Creek

(ILGL09) through a combination of A-Jacks structures and dormant cuttings of

native willows and dogwoods.

**Project Location:** Cook County

**Subgrantee:** Village of Palatine

Department of Public Works 148 West Illinois Street Palatine, Illinois 60067

#### **Project Reports and Other Informational Materials:**

"Salt Creek Streambank Stabilization Project Final Report." June 1994. Village of Palatine.

### **BMP Implementation Summary:**

_	•		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	285	42	36	72

93-13(319)SR

**Title:** Paris Restoration/Protection 314/319 Project

**Purpose:** This project demonstrated a holistic approach to in-lake and watershed treatment to enhance the water quality and recreational uses of Paris Twin Lakes (ILRBL, ILRBX) through coordination of the Section 319 Nonpoint Source Management Program and the Section 314 Clean Lakes Program. Section 319 funds were utilized to implement practices such as shoreline stabilization and sediment retention basin construction.

**Project Location: Edgar County** 

Subgrantee: City of Paris

123 South Central Avenue Paris, Illinois 61944

# **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	2,400 ft.	80	67	134

93-14(314)JC

Title: Nonpoint Source Pollution Concert/Celebration

Purpose: The John G. Shedd Aquarium, in cooperation with the Illinois EPA, developed a program for a Wetland Wonders and Pollution Prevention Festival held at the Shedd Aquarium on six consecutive days in May, 1996. The Festival accompanied the opening of the Shedd's 1996 special exhibit, "Frogs: Wonders of the Wetlands." The program was designed to enhance the public's understanding of nonpoint source pollution and the importance of wetlands, lakes, and streams. The Festival included information and activities that explained the causes of NPS pollution, its impact on water quality, and what can be done to protect aquatic resources. The program included music, theater, storytelling, games, and similar events designed to educate as well as entertain.

**Project Location:** Cook County

Subgrantee: John G. Shedd Aquarium

1200 South Lake Shore Drive Chicago, Illinois 60605

Title: Chicagoland Environmental Network

Purpose: The Chicagoland Environmental Network facilitated the exchange of information and

resources concerning nonpoint source pollution, water quality, and 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.

**Project Location:** Cook County

Subgrantee: Chicago Zoological Society

3300 South Golf Road Brookfield, Illinois 60513

93-17(319)SR

#### FFY 1994 FEDERALLY FUNDED SECTION 319 PROJECTS

**Title:** Englewood Environmental Protection Lot Reclamation Project

Purpose: This project demonstrated the benefits of water quality education and land restoration in an urban environment by reclaiming eight inner-city lots, implementing a storm drain stenciling program, and disseminating nonpoint source education materials. The reclamation of these lots reduced the amount of pollutants entering the water system, while simultaneously aiding in the revitalization of the Englewood community. Local youth were employed to implement the reclamation and to design and develop community gardens on the formerly abandoned lots.

**Project Location:** Cook County

**Subgrantee:** University of Illinois - Cooperative Extension Service

549 Bevier Hall, 905 S. Goodwin Avenue

Urbana, Illinois 61801

#### **Project Reports and Other Informational Materials:**

"A Project with SOUL." (11.25 min. videotape) University of Illinois - Cooperative Extension Service.

## **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment Phosphorus Nitro		
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
562	Recreation Area Improvement	1.6 ac.	?	?	?

94-1(319)SR

**Title:** Skokie Lagoons Shoreline Stabilization Project

Purpose: This project implemented shoreline restoration aimed at vegetative stabilization along approximately 2.5 miles of shoreline. The restoration focused on areas where the most erosion has occurred because these are the most significant targets for addressing nonpoint source pollutants. Treatment of the shoreline extended beyond the water's edge and into the floodplain for a distance of approximately 200 feet. Where feasible, the vegetative cover was extended into the water for further stabilization. Restoration measures used included coir fascines, gravel access points, coir mattresses, dead brush layers, sand and gravel stabilizer, live brush mattresses, rock toes, temporary wood stakes, and coir webbing.

Project Location: Cook County

**Subgrantee:** Forest Preserve District of Cook County

536 North Harlem Avenue River Forest, Illinois 60305

### **Project Reports and Other Informational Materials:**

"Skokie Lagoons Shoreline Stabilization Project – Final Report." October 1, 1997. Forest Preserve District of Cook County.

#### **BMP Implementation Summary:**

			Estimated Load Reduction			
			Sediment	ediment Phosphorus Nit		
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
580	Streambank/Shoreline Protection	10,660 ft.	294	250	499	
94-2(319)ST						

**Title:** Senachwine Creek Nonpoint Source Control Project

Purpose: This project improved water quality through the treatment of uplands and floodplains in the Senachwine Creek 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 46,725 feet of terraces, 24.2 acres of waterways, 9 sediment basins, and three grade stabilization structures. Floodplain BMPs included eight ponds and six streambank stabilization projects which addressed 3,900 linear feet.

**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 Nonpoint Source Control Project – Final Report." December 1997. Illinois River Soil Conservation Task Force.

#### **BMP Implementation Summary:**

•	•		Es	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
600	Terrace	46,725 ft.	5,007	?	?
412	Grassed Waterway	24.2 ac.	1,689	?	?
350	Sediment Basin	9 (no.)	1,882	?	?
410	Grade Stabilization Structure	3 (no.)	265	?	?
378	Pond	8 (no.)	1,564	?	?
580	Streambank/Shoreline Stabilization	3,900	2,400	2,100	4,350
94-3(319)MF					

**Title:** Mauvaise Terre Creek Project

Purpose: The project informed and educated the public, specifically at-risk youth, about nonpoint source pollution, how it is impairing Mauvaise Terre Creek, and what can be done to prevent this pollution. The youth involved in this project removed debris from the creek that is affecting flow and water quality and document the stretches of the creek that are experiencing streambank erosion for future restoration. An environmental education curriculum was developed for the students and the students made presentations on the project. The youth also worked with the Illinois Rivers Project through Jacksonville High School to benefit from water quality education and to assist in providing data for the Illinois Rivers Project.

**Project Location:** Morgan County

Subgrantee: Youth Attention Center

527 South Main Street Jacksonville, Illinois 62650

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
326	Clearing & Snagging	400 ft.	3	3	6

94-4(319)CT

Title: Perry County Demonstration/Education Plots

Purpose: This project provided information and technology transfer regarding conservation

tillage methods and their effects on water quality. This was accomplished by developing field demonstration plots from which surface and ground water samples were analyzed to determine various best management practices' effectiveness in reducing nonpoint source pollution to protect water quality in the Blacksop Creek

(ILNEB01) watershed.

**Project Location:** Perry County

Subgrantee: Perry County Soil & Water Conservation Districts

Post Office Box 146

Pinckneyville, Illinois 62274

94-5(319)ST

Title: Macoupin County Public Water Supply Watershed Protection/Education Project

**Purpose:** This project addressed specific water quality issues, primarily siltation and atrazine as nonpoint source pollutants in public water supply lakes. This was done by

building 18 water and sediment control basins and three wetlands in three different watersheds; establishing comparison plots of different types of vegetation in those basins; comparing the results; and using the summary of findings to educate the

public about watershed management.

**Project Location:** Macoupin County

Subgrantee: Macoupin County Soil & Water Conservation District

300 Carlinville Plaza Carlinville, Illinois 62626

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
638	Water & Sediment Control Structure	18 (no.)	3,906	?	?
657	Wetland Restoration	5.3 ac.	?	?	?
94-6(319)JC					

Title: City of Lockport Abandoned Well Sealing Project

Purpose: Service at the city of Lockport's public water supply well no. 3 was discontinued in

1970 due to lack of production and high sulfur content. However, the abandoned well was not properly sealed, making it a point where potential contamination could

enter the aguifer. The city of Lockport had the well properly sealed.

Project Location: Will County

Subgrantee: City of Lockport

222 East Ninth Street, Suite 4 Lockport, Illinois 60441-3497

#### **BMP Implementation Summary:**

94-8(319)JC

•	•		Estimated Load Reduction		
			Sediment Phosphorus Nitro		
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
005	Well Sealing	1 (no.)	?	?	?

Title: Southern Illinois No-Till Rental & Demonstration Project (Johnson Co.)

**Purpose:** This project allowed the rental of no-till equipment to farmers in Johnson County at a reduced cost per acre charge. Because the economic conditions experienced in the agricultural communities in this part of the state, and the average farm size in the county being significantly less than the state average, many farmers need hands-on experience before they will be convinced to purchase the expensive equipment on their own. This project also demonstrated to the farmer ways of managing no-till so

equal or better results compared to conventional tillage can be attained.

Project Location: Johnson County

Subgrantee: Johnson County Soil & Water Conservation District

209 North 4th

Vienna, Illinois 62995

**Estimated Load Reduction** 

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			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
329	Conservation Tillage	2,784	23,633.9	?	?

94-9(319)JC

Title: Larkdale Lagoons Shoreline Stabilization Project

Purpose: Local government staff was trained in the placement of vegetative shoreline stabilization in the Larkdale Lagoons and a connecting ditch to improve water quality performance. Approximately 700 feet of lagoon shoreline and the 700 feet of connecting ditch were planted in wetland vegetation to reduce erosion and improve nutrient removal. The water quality performance of Larkdale Lagoons was enhanced by significantly reducing shoreline and channel erosion and by adding wetland vegetation, which will substantially increase suspended and soluble pollutant removal.

**Project Location:** Lake County

Subgrantee: Village of Wauconda

101 North main Street

Wauconda, Illinois 60084-0785

#### **Project Reports and Other Informational Materials:**

"Shoreline Stabilization with Native Vegetation Training Course." September 1995. Hey and Associates.

#### **BMP Implementation Summary:**

			Estimated Load Reduction			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
580	Streambank/Shoreline Protection	1,400 ft.	9	8	16	

94-10(319)ME

Title: Milne Creek Streambank Stabilization Project

Purpose: This project stabilized 1,125 feet of streambanks along Milne Creek using

bioengineering techniques (vegetation, coconut roll, and A-Jack structures).

**Project Location:** Will County

Subgrantee: City of Lockport

222 East Ninth Street, Suite 4 Lockport, Illinois 60441-3497

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,125	99	84	169
94-11(319)JC					

Estimated Load Reduction

Title: Grass Lake Nonpoint Source Pollution Control Project

Purpose: This project determined and implemented cost-effective programs to reduce nonpoint source pollution in northern Grass Lake (ILRTQ) due to boat traffic and other recreational uses. Both structural and non-structural methods were implemented and evaluated, including barrier methods to restrict the movement of resuspended sediment, creation of wind breaks, water use regulation (i.e., no-wake zones and no-motor areas), and redirection of traffic routes to deeper locations. Education of boaters of the impact of their activities on resuspension of sediments and of proposed management methods was also an important part of this project.

**Project Location:** Counties of Lake and McHenry

**Subgrantee:** Chain-O-Lakes Fox River Waterway Management Agency

64 East Grand, Post Office Box 541

Fox Lake, Illinois 60020

94-12(319)SR

Title: DeKalb County Streambank and No-Till Program

**Purpose:** This project protected Lake Holiday from sedimentation and other sources of nonpoint source pollution attributed to agricultural runoff. This was accompanied by increasing the number of acres in the watershed that are farmed by no-till. A no-till drill was supplied to farmers at a \$4 per acre charge to encourage the practice and was used on 650 acres. Rip rap was installed to stabilize 300 feet of streambank on Samonauk Creek (ILDTB01).

**Project Location:** DeKalb County

Subgrantee: DeKalb County Soil & Water Conservation District

315 North Sixth Street Dekalb, Illinois 60115

## **Project Reports and Other Informational Materials:**

"Samonauk Creek 319 Grant - Final Report." 1997. Dekalb County Soil & Water Conservation District.

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
329	Conservation Tillage	650 ac.	5,500	?	?
580	Streambank/Shoreline Protection	300 ft.	50	42	84
94-13(319)CD					

**Title:** Norton Creek Urban Stream Maintenance/Restoration Program

Purpose: Norton Creek became degraded due to changes in watershed hydrology, channel modifications, incursion of non-native woody vegetation, and lack of maintenance. Periodic failure of septic systems were reported due to debris blockages, which back up waters, further degrading water quality. To reduce debris related backups and streambank erosion, and to improve habitat and pollutant filtering mechanisms in Norton Creek, stream maintenance and restoration activities were implemented. These activities included the removal and disposal of nuisance vegetation adjacent to the stream such as overhanging trees, limbs, and shrubs, as well as other debris. These techniques were applied to approximately 7,000 feet of stream.

Cationata d Land Dadwatian

**Project Location:** Kane County

Subgrantee: Village of Wayne

5N430 Railroad Street Post Office Box 532 Wavne. Illinois 60184

#### **Project Reports and Other Informational Materials:**

"Final Report – Norton Creek Urban Stream Maintenance/Restoration Plan." May 23, 1996. Christopher B. Burke Engineering, LTD.

#### **BMP Implementation Summary:**

			ES.	eduction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
326	Clearing & Snagging	7,000 ft.	?	?	?
94-14(319)ME					

Title: Greenleaf Creek Streambank Stabilization Project

Purpose: This project demonstrated the ability to stabilize streambanks within an urbanized watershed by implementing an aggressive vegetation management program to remove undesirable non-native plant species on 1,100 feet of streambank, reintroduce native wetland/streamside species on 1,100 feet of streambank, and stabilization of 600 feet of streambank with A-Jacks. An educational opportunity to adjacent property owners was also provided.

**Project Location:** Lake County

Subgrantee: City of Park City

3420 Kehm Boulevard Park City, Illinois 60085

## **Project Reports and Other Informational Materials:**

"Greenleaf Creek Streambank Stabilization Project." (videotape) 1996. RSK Consultants, Inc.

"Greenleaf Creek Streambank Stabilization Project." 1996. RSK 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	1,700 ft.	22	19	38
94-15(319)ME					

Title: Ninemile Creek Watershed Sinkhole Stabilization Project

Purpose: This project demonstrated and provided information/education to residents and landowners in the Ninemile Creek watershed as to cost-effective practices and methods to improve water quality. Ten (10) sinkholes were stabilized with

appropriate land treatment practices applied to the surrounding land.

**Project Location:** Randolph County

Subgrantee: Randolph County Soil & Water Conservation District

313 West Belmont Sparta, Illinois 62286

#### **BMP Implementation Summary:**

			Estimated Load Reduction			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
800	Sinkhole Stabilization	10 (no.)	?	?	?	

94-17(319)ME

**Title:** Ground Water Pollution Prevention Project

**Purpose:** This project included nonpoint source pollution prevention education for both the urban and rural communities including three field days and/or training workshops for landowners, well sealing contractors, public officials, Soil Conservation Service, Cooperative Extension Service, and soil and water conservation district (SWCD) personnel. The field days and workshops demonstrated the correct procedures to seal abandoned wells and promoted a variety of best management practices (BMPs) such as setback zones and pesticide and nutrient management practices to be

implemented by landowners, business, and municipalities, etc. for the protection of ground water. County and municipal officials within Iroquois County were contacted concerning ground water protection and assistance was provided to those who plan to implement pollution prevention practices. Program information was also provided to surrounding SWCDs and other similar organizations. In addition to the educational portion, a cost-share program was administered so that a total of 58 abandoned wells were properly sealed.

**Project Location:** Iroquois County

Subgrantee: Iroquois County Soil & Water Conservation District

205 West Oak Street Watseka, Illinois 60970

### **BMP Implementation Summary:**

			Estimated Load Reduction			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
005	Well Sealing	58 (no.)	?	?	?	

94-18(319)CD

Title: National Monitoring Strategy on Lake Pittsfield

**Purpose:** This project will continue the identification of sources of sediment and the efficiency of sedimentation control practices on the tributary watershed of Lake Pittsfield. This project was previously funded under Section 319 in federal fiscal years 1992 and

1993. The project is a cooperative Section 319/314 effort for lake restoration and water quality improvement.

Project Location: Pike County

Subgrantee: Illinois State Water Survey

Post Office Box 697

Peoria, Illinois 61652-0697

94-19(319)ST

**Title:** Waukegan River National Monitoring Strategy

Purpose: This project utilized the national monitoring program to demonstrate the effectiveness of biotechnical stream stabilization techniques implemented on the Waukegan River. The urban fisheries and stream habitat were surveyed before implementation of biotechnical stream stabilization. Under the national monitoring program, stream fishery and instream habitat were surveyed to provide post implementation data. The monitoring strategy included macroinvertebrate sampling, physical habitat monitoring, and fisheries monitoring during the spring, summer, and fall cycles of the project period. All monitoring and associated data were entered into USEPA's Nonpoint Source Management System (NPSMS) and STORET

system. A color brochure was developed which described 1) the biotechnical stream stabilization techniques implemented on the Waukegan River, 2) the monitoring program, and 3) the physical and biological enhancements achieved on the Waukegan River. A report was prepared summarizing the monitoring data and the findings related to the effectiveness of implemented biotechnical stream stabilization techniques, including but not limited to improvements in habitat and bank stabilization.

**Project Location:** Lake County

Subgrantee: Illinois State Water Survey

Post Office Box 697

Peoria, Illinois 61652-0697

94-20(319)ST

Title: Stream Restoration Manual

**Purpose:** A manual was developed which provides detailed instructions on the application of stream restoration techniques (both biotechnical and streambed controls) in a watershed context. The instructional manual is divided into three sections: 1) introduction to geomorphic assessments of watersheds and stream geometry, 2) application of biotechnical techniques within a watershed context, and 3) application of streambed grade controls to enhance stable pool and riffle habitat. The instructional manual is supplemented with video footage of the described application and geomorphic setting.

**Project Location:** Statewide

**Subgrantee:** Illinois State Water Survey

Post Office Box 697

Peoria, Illinois 61652-0697

# **Project Reports and Other Informational Materials:**

"Field Manual of Urban Stream Restoration." June 1997. Illinois State Water Survey

94-21(319)CT

**Title:** National Monitoring Conference

**Purpose:** This project brought together a variety of entities involved in the assessment of water quality in the United States and Canada. The conference focused on those groups and individuals with an interest in national monitoring projects and those with the knowledge of water quality assessment in order to create a unified, organized effort to accomplish water quality improvement. The conference also highlighted the use of national monitoring criteria to provide comparable results and to improve the

opportunity for water quality data comparisons between states.

**Project Location:** Statewide

94-22(319)CT

**Title:** Nonpoint Source Pollution Awareness Through Advertisements

Purpose: This project heightened the awareness of urban nonpoint source pollution (specifically stormwater runoff) through pollution prevention advertisements (messages, graphics, and photographs) on billboards in Springfield, Illinois. The advertisements will addressed the different types of pollutants associated with urban runoff and highlighted the concept of pollution prevention through watershed management. One billboard design was featured in Springfield from July through August, 1996. A second new design was used from September through October, 1996.

**Project Location:** Sangamon County

Subgrantee: Not Applicable

94-24(319)CT

**Title:** GIS Technology Support for the Targeted Watershed Approach

Purpose: This project created the coverages and programs necessary for conducting the Targeted Watershed Approach (TWA) in a geographic information system (GIS) environment and trained Illinois EPA staff in GIS techniques and applications. The TWA is a method of prioritizing Illinois EPA's Bureau of Water program activities within targeted watersheds where the greatest environmental benefit can be realized. The Support Technology for Environmental Water & Agricultural Resource Decisions (STEWARD) and Agricultural Nonpoint Source Pollution (AGNPS) model were applied on the Lake Pittsfield watershed to 1) identify recommended best management practices (BMPs) that should be applied; 2) quantify pollutants loads under conditions before and after implementation of Section 319 BMPs; 3) evaluate the effectiveness of applied BMPs; and 4) determine the functional value of the models for these purposes.

**Project Location:** Statewide

Subgrantee: Illinois State Water Survey

2204 Griffith Drive

Champaign, Illinois 61820-7495

#### **Project Reports and Other Informational Materials:**

"GIS Technology Support for the Targeted Watershed Approach." June 1996. Illinois State Water Survey and Illinois Environmental Protection Agency.

"Investigation of the STEWARD Expert System for the lake Pittsfield Watershed." December 1998. Illinois State Water Survey.

"Modeling the Lake Pittsfield Watershed Using the AGNPS-ARC/INFO Model." December 1998. Illinois State Water Survey.

94-25(319)SR

Title: Southern Illinois No-Till Rental and Demonstration Project (Union Co.)

Purpose: This project allowed the rental of no-till equipment to farmers in Union County at a reduced cost per acre charge. Because the economic conditions experienced in the agricultural communities in this part of the state, and the average farm size in the county being significantly less than the state average, many farmers need hands-on experience before they will be convinced to purchase the expensive equipment on their own. This project also demonstrated to the farmer ways of managing no-till so equal or better results compared to conventional tillage can be attained.

**Project Location: Union County** 

**Subgrantee:** Union County Soil & Water Conservation District

R.R. #2. Box 305C Anna, Illinois 62906

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
329	Conservation Tillage	5,038.5 ac	. 49,512.9	?	?

94-26(319)JC

**Title:** NPS Information and Education Conference

Purpose: The Illinois EPA held a conference during the fall of 1996 focused on the techniques utilized to inform and educate the public about nonpoint source pollution prevention. Federal, state, local, and volunteer groups discussed their efforts and students participating in environmental programs made presentations on their efforts. A site visit was made to the Brookfield Zoo and an optional trip to the Shedd Aquarium (two information/education projects funded in part by Section 319).

**Project Location:** Cook County

**Subgrantee:** Northeastern Illinois Planning Commission

222 South Riverside Plaza, Suite 1800

Chicago, Illinois 60606-6097

94-29(319)CT

Title: Joliet Arsenal Riparian Restoration Project

Purpose: This project provided geographic information system data, maps, and model

analysis for the creation and restoration of wetlands and protection of the wetland

systems within the Joliet Arsenal.

Project Location: Will County

Subgrantee: Illinois Department of Natural Resources

524 South Second

Springfield, Illinois 62701-1787

94-30(319)ST

Title: Biotic Assessment of Watershed Management Practices Methodology

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Purpose: The Illinois EPA will assess and revise current Index of biotic Integrity (IBI) metrics, including incorporation of alternative measures of stream size. Revision of the effort metric shall be assessed, including modifications to account for low fish abundance. After revision of the effort metric, an IBI user manual will be developed. Recommendations and protocols regarding use of the IBI as a watershed assessment tool will also be developed. Finally, various regionalization schemes for fisheries communities will be verified and recommended.

**Project Location:** Statewide

**Subgrantee:** Center for Aquatic Ecology

Illinois Natural History Survey

607 E. Peabody Drive Champaign, Illinois 61820

94-31(319)GG

**Title:** Blue Creek Stream Restoration Project

Purpose: Blue Creek, a tributary of Lake Pittsfield (ILRDP), was experiencing streambed incision and mass wasting of oversteepened banks, producing for increased sediment yield. Along the stream channel, large ravines had eroded around concrete drop structures and were downcutting upstream through grassed waterways into row crop fields, further increasing sediment yield. To address these problems, the stream channel was stabilized with 12 low rock wiers, which were spaced as natural riffles along 1,500 feet of stream. Two of the weirs were constructed to serve as low water stream crossings for farm equipment. Eroding banks were stabilized with vegetation. In some weir locations, riprap was extended downstream to protect the streambed and bank on meander bends from the high energy flows generated on the weir backslope. Two ravine erosion sites were

stabilized with riprap, soils, and grasses where runoff had eroded soils from concrete drop structures.

**Project Location:** Pike County

**Subgrantee:** Illinois State Water Survey

Post Office Box 697 Peoria, Illinois 61652-0697

#### **Project Reports and Other Informational Materials:**

"Blue Creek Restoration - Riffle/Weir Construction." 1998. Illinois State Water Survey.

### **BMP Implementation Summary:**

			Es	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
584	Stream Channel Stabilization	1,500 ft.	99	84	168
94-32(319)ST					

Title: Macoupin County Public Water Supply Watershed Project

**Purpose:** This project addressed water quality problems, primarily siltation and atrazine, of two public water supply lakes. Thirteen (13) water and sediment control basins were

constructed in the Otter Lake (ILRDF) watershed.

**Project Location:** Macoupin County

Subgrantee: Macoupin County Soil & Water Conservation District

300 Carlinville Plaza Carlinville, Illinois 62626

## **Project Reports and Other Informational Materials:**

"Macoupin County PWS Watershed Project – Final Report." August 25, 1999. Macoupin 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)
638	Water & Sediment Control Basin	13 (no.)	442	?	?
94-34(319)JC					

**Title:** The North Branch Chicago River Project – 2

**Purpose:** With funding under Section 319 in federal fiscal year 1996, the Friends of the Chicago River and its project partners developed a model urban watershed

protection handbook that will assist urban resource managers and interested parties throughout the midwest in the protection, restoration, and maintenance of similar watersheds. The handbook was developed and field tested as part of the development of an actual watershed strategy and implementation effort for the North Branch of the Chicago River (ILHCC08). With supplemental funding under the FFY94 Section 319 grant, the friends of the Chicago River implemented additional best management practices to demonstrate techniques for the protection and restoration of water quality in the North Branch of the Chicago River. Funding was also used to print additional copies of the model urban watershed protection handbook.

Project Location: Counties of Lake & Cook

**Subgrantee:** Friends of the Chicago River

407 S. Dearborn Street, Suite 1580

Chicago, Illinois 60605

## **Project Reports and Other Informational Materials:**

"Voices of the Watershed – A Guide to Urban Watershed Management Planning." 1999. Friends of the Chicago River.

"North Branch Chicago River Project – Final Report." June 13, 2000 Friends of the Chicago River.

94-35(319)CD

Title: Salt Creek Streambank Stabilization Project

**Purpose:** This project reduced erosion and nonpoint source pollution through the stabilization of eroding streambanks along an approximately 2,735 foot segment of Salt Creek (ILGL09) located in Wood Dale, Illinois. Bioengineering techniques (i.e., geogrid, lunkers, A-jacks, fiber rolls, minor stream regrading, vegetation) were used. An educational stand was also installed at the site to explain the streambank stabilization practices and the importance of nonpoint source pollution control.

**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 Streambank Stabilization Project – Final Report." August 2000. City of Wood Dale.

	<b>,</b>		Estimated Load Reduction			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
580	Streambank/Shoreline Protection	2,735 ft.	127	109	216	

94-36(319)SR

Title: Nonpoint Source Pollution Book for Grades 3 through 5

**Purpose:** This project developed a "Magic School Bus" style book on nonpoint source pollution. The intended audience is youth in the 3<sup>rd</sup> through 5<sup>th</sup> grades. A teachers

guide was also developed.

**Project Location:** Statewide

Subgrantee: The University of Illinois

801 South Wright Street Champaign, Illinois 61820

## **Project Reports and Other Informational Materials:**

"Secret Agent Worms In ... The Disappearing Earth." December 2000. University of Illinois Extension.

"Mission Possible - A Teacher's Guide for the Disappearing Earth." December 2000. University of Illinois Extension.

94-37(319)BL

#### FFY 1995 FEDERALLY FUNDED SECTION 319 PROJECTS

**Title:** Mackinaw River Project

Purpose: This project assisted rural land and water managers in Illinois' Mackinaw River (ILDK13) eco-shed in protecting and restoring aquatic and riparian life. The project demonstrates the viability of cooperative efforts to implement land and water management practices that are ecologically, economically, and socially compatible. The project implemented a replicable process for examining, prioritizing, and correcting water quality impairments resulting from changes in land use and hydrology, and increased nonpoint source pollution. The project illustrated innovative solutions to economic and social constraints to the adoption of best management practices. The project established a process for involving and empowering key stakeholders in eco-shed management.

Project Location: Counties of Mason, Tazewell, Woodford, Ford, McLean, and Livingston

Subgrantee: The Nature Conservancy, Central Illinois Field Office

416 Main Street, Suite 1112

Peoria, Illinois 61602

## **Project Reports and Other Informational Materials:**

"Building Partnerships Over Land & Water – The Mackinaw River Project." (videotape, 24 min.) 1998. The Nature Conservancy.

"Ensuring Citizens Have a Voice ... a Guide to Watershed Management Planning." 1998. The Nature Conservancy.

"Mackinaw River Watershed Management Plan." June 1998. The Nature Conservancy.

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	59 ac.	?	?	?
350	Sediment Basin	5 (no.)	?	?	?
580	Streambank/Shoreline Protection	9,240 ft.	203	172	346
556	Planned Grazing System	40 ac.	?	?	?
410	Grade Stabilization Structure	3 (no.)	?	?	?
612	Tree Planting	12 ac.	?	?	?
614	Trough or Tank	1 (no.)	?	?	?
512	Pasture & Hayland Planting	14 ac.	?	?	?
510	Pasture & Hayland Management	416 ac.	?	?	?
644	Wildlife Wetland Habitat Management	4 ac.	?	?	?
666	Woodland Improvement	242 ac.	?	?	?
314	Brush Management	6 ac.	?	?	?
870	Level Spreader	3 ac.	?	?	?
472	Livestock Exclusion	10 ac.	?	?	?
342	Critical Area Planting	3 ac.	?	?	?

95-1(319)CD

**Title:** Lake Forest Wetland Demonstration Project

Purpose: This project recreated a 25 acre wetland by restoring the natural hydrology and vegetative cover of the project site, primarily floodplain. Drainage tiles and minor water control structures were disabled to allow for the creation of a wetlands complex which intercepts runoff and benefits water quality. The project diverted stormwater runoff from the upstream sources into a wetlands system where it receives secondary biological treatment prior to discharge into the Middle Fork of the North Branch of the Chicago River (ILHCCC04). The project also involved the implementation of a public education program.

**Project Location:** Lake County

Subgrantee: Lake County Forest Preserve District

2000 Milwaukee Avenue Libertyville, Illinois 60048

## **Project Reports and Other Informational Materials:**

"Lake Forest Wetlands Demonstration Project." January 31, 1997. Lake County Forest Preserve District.

## **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	25 ac.	?	?	?
95-2(319)ME					

**Title:** Urban Erosion Control Project

Purpose: This project was implemented in an agricultural area undergoing phased urban development in the Lake Springfield watershed. The project demonstrated the effectiveness of nonpoint source pollution control practices implemented and maintained during the construction of utilities and houses. Control sites were used for comparison purposes. The effectiveness of pollution control techniques were documented through videotape and a computer simulation model of runoff from the project sites. Project results were used for preparing a draft construction erosion control ordinance in Sangamon County and for strengthening an existing city of Springfield Land Subdivision Ordinance.

**Project Location:** Sangamon County

Subgrantee: Sangamon County Soil & Water Conservation District

40 Adloff Lane, Suite 4 Springfield, Illinois 62703

## **Project Reports and Other Informational Materials:**

"Urban Development Erosion Control Demonstration Project for Lake Springfield Watershed -Final Report." October 1997. Sangamon County Soil & Water Conservation District.

95-3(319)JC

Title: Chick Evans Golf Course Stream Protection Project

Purpose: This project created a filter strip along the North Branch of the Chicago River (ILHCC08) in the Chick Evans Golf Course to reduce nonpoint source pollution such as sediment, fertilizers, and other chemicals through the establishment of land treatment measures that improved aesthetic conditions, enhanced environmental quality, and inhibit flood damage. A-jacks, lunkers, and vegetation were established along the river to stabilize 827 feet of streambanks and reduce the amount of sediment released into the water and filter runoff from the golf course.

**Project Location:** Cook County

**Subgrantee:** Forest Preserve District of Cook County

536 North Harlem Avenue River Forest, Illinois 60305

## **Project Reports and Other Informational Materials:**

"Chick Evans Golf Course Stream Protection Project – Final Report." September 1997. Forest Preserve District of Cook County.

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Stabilization	827 ft.	34	29	58

95-4(319)SR

**Title:** Illinois Farm-A-Syst

Purpose: This project was Phase 2 of the Farm-A-Syst program established by the Illinois Department of Agriculture. Phase 2 further developed and enhanced the efforts and developments of Phase 1 of this effort by providing additional training, the development of Illinois Farm-A-Syst Plus, the development of Illinois Home-A-Syst. and by providing the availability of water sampling. Phase 2 was the next step in the development of a Farm-A-Syst program which was comprehensive and provided universal statewide coverage.

Project Location: Statewide **Subgrantee:** Illinois Department of Agriculture

Division of Natural Resources State Fairgrounds, P.O. Box 19281 Springfield, Illinois 62794-9281

95-5(319)JC

Title: 60 Ways Farmers Can Protect Surface Water

Purpose: A guidebook entitled 60 Ways Farmers Can Protect Surface Water was developed,

published, and distributed. The book contains information on techniques to control soil erosion and livestock waste, methods for reducing chemical use, and application

of best management practices that prevent surface water contamination.

**Project Location:** Statewide

Subgrantee: University of Illinois - Cooperative Extension Service

65 Mumford Hall, 1301 N. Gregory Drive

Urbana, Illinois 61801

## **Project Reports and Other Informational Materials:**

"60 Ways Farmers Can Protect Surface Water." August 1997. University of Illinois -Cooperative Extension Service.

95-7(319)CT

**Title:** Phase 1 Implementation of the Flint Creek Watershed Management Plan

Purpose: This project initiated the implementation of a comprehensive nonpoint source pollution control strategy developed with Clean Water Act Section 104(b)(3) funding. Recommendations of the Flint Creek (ILDTZS01) watershed management plan were executed through the coordinated implementation of best management practices for urban runoff and stream and watershed management. The overall project included streambank (6,656 feet) and lake shoreline (250 feet) stabilization/restoration, the installation of sand filters, flow control structures, wetland restoration, public education, and implementation of the Lake County Watershed Development Ordinance in the Flint Creek watershed.

**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:**

"Flint Creek Watershed Restoration Projects." September 1997. Northeastern Illinois Planning 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	6,906	128	108	217
845	Infiltration Trench	2 (no.)	?	?	?
840	Grassed Lined Channel	0.33 ac.	?	1	3
657	Wetland Restoration	0.63 ac.	?	?	?

95-8(319)SR

**Title:** National Monitoring Strategy on Lake Pittsfield

Purpose: This project continued the identification of sources of sediment and the efficiency of

sediment control practices on the tributary watershed of Lake Pittsfield. This project was previously funded under Section 319 in federal fiscal years 1992, 1993, and 1994. The project is a cooperative Section 319/314 effort for lake restoration and

water quality improvement.

**Project Location:** Pike County

Subgrantee: Illinois State Water Survey

Post Office Box 697

Peoria, Illinois 61652-0697

#### **Project Reports and Other Informational Materials:**

"Effects of Land Management on Lake Pittsfield Sedimentation and Water Quality - National Watershed Monitoring Project." November 15, 1996. Illinois State Water Survey.

95-9(319)ST

**Title:** Waukegan River National Monitoring Strategy (Phase 2)

Purpose: This project continued 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.

**Project Location:** Lake County

**Subgrantee:** Illinois State Water Survey

Post Office Box 697

Peoria, Illinois 61652-0697

## **Project Reports and Other Informational Materials:**

"Waukegan River National Monitoring Program - Biological and Physical Monitoring of Waukegan River Restoration Efforts in Biotechnical Bank Protection and Pool/Riffle Creation." May 1997. Illinois State Water Survey.

95-10(319)ST

**Title:** Southwestern Illinois Karst Project

Purpose: This project was located within Illinois EPA's Southern Illinois Ground Water Protection Region. The three counties involved have more than 220,800 acres of karst topography. The project educated residents in the karst areas about how their activities affect the quality of the ground water, what nonpoint source pollution is, and the best management practices needed to prevent it. In addition, technical studies were conducted to produce up-to-date assessments on the ground water quality of the area, identify priority contaminants, and their pathways.

**Project Location:** Monroe County

**Subgrantee:** Monroe-Randolph Bi-County Health Department

901 Illinois Avenue. Suite A Waterloo, Illinois 62298

#### **Project Reports and Other Informational Materials:**

Karst Land in Illinois." (poster) 1997. Illinois State Geological Survey.

"Southwestern Illinois Sinkhole Plain – Best Management Practices Manual." 1997. Mississippi Karst Resource Planning Committee.

"Groundwater Quality & Contaminant Levels, Monroe County, Illinois." 1997. Southern Illinois University.

"Groundwater Tracing and Recharge Area Delineation Study for Two Karst Study Areas in Monroe County, Illinois." January 29, 1998. Ozark Underground Laboratory.

95-11(319)CD

Title: Brookfield Zoo NPS Pollution Awareness Exhibit (Wetlands Conservation Exhibit)

Purpose: A Wetlands Conservation Exhibit was designed and constructed to enhance the public's understanding of the value and function of swamps, marshes, and other wetlands. The exhibit highlighted the importance of wetlands in improving water quality, supporting wildlife, and controlling floods. Impacts on water quality and wetlands, such as nonpoint source pollution, draining and filling, introduction of exotic species, and unsustainable use of natural resources are presented. The qualities indicative of a healthy wetland environment are displayed and described.

The ways in which human activities impact wetland ecosystems, including nonpoint source pollution, are demonstrated in a variety of means throughout the exhibit. The actions zoo visitors can take to minimize negative impacts on wetlands are also displayed, such as minimizing the use of fertilizers and pesticides, helping to enforce existing wetland protection laws, keeping harmful materials out of storm sewers, and supporting wetlands protection and enhancement efforts.

**Project Location:** Cook County

Subgrantee: Chicago Zoological Society

Brookfield Zoo 3300 Golf Road

Brookfield, Illinois 60513

## **Project Reports and Other Informational Materials:**

"The Swamp: Wonders of Our Wetlands." (video and narrated photo journal) March 1996. Chicago Zoological Society.

95-12(319)RM

**Title:** Shedd Aguarium NPS Pollution Awareness Exhibit (WaterWise)

Purpose: The WaterWise exhibit was designed and constructed to explain the various forms of nonpoint source pollution, their impacts on the environment, methods for minimizing those impacts, and the importance of water quality protection. The information was presented in a fun and engaging manner to stimulate the public's willingness to participate in the practical solutions to nonpoint source pollution highlighted by the exhibit. The exhibit was located in the John G. Shedd Aquarium's main foyer during August 1995. Each Thursday evening in August 1995, the exhibit was part of a special "after hours" event. Illinois EPA employees and other volunteers staffed the exhibit, providing the public an opportunity to talk with water quality experts. After August, the exhibit was relocated to an alternate venue. WaterWise was coordinated with, and the funding used to enhance, the Nonpoint Source Pollution and Stream Ecology exhibit initiated with Federal fiscal year 1991 Section 319 funds.

**Project Location:** Cook County

Subgrantee: John G. Shedd Aquarium

1200 South Lake Shore Drive

Chicago, Illinois 60605

95-13(319)SR

Title: Lincoln Memorial Garden NPS Pollution Control Education Project

Purpose: Demonstrative best management practices (BMPs) for nonpoint source pollution control were implemented on Lincoln Memorial Garden property located within the Lake Springfield watershed. BMPs included upland watershed treatment. streambank stabilization, shoreline protection, critical area vegetative management (prairie grasses and forbes and trees), reforestation, and wetland restoration. The project also provided an excellent opportunity for "hand-on" application workshops for a variety of ages. In addition to the BMPs, a nonpoint source pollution control interpretive exhibit was located at the Nature Center on the Garden property and information/education materials were developed and distributed.

**Project Location:** Sangamon County

**Subgrantee:** Lincoln Memorial Garden

2301 East Lake Drive Springfield, Illinois 62707

### **Project Reports and Other Informational Materials:**

"Striving For Cleaner Water: A Self-Guided Trail Tour." Brochure. 1999. Lincoln Memorial Garden.

"Lincoln Memorial Garden Nonpoint Source Pollution Control Education Project – Final Report." January 30, 1999. Lincoln Memorial Garden Nature Center.

## **BMP Implementation Summary:**

			Es	eduction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	3.0 ac.	?	?	?
356	Dike	100 ft.	?	?	?
410	Grade Stabilization Structure	3 (no.)	?	?	?
584	Stream Channel Stabilization	1,100 ft.	72	61	124
580	Streambank/Shoreline Protection	2,400 ft.	170	144	291
393	Filter Strip	?	?	?	?
	·				
95-15(319)CD					

**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. The CEN also developed a long range plan identifying its 10 year mission and strategy, including future programs and functions, resource needs, goals and objectives, etc.

**Project Location:** Cook County

**Subgrantee:** Chicago Zoological Society

3300 South Golf Road Brookfield, Illinois 60513 Title: Indian Lake Interpretation

Purpose: Through a cooperative effort with the Chicago Zoological Society (Brookfield Zoo),

the Illinois EPA created an interpretive program designed to educate visitors about the benefits of healthy lake ecosystems, the physical and biological characteristics of functioning lakes including the flora and fauna of such habitats in Illinois, the positive and negative impacts of people on lakes, and how visitors can help protect lake water quality. This interpretive program is located around Indian Lake (ILWGZY) at

the Brookfield Zoo.

Project Location: Cook County

Subgrantee: Chicago Zoological Society

3300 South Golf Road Brookfield, Illinois 60513

## **Project Reports and Other Informational Materials:**

"Salt Creek Wilderness, Indian Lake, Dragonfly Marsh – Final Report." August, 1999. Brookfield Zoo.

95-17(319)ST

Title: Know Your Watershed Program

Purpose: The Illinois EPA assisted in the Conservation Technology Information Center's

efforts to host one statewide Watershed Partnership Workshop and three regional Watershed Facilitator Workshops in Illinois. The workshops were targeted to representatives from municipalities, state agencies, state level associations, commodity groups, private industry, non-governmental organizations, and other pertinent groups working with watershed management. The focus of the workshops was on what each organization can provide toward the management of watersheds in Illinois

**Project Location:** Statewide

Subgrantee: Conservation Technology Information Center

1220 Potter Drive, Room 170

West Lafayette, Indiana 47906-1383

#### **Project Reports and Other Informational Materials:**

"Bridge Builder – A Guide for Watershed Partnerships. Facilitators Handbook." 1998. Conservation Technology Information Center.

95-18(319)CD

**Title:** Illinois River Watershed Display

**Purpose:** An Illinois River watershed display and brochure was designed to enhance the public's awareness of the watershed, water quality of the watershed, nonpoint source pollution and its impact on the Illinois River watershed, efforts to improve water quality in the watershed, tips on how the public can prevent nonpoint source pollution in the watershed, and history of the Illinois River watershed. The display will be placed on exhibition at various locations, including at the Clean Water

Celebration in March 1999 at the Peoria Civic Center.

**Project Location:** Peoria County

Subgrantee: Powell Press Board of Managers

942 N. E. Glen Oak Peoria, Illinois 61603

# **Project Reports and Other Informational Materials:**

"Our River is a Reflection of Our Community." (Brochure) 1999. The Peoria Historical Society.

95-19(319)SR

Title: National Urban Water Quality Retrofit Conference

Purpose: Financial and technical assistance was provided by the Illinois EPA to help host the

National Urban Water Quality Retrofit Conference. The conference highlighted innovative technologies and approaches for the improvement of water quality in

urban areas.

**Project Location:** Cook County

**Subgrantee:** Northeastern Illinois Planning Commission

222 South Riverside Plaza. Suite 1800

Chicago, Illinois 60606-6097

95-20(319)SR

#### FFY 1996 FEDERALLY FUNDED SECTION 319 PROJECTS

Title: NPS Control in a Priority Ground Water Protection Planning Region

**Purpose:** The goal of this project was to reduce the leaching potential of certain pesticides within community water supplies (CWS) well recharge areas, given soil characteristics and implementation of selected agricultural best management

practices (BMPs). The three CWSs chosen were Edwardsville, Roxana, and Troy all located in the Southern Groundwater Protection Planning Region. Landowners

employed BMPs on 750 out of 1,000 acres within the recharge areas.

**Project Location:** Madison County

**Subgrantee:** Madison County Soil & Water Conservation District

7205 Marine Road, P.O. Box 482 Edwardsville, Illinois 62025

96-1(319)SR

Title: North Branch Chicago River Watershed Project

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**Purpose:** A model urban watershed protection handbook was developed to assist urban resource managers and interested parties throughout the Midwest in the protection, restoration, and maintenance of similar watersheds. The handbook was developed and field tested as part of the development of an actual watershed management plan and implementation effort for the North Branch of the Chicago River (ILHCC08). The project promoted partnerships that advocate and implement watershed planning and the implementation of best management practices.

**Project Location:** Cook County

**Subgrantee:** Friends of the Chicago River

407 S. Dearborn Street, Suite 1580

Chicago, Illinois 60605

#### **Project Reports and Other Informational Materials:**

"Voices of the Watershed – A Guide to Urban Watershed Management Planning – Based on the Experiences of the North Branch Watershed Project." 1999. Friends of the Chicago River.

"North Branch Chicago River Project – Final Report." February 9, 2000. Friends of the Chicago River.

#### **BMP Implementation Summary:**

•	•		<b>Estimated Load Reduction</b>		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	4,700 ft.	27.7	22	42
865	Land Grading	1.8 ac.	5.7	5	9
880	Permanent Seeding	1.8 ac.	5.7	5	9
800	Urban Stormwater Wetland	1 (no.)	?	11	45

**Title:** Indian Lake Wetlands Educational Interpretation Project

Purpose: The Illinois EPA expanded its nonpoint source pollution control information/education program through a cooperative effort with the Chicago Zoological Society (Brookfield Zoo). A wetland adjacent to the Zoo's Indian Lake (ILWGZY) was designed to help visitors experience a functioning wetland system in northeastern Illinois. educational interpretive program was developed for the wetland to highlight both the positive and negative impacts people can have on the environment, with an emphasis on helping visitors learn about ways they can help the environment. A boardwalk was constructed through the wetland for visitors to safely travel through the wetland without disrupting the natural functions. Visitors have the opportunity to perform hands-on tests to see how the wetland improves water quality. Signage and interactive devices along the boardwalk help visitors understand the importance of clean water. A self-guided trail tells the wetland story without detracting from the surrounding natural scene.

**Project Location:** Cook County

**Subgrantee:** Chicago Zoological Society

3300 South Golf Road Brookfield, Illinois 60513

# **Project Reports and Other Informational Materials:**

"Salt Creek Wilderness, Indian Lake, Dragonfly Marsh - Final Report." August, 1999. Brookfield Zoo.

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	1.5 ac.	?	?	?
96-3(319)ST					

**Title:** Expansion of the Water Works Lab

Purpose: A Water Lab exhibit was constructed at the Chicago Academy of Sciences' new Nature Museum to present key concepts of water related sciences to help people examine, understand, and affect environmental issues. The Water Lab is a "handson/minds-on" exhibit and a working laboratory/classroom. A large model of the Chicago River provides explanations of how the river works, and what kinds of plants and animals live in this environment. The model explains the concept of watersheds and that what we do on the land impacts the quality of our water. The history of how the river has changed is described, as are the different types of uses and ecosystems of the river and Lake Michigan. Interactive devises teach visitors about urban nonpoint source pollution and how such pollution can be reduced. The loss,

function, and benefits of wetlands are explained. The exhibit includes aquarium tanks stocked with aquatic animals, including species both exotic and native to the Chicago River. A separate stream table allows visitors to make their own river and learn first hand how water shapes the land while exploring issues related to erosion and stream hydrology. A water quality testing lab allows visitors to analyze random water samples and make water management decisions based on the test results. Visitors can test for pH, chloride, and dissolved oxygen. Interactive computer stations allow visitors to explore various software and databases concerning water quality and related environmental issues.

**Project Location:** Cook County

Subgrantee: Chicago Academy of Sciences

2060 North Clark Street Chicago, Illinois 60614

96-4(319)SR

**Title:** National Monitoring Strategy on Lake Pittsfield

Purpose: This project continued the identification of sources of sediment and the efficiency of

sediment control practices on the tributary watershed of Lake Pittsfield (ILRDP). This project was previously funded under Section 319 in federal fiscal years 1992, 1993, 1994, and 1995. The project was a cooperative Section 319/314 effort for

lake restoration and water quality improvement.

**Project Location:** Pike County

**Subgrantee:** Illinois State Water Survey

Post Office Box 697

Peoria, Illinois 61652-0697

96-5(319)ST

**Title:** Waukegan River National Monitoring Strategy (Phase 3)

Purpose: This project continued 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.

**Project Location:** Lake County

Subgrantee: Illinois State Water Survey

Post Office Box 697 Peoria, Illinois 61652-0697

96-6(319)ST

**Title:** Northeastern 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 Resource Conservation Service

1902 Fox Drive

Champaign, Illinois 61820

96-7(319)ME

Title: National NPS Pollution Information/Education Conference Proceedings

Purpose: This project printed the presentations from the National NPS Pollution

Information/Education Conference and distributed the proceedings to registered

participants at the conference.

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:**

"A National Conference - Nonpoint Source Pollution Information/Education Programs." March 1997. Northeastern Illinois Planning Commission.

96-9(319)CT

**Title:** Phase 2 Modeling on Lake Pittsfield

Purpose: This project provided additional funding to implement the modeling component of the GIS Technology Support for the Targeted Watershed Approach project funded under Section 319 in FFY94. The Support Technology for Environmental Water & Agricultural Resource Decisions (STEWARD) and Agricultural Nonpoint Source

Pollution (AGNPS) model were applied on a sub-watershed of the Lake Pittsfield

(ILRDP) watershed. The purpose of the modeling was to 1) identify recommended best management practices (BMPs) that should be applied; 2) quantify pollutant loads under conditions before and after implementation of Section 319 BMPs; 3) evaluate the effectiveness of applied BMPs; and 4) determine the functional value of the models for these purposes.

**Project Location:** Pike County

Subgrantee: Illinois State Water Survey

2204 Griffith Drive

Champaign, Illinois 61820-7495

#### **Project Reports and Other Informational Materials:**

"Investigation of the STEWARD Expert System for the Lake Pittsfield Watershed." December 1998. Illinois State Water Survey.

"Modeling of the Lake Pittsfield Watershed Using the AGNPS-ARC/INFO Model." December 1998. Illinois State Water Survey.

96-11(319)SR

**Title:** Nonpoint Source Pollution Awareness Exhibit

Purpose: A new exhibit was designed, constructed, and placed on display at the Shedd Aquarium to enhance the public's understanding of the value and function of water resources, nonpoint source pollution and its impact on water quality, and what can be done to protect Illinois' water resources. The exhibit includes an aquarium stocked with live fish and plant species native to Illinois as well as graphics, copy, and interactive materials that present information on nonpoint source pollution and methods for reducing nonpoint source pollution. A music video for the song "Environment is Everything" was developed to illustrate the causes and sources of nonpoint source pollution, its impact on water quality, and the need to protect water resources. The music video was routinely played at the Shedd Aquarium for viewing by the public.

**Project Location:** Cook County

**Subgrantee:** John G. Shedd Aquarium

1200 South Lake Shore Drive

Chicago, Illinois 60605

# **Project Reports and Other Informational Materials:**

"Environment is Everything." (music video, 4.5 min.) 1997. John G. Shedd Aquarium.

96-10(319)SR

Title: Evaluation for the Children's Zoo

Purpose: The purpose of this project was to evaluate Brookfield Zoo visitors' awareness of the

environmental impact of agriculture. The evaluation will affect planning for the

expansion and renovation of the Children's Zoo.

**Project Location:** Cook County

Subgrantee: Chicago Zoological Society

Brookfield Zoo 3300 Golf Road

Brookfield, Illinois 60513

96-12(319)CT

**Title:** Cache River Reforestation Project

Purpose: This project accelerated the conversion of environmentally sensitive croplands to

forest through the 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 which 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.

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 1 – Final Report." March 17, 2000. Shawnee Resource Conservation & Development Area, Inc.

"Managing Your Forestland." (25 min. Videotape) March 2000. Shawnee Resource Conservation & Development Area, Inc.

#### **BMP Implementation Summary:**

p.	January.		Estimated Load Rec		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
612	Tree Planting	2,601.8 ac	. 72,000	?	?
96-13(319)JC					

**Title:** Tri-County Erosion, Sedimentation, and Stormwater Management Program

Purpose: This project initiated the execution of the multi-county soil erosion and sedimentation control program implementation plan and ordinance prepared with funding under a FFY90 Section 319 grant. Funding was used to finance staff to review local erosion and sedimentation control plans, perform inspections and other enforcement procedures, carry-out education and training functions, maintain control standards and technical guides, ensure intergovernmental cooperation, and evaluate program effectiveness.

Project Location: Counties of Peoria, Woodford, and Tazewell

**Subgrantee:** Tri-County Regional Planning Commission

100 North Main Street, Suite 301 East Peoria. Illinois 61611-2533

# **Project Reports and Other Informational Materials:**

"Tri-County Erosion, Sediment & Storm Water Management Program – First Annual Report." 1997. Tri-County Regional Planning Commission.

"Tri-County Erosion, Sediment & Storm Water Management Program - Second Annual Report." 1998. Tri-County Regional Planning Commission.

96-14(319)ST

**Title:** North Fork Embarras Watershed Project

Purpose: This project protected and improved the water quality of the North Fork Embarras River (ILBEF05) watershed by reducing nonpoint source pollutants. comprehensive sediment and nutrient reduction project was implemented that included watershed protection, information, and education programs. Upland BMPs installed included 33 grassed waterways, 25 sediment and nutrient retention structures, 3 critical area seedings, 3 water and sediment control basins, 2 terrace systems, and 13 grade stabilization structures. Eight streambank stabilization projects were installed on 2,373 linear feet of streambank on the main channel and its tributaries. These included one bendway weir project (consisting of seven weirs), one willow post planting, and six longitudinal peakstone toe protection projects.

Project Location: Counties of Jasper, Crawford, Edgar, Coles, Cumberland, 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." March 2000. North Fork Conservancy District.

•	omoniation Gammary.		Estimated Load Reduction			
BMP Code	BMP Name	Amount	Sediment (tons/year)	Phosphorus (lbs/year)	Nitrogen (lbs/year)	
580	Streambank/Shoreline Protection	2,373 ft.	18,452	?	?	
412	Grassed Waterway	44.81 ac.	12,374	?	?	
638	Water & Sediment Control Basin	875 ft.	285	?	?	
342	Critical Area Planting	4.5 ac.	3,276	?	?	
600	Terrace	1,475 ft.	189.5	?	?	
657	Wetland Restoration	2.7 ac.	440	?	?	
410	Grade Stabilization Structure	13 (no.)	1,492.5	?	?	
350	Sediment Basin	25 (no.)	7,225	?	?	
96-15(319)JC						

Title: Camp Creek Restoration and Watershed Management

**Purpose:** This project improved water quality through the implementation of conservation practices on upland cropland, hog lots, destabilized streambanks, and the provision of education to the watershed community. Water quality benefits were achieved through construction of 1,350 feet of terraces and diversions, 47 water and sediment control basins, 3.7 acres of grassed waterways, 11.9 acres of critical area seedings, and 450 feet of willow post plantings for the stabilization of streambanks along Camp Creek (ILDGI01).

**Project Location:** Brown County

**Subgrantee:** Brown County Soil and Water Conservation District

R.R. #4

Mt. Sterling, Illinois 62353

### **Project Reports and Other Informational Materials:**

"Camp Creek Restoration and Watershed Management Project – Final Report." December 21, 1998. Brown County Soil & Water Conservation District.

## **BMP Implementation Summary:**

		Estimated Load Reduction		
		Sediment	Phosphorus	Nitrogen
BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
Streambank/Shoreline Protection	450 ft.	490	?	?
Grassed Waterway	3.7 ac.	775	?	?
Water & Sediment Control Basin	26,335 ft.	8,586.5	?	?
Terrace	1,350 ft.	106.5	?	?
	Streambank/Shoreline Protection Grassed Waterway Water & Sediment Control Basin	Streambank/Shoreline Protection 450 ft. Grassed Waterway 3.7 ac. Water & Sediment Control Basin 26,335 ft.	Sediment  BMP Name Amount (tons/year)  Streambank/Shoreline Protection Grassed Waterway Water & Sediment Control Basin  Sediment (tons/year)  450 ft. 490  3.7 ac. 775  8,586.5	BMP NameAmount(tons/year)(lbs/year)Streambank/Shoreline Protection450 ft.490?Grassed Waterway3.7 ac.775?Water & Sediment Control Basin26,335 ft.8,586.5?

Title: Milne Creek Phase 2 Project

**Purpose:** The City of Lockport continued the streambank stabilization of Milne Creek initiated with funding under Section 319 in FFY94. An additional 1,240 linear feet of streambank was stabilized using bio-engineering techniques (coconut rolls and A-

jacks). Also, public education materials were developed and presented to advance the need for better care of the water resources in the area.

Project Location: Will County

Subgrantee: City of Lockport

222 East 9th Street Lockport, Illinois 60441

#### **Project Reports and Other Informational Materials:**

"Milne Creek Stream Bank Stabilization Project – Final Report." July 27, 1999. City of Lockport.

## **BMP Implementation Summary:**

-	•		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,240 ft.	67	57	113
96-17(319)JC					

Title: Klein Creek Project

**Purpose:** This project stabilized 1,000 feet of eroding streambanks along Klein Creek (ILGBK05) using bioengineering techniques (lunkers, willow posts, vegetation, etc.)

to reduce erosion and improve water quality. Local teachers were taught techniques for controlling nonpoint source pollution and stabilizing eroding streambanks. These teachers presented this knowledge to their grade school classes and students developed and implemented nonpoint source pollution control strategies to control

streambank erosion.

**Project Location:** DuPage County

**Subgrantee:** Forest Preserve District of DuPage County

Fullersburg Woods Educational Center

3609 Spring Road

Oak Brook, Illinois 60521

#### **Project Reports and Other Informational Materials:**

"Klein Creek Stabilization Program – Final Report." February 6, 2000. 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)
580	Streambank/Shoreline Protection	1,000 ft.	10	10	20

96-19(319)CD

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.

**Project Location:** Cook County

Subgrantee: Chicago Zoological Society

3300 South Golf Road Brookfield, Illinois 60513

96-20(319)SR

Title: Southeast Illinois Oil Brine Damage Reclamation Project

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**Purpose:** This project demonstrated four (4) different cost-effective methods (organic matter, mineral application, plant materials, and composite test) for the reclamation of oil brine damaged sites to reduce nonpoint source pollution in the Wabash River (ILB07) and Saline River (ILAT05) watersheds. It is estimated that there is a total of 7,120 oil brine damaged sites within the project area. Runoff from these sites carry sediment, salinity, chlorides, and petroleum wastes. Four job sheets and an information packet were developed which describe materials, rates, and management techniques for use by affected landowners.

**Project Location:** Counties of Gallatin, Hamilton, Saline, & White.

**Subgrantee:** Shawnee Resource Conservation & Development Area, Inc.

Rural Route 6, Post Office Box 255

1305 North Carbon Marion, Illinois 62959

# **Project Reports and Other Informational Materials:**

"Southeast Illinois Brine Damage Task Force – Illinois EPA Section 319 – Oil Brine Remediation Project." (brochure) 2000. Southeast Illinois Brine Damage Task Force.

"Southeast Illinois Brine Damage Reclamation Project – Final Report." March 7, 2000. Southeast Illinois Brine Damage Task Force.

#### **BMP Implementation Summary:**

•	•		Estimated Load Reduction			
			Sediment	Phosphorus	Nitrogen	
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)	
544	Land Reconstruction, Currently Mined Land	20 ac.	?	?	?	

**Title:** Determining the Effective Discharges of Illinois Streams

Purpose: This project determined the effective discharges of Illinois streams so that these

values can be used in guiding stream restoration projects. Effective discharge is the discharge (or range of discharges) that is responsible for transporting the

comparatively largest fraction of the sediment load for that stream.

Subgrantee: Illinois State Water Survey

Post Office Box 697 Peoria, Illinois 61652-0697

### **Project Reports and Other Informational Materials:**

"Effective Discharge of Illinois Streams." November 2002. Illinois State Water Survey.

96-22(319)ST

Title: Pittsfield National Monitoring Program

Purpose: This project continued the identification of sources of sediment and the efficiency of

sediment control practices on the tributary watershed of Lake Pittsfield (ILRDP). This project was previously funded under Section 319 in federal fiscal years 1992,

1993, 1994, 1995, 1996, 1997, and 1998.

**Project Location:** Pike County

**Subgrantee:** Illinois State Water Survey

Post Office Box 697

Peoria, Illinois 61652-0697

#### **Project Reports and Other Informational Materials:**

"Evaluation of Sediment Delivery to Lake Pittsfield after Best Management Practice Implementation - National Monitoring Project Annual Report." September 2000. Illinois State Water Survey.

96-23(319)ST

## FFY 1997 Federally Funded Section 319 Projects

**Title:** Honey Creek Watershed Project

**Purpose:** This project involved the construction of 25 large ponds, along with 6 riffles and stream barbs in tributary streams of Honey Creek (ILKCAG01) to provide increased dissolved oxygen while retaining silt, nutrients, and pesticides from immediately entering the stream. The project augmented conventional land and water treatment programs currently existing in the watershed through the construction of water holding basins in the extreme lower reaches of the side tributaries off the main stem

of Honey Creek.

**Project Location:** Pike County

Subgrantee: Pike County Soil & Water Conservation District

1319 West Washington Street

Pittsfield, Illinois 62363

## **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
378	Pond	25 (no.)	14,880	5,041	10,080
584	Stream Channel Stabilization	? ` ´	?	?	?
97-1(319)JC					

Title: North Fork Vermilion River Project

**Purpose:** Operators in the North Fork Vermilion River (ILBPG09) watershed 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 to be used in this project included 6,150 feet of terraces and 7.5 acres of waterways. Public meetings will be conducted to increase awareness to all citizens in the watershed.

**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 – Final Report." February 28, 1999. Vermilion County Soil & Water Conservation District.

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
600	Terrace	6,150 ft.	989	?	?
412	Grassed Waterway	7.5 ac.	240	?	?
97-2(319)JC					

Title: Upper Sangamon River Basin Water Quality Improvement Project

Purpose: This project reduced the amount of nonpoint source (NPS) pollution in the Upper Sangamon River (ILE28) basin and Lake Decatur (ILREA) by working in direct cooperation with the majority of the basin's land use decision makers. The two target NPS pollutants were nutrients and sediment. Through subcontracts with local soil and water conservation districts one-on-one on-site technical and educational assistance was provided to landowners throughout the watershed. Cost-share funds were used to implement agricultural best management practices including GIS/GPS w/fertilizer monitors and two wetlands.

Estimated Load Reduction

**Project Location:** Macon County

**Subgrantee:** City of Decatur

#1 Gary K. Anderson Plaza Decatur, Illinois 62523-1196

## **Project Reports and Other Informational Materials:**

"Upper Sangamon River Basin Water Quality Improvement Project – Final Report." August 31, 1999. Macon County SWCD.

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	3.0 ac	?	?	?
590	Nutrient Management	40,183 ac.	?	?	?
97-3(319)JC					
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**Title:** Addison Creek Streambank Stabilization Project

Purpose: This project stabilized approximately 2,720 feet of eroding streambanks along Addison Creek (ILGLA01) in the city of Northlake. The project included the installation of 715 feet of rip rap and 700 feet of lunkers on the north bank and 455 feet of rip rap and 850 feet of lunkers on the south bank to reduce erosion and improve water quality.

**Project Location:** Cook County Subgrantee: Addison Creek River Conservation District

55 East North Avenue Northlake, Illinois 60164

### **Project Reports and Other Informational Materials:**

"Addison Creek Streambank Stabilization Project – Final Report." August 1999. 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	2,720 ft.	209	178	356
97-4(319)JC					

Title: Streambank Stabilization of Spring Brook No. 1

Purpose: This project stabilized eroding streambanks along 4,000 feet of Spring Brook No.1

(ILGBKA), a tributary to the West Branch of the DuPage River using bioengineering techniques (i.e., re-establishment of native riparian vegetation, brush mattress, vegetated geogrid with fiber roll, etc.) to reduce erosion and improve water quality.

**Project Location:** DuPage County

**Subgrantee:** DuPage County Department of Environmental Concerns

421 North County Farm Road Wheaton, Illinois 60187

## **Project Reports and Other Informational Materials:**

"Spring Brook No. 1 Streambank Stabilization Project – Final Report." January 1999. DuPage County Department of Environmental Concerns.

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment Phosphorus Nitroge		
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	4,000 ft.	528	449	898
97-6(319)JC					
- (/					

**Title:** TAM Golf Course Streambank Stabilization

**Purpose:** This project stabilized approximately 1,715 feet of eroding streambanks along the North Branch of the Chicago River (ILHCC08) using bioengineering techniques (Ajacks, Bar Root River Birch, Red Twig Dogwood, prairie and wetland plants) and the creation of a 1.5 acre wetland to reduce erosion and improve water quality. An

educational stand was installed to describe the wetland and streambank stabilization practices.

Project Location: Cook County

Subgrantee: Niles Park District

7877 Milwaukee Avenue Niles, Illinois 60714

## **Project Reports and Other Informational Materials:**

"TAM Golf Course Stream Bank Stabilization Project – Final Report." June 1999. Niles Park District.

# **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	de BMP Name Am	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,715 ft.	132	112	224
800	Urban Stormwater Wetland	1.5 ac.	?	?	?
97-7(319)SR					

**Title:** Langendorf Pond Retrofit to Reduce Nonpoint Source Pollution

Purpose: This project involved stream restoration activities and modification of an existing 2.5 acre impoundment (Langendorf Pond) on Flint Creek (ILDTZS01) to reduce nonpoint source pollution and enhance aquatic habitat. The modifications included 1) dam removal to restore the pond to a 300 foot long meandering stream channel and a wetland area, 2) installation of biotechnical streambank stabilization techniques along 360 feet of Flint Creek, 3) removal of a petting zoo, 4) establishment of a buffer of native prairie vegetation around the riparian area, and 5) installation of a 360 foot long swale to filter parking lot runoff. An interpretive signage system and educational program was also implemented to educate the public about nonpoint source pollution and the ecological benefits of the project.

**Project Location:** Lake County

**Subgrantee:** Village of Barrington

Department of Public Works 206 South Hough Street Barrington, Illinois 60010

## **Project Reports and Other Informational Materials:**

"Langendorf Pond Retrofit to Reduce Nonpoint Source Pollution - A Project to retrofit an Onstream Impoundment in the Flint Creek Watershed." April 2000. Village of Barrington.

# **BMP Implementation Summary:**

-	•		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
500	Obstruction Removal	1 (no.)	?	?	?
009	Stream Channel Restoration	300 ft.	2	1	3
580	Streambank/Shoreline Protection	360 ft.	4	3	7
657	Wetland Restoration	2.06 ac.	?	?	?
472	Livestock Exclusion	0.5 ac.	?	?	?
835	Urban Filter Strip	360 ft.	?	?	?
	·				

97-8(319)ST

Title: National Monitoring Strategy on Lake Pittsfield

Purpose: This project continued the identification of sources of sediment and the efficiency of

sediment control practices on the tributary watershed of Lake Pittsfield (ILRDP). This project was previously funded under Section 319 in federal fiscal years 1992, 1993, 1994, 1995, and 1996. The project was a cooperative Section 319/314 effort

for lake restoration and water quality improvement.

**Project Location:** Pike County

**Subgrantee:** Illinois State Water Survey

Post Office Box 697

Peoria, Illinois 61652-0697

97-9(319)ST

**Title:** Waukegan River National Monitoring Strategy (Phase 4)

Purpose: This project continued 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

### **Project Reports and Other Informational Materials:**

"Biological and Physical Monitoring of Waukegan River Restoration Efforts in Biotechnical Bank Protection and Pool/Riffle Creation - National Watershed Monitoring Project Annual Report." May 1999. Illinois State Water Survey.

97-10(319)ST

**Title:** Des Plaines Streambank Restoration Project

Purpose: This project stabilized approximately 4,000 feet of eroding streambanks along the Des Plaines River (ILG30) using bioengineering techniques to reduce erosion and improve water quality. Approximately 2,600 feet of streambank were stabilized through selective brush removal, weed control, and planting of native vegetation. Live stakes (450 feet) and live fascines (350 feet) were also installed. The slope was reconstructed on a 600 foot length of streambank. Because of the high potential for erosion, the fine-grained sands were removed from this site during reconstruction. An organic clay cover was placed over the site and covered with soil and an erosion control blanket. The area was seeded and live stakes and posts installed. However, the clay cover interfered with the flow of groundwater into and out of the bank. Hydrostatic pressure exceeded the material strength, causing the bank to fail and be washed away by the river. Since the failure, vegetation was reestablished and the 600 foot site was stabilizing. A catch basin, storm sewer, and rip rap outlet was also installed at a point of discharge of surface runoff into the river was experiencing severe erosion. The project included education/information component in which college students and local community residents were taught techniques for controlling nonpoint source pollution and stabilizing eroding streambanks. A videotape of the project was developed along with educational seminars and news releases.

**Project Location:** Cook County

**Subgrantee:** Oakton Community College

1600 East Golf Road

Des Plaines, Illinois 60016-1268

#### **Project Reports and Other Informational Materials:**

"DesPlaines Streambank Restoration Project – Final Report." October 31, 2000. Oakton Community College.

"Banking on Our Future." (13 min. videotape) October 31, 2000. Oakton Community College.

#### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	s/year) (lbs/year)
580	Streambank/Shoreline Protection	4,000	95	80	160
945	Subsurface Drain (Catch Basin)	1 (no.)	?	?	?
97-11(319)SR					

**Title:** Alternative Pavement Deicing Materials Brochure

Purpose: An educational/technical assistance brochure was developed on alternatives to and appropriate uses of pavement deicing materials. The brochure addressed adverse

environmental effects, alternative deicing materials, alternatives to deicing (e.g., abrasives, plowing), application rates and conditions, costs of deicing, and environmental costs of deicing. The brochure was distributed to affected parties representing highway agencies, local governments, and owners of commercial land, and made available to members of the general public and interest groups.

**Project Location:** Statewide

Subgrantee: Northeastern Illinois Planning Commission

222 South Riverside Plaza, Suite 1800

Chicago, Illinois 60606-6097

### **Project Reports and Other Informational Materials:**

"Pavement Deicing – Minimizing the Environmental Impacts." Brochure. April 1998. Northeastern Illinois Planning Commission.

97-12(319)ME

**Title:** Jefferson County Outdoor Education Facility

Purpose: This project educated the citizens of Jefferson County about nonpoint source (NPS) pollution and the use of best management practices (BMPs) to control it. An existing outdoor educational facility was enhanced by using BMPs to promote the control of NPS pollution. A "Neighbor to Neighbor" program was implemented to strengthen the network of landowners who practice water quality protection and to promote the use of BMPs by others. Selected BMPs (i.e., filter strips, terraces, grassed waterways, ponds, streambank stabilization, etc.) were implemented through the "Neighbor to Neighbor" program to reduce NPS pollution in the Casey Fork (ILNJ07) watershed. Also, NPS pollution was reduced through the application of landscape waste and compost materials on oil brine damaged sites.

**Project Location:** Jefferson County

Subgrantee: Jefferson County Soil & Water Conservation District

109 Shiloh Drive

Mt. Vernon, Illinois 62864

### **Project Reports and Other Informational Materials:**

"Jefferson County Outdoor Educational Facility – Final Report." May 2000. Jefferson County Soil & Water Conservation District.

Outdoor Educational Facility Self Guided Tour & Education Manual – Primary & Middle Grades." May 2000. Jefferson County Soil & Water Conservation District.

Outdoor Educational Facility Self Guided Tour & Education Manual – High School & Adult." May 2000. Jefferson County Soil & Water Conservation District.

## **BMP Implementation Summary:**

Estimated Load Reduction Sediment Phosphorus Nitrogen BMP Code Amount (lbs/year) (tons/year) (lbs/year) Land Reconstruction, Abandoned Mine Land 1.5 ac. 543

97-13(319)ST

**Title:** Glen Shoals Restoration Project

Purpose: The project included the stabilization of approximately 3,605 feet of eroding

shoreline along Glen Shoals Lake (ILROL) using bioengineering techniques (A-

jacks, willow posts, vegetation, etc.).

**Project Location:** Montgomery County

**Subgrantee:** Montgomery County Soil & Water Conservation District

1621 Vandalia Road Hillsboro, Illinois 62049

### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	3,605 ft.	195	166	332

97-14(319)ST

Title: Willoway Brook Streambank Stabilization Project

Purpose: This project reduced erosion and nonpoint source pollution through the stabilization of approximately 1,280 feet of eroding streambanks along Willoway Brook, a tributary of the East Branch DuPage River (ILBGL10), located on the Morton Bioengineering techniques (i.e., lunkers, A-jacks, geogrid, Arboretum property. minor stream re-grading, vegetative stabilization, fiber rolls) were used. Rock riffles were also installed in five locations. An educational program was implemented to present visitors with information on topics including water pollution control, best management practice implementation, and land use impacts on water resources.

**Project Location:** DuPage County

**Subgrantee:** The Morton Arboretum

4100 Illinois Route 53 Lisle, Illinois 60532-1293

### **Project Reports and Other Informational Materials:**

"Willoway Brook Streambank Stabilization Project - Final Report." December 2001. Earth Tech.

# **BMP Implementation Summary:**

-	•		Estimated Load Reduction		
		_	Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,280 ft.	120	102	205
584	Stream Channel Stabilization	1,280 ft.	40	34	68
97-17(319)CD					

Title: Four Lakes Village Streambank Stabilization Project

Purpose: This project stabilized 1,135 feet of eroding streambanks along a segment of the

East Branch of the DuPage River (ILGBL10) using bioengineering techniques to reduce erosion and improve water quality. A combination of A-jacks and gabion baskets were used to stabilize the toe of the streambank where a majority of high velocity flows occur. Above the A-jacks and gabion baskets, the soil was back-filled,

covered with an erosion control blanket and seeded with native vegetation.

**Project Location:** DuPage County

**Subgrantee:** The Conservation Foundation

10S 404 Knoch Knolls Road Naperville, Illinois 60565

### **Project Reports and Other Informational Materials:**

"Four Lakes Streambank Stabilization Project." May 8, 2000. 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	1,135 ft.	125	106	212
97-18(319)JC					

**Title:** Stream Classification & Fish Sampling Protocols

Purpose: This project developed a system to delineate segments of Illinois streams and

classify each segment into one of several possible categories or types developed guidelines for effectively sampling fish communities in Illinois streams, using

electrofishing gear.

**Project Location:** Statewide

**Subgrantee:** Illinois History Survey

Center of Aquatic Ecology 607 E. Peabody Drive Champaign, Illinois 61820

97-20(319)GG

Title: Initial Site Evaluation (ISE) Procedure for Wetland Creation or Restoration

**Purpose:** This project involved the development of an Initial Site Evaluation (ISE) Procedure that can be used to evaluate the suitability of a site for wetland creation or restoration. The Report describes a rapid, transferable, standardized, and cost-effective procedure for evaluating a site's hydrogeologic potential for supporting a healthy wetland system. The Report identifies the hydrogeologic features along with the associated ranking or appraisal criteria and guidelines that should be used to assess a site's potential for successful wetland creation or restoration. The report contains guidance that will assist other users of the procedure, although it is expected that each user will differ in experience and may not be able to perform all aspects of the procedure.

**Project Location:** Statewide

Subgrantee: Illinois State Geological Survey

615 East Peabody Drive Champaign, Illinois 61820

## **Project Reports and Other Informational Materials:**

"A Hydrogeologic Procedure for Evaluating Wetland Restoration and Creation Sites." February 20, 2003. Illinois State Geological Survey.

97-21(319)ST

Title: Conservation Reserve Enhancement Program (CREP) Assistance

Purpose: The Association of Illinois Soil & Water Conservation District (AISWCD) helped counties 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 county SWCDs completed the Conservation Reserve Program - 2 form, type the Conservation Plan of Operations, obtain the necessary producer signatures on required documents, and complete all state CREP enrollment forms. The county 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 Bureau, Christian, Fulton, Knox, Marshall, Menard,

Montgomery, Putnam, Sangamon, & Shelby

**Subgrantee:** Association of Illinois Soil & Water Conservation Districts

2520 Main Street

Springfield, Illinois 62702

97-22(319)JC

### FFY 1998 FEDERALLY FUNDED SECTION 319 PROJECTS

Title: Cache River Watershed No Till Project

Purpose: This project was aimed at limited resource farmers operating small farms within the

Cache River (ILIX04) watershed. The objective of increasing no till crop production by these hard to reach operators by 4,000 acres annually was accomplished by placing a no till drill in the Johnson, Pulaski-Alexander, and Union soil and water conservation districts. Education and technical assistance was provided through a Conservation Tillage Specialist employed via contract with the Shawnee RC & D.

**Project Location:** Johnson, Pulaski-Alexander, and Union Counties

Subgrantee: Shawnee Resource Conservation & Development Area

R.R. 6, Box 255, 1305 N. Carbon

Marion, Illinois 62959

# **Project Reports and Other Informational Materials:**

"Cache River Watershed No Till Project – Final Report." April 4, 2000. Shawnee Resource Conservation & Development Area.

## **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	Amount (tons/year) (lbs/year)	(lbs/year)	(lbs/year)
329	Conservation Tillage	4,435.1 ac.	55,382	?	?
98-1(319)JC					

**Title:** Phase 2 Implementation of Flint Creek Watershed Management Plan

Purpose: The purpose of this project was to continue the implementation of the Flint Creek Watershed Management Plan and demonstrate measures to address the nonpoint source pollution impacts of urban runoff and streambank erosion. Seven riffles were installed and approximately 2,400 feet of Flint Creek (ILDTZS01) were stabilized through a residential section of Barrington. An existing dry bottom detention basin was retrofitted to create a wetland detention basin in Lake Zurich to capture urban runoff pollutants and attenuate flow rates to Flint Creek. Approximately 800 feet of Flint Creek were stabilized along a reach of stream adjacent to Citizens for Conservation property.

**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:**

"Flint Creek Watershed Restoration Projects – Final Report ." April 2000. Northeastern Illinois Planning 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	3,200 ft.	108	108	216
800	Urban Stormwater Wetland	1 (no.)	?	6	22
98-2(319)SR					
-(-:-/-:-					

Title: Waukegan River Wetland Restoration Project

Purpose: This project restored a 1/2 acre wetland adjacent to the Waukegan River (ILQ01) in

Washington Park to reestablish the natural function and reduce nonpoint source pollution impacts. The project also included the stabilization of 300 feet of eroding streambank on the Waukegan River using bioengineering techniques. An interpretive observation station was constructed overlooking the site to present

information about the project and nonpoint source pollution.

**Project Location:** Lake County

**Subgrantee:** Waukegan Park District

2000 Belvidere Street Waukegan, Illinois 60085

### **Project Reports and Other Informational Materials:**

"Waukegan River Wetland Restoration – Final Report." December 2000. Waukegan Park District.

### **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	0.5 ac.	?	?	2
580	Streambank/Shoreline Protection	300 ft.	32	32	64
98-3(319)ST					

Title: Mitchell Park Ravine Watershed Project

**Purpose:** The project focused on soil erosion control and water quality in an urban watershed tributary to the Mississippi River and determined to be high priority by the East Moline Stormwater Committee. Proven soil erosion and sediment control and stormwater management approaches planned in consultation with the NRCS were utilized. Practices included grade stabilization structures, streambank stabilization,

stormwater detention basins, critical area treatment, and permanent vegetative cover.

Project Location: **Rock Island County** 

Subgrantee: City of East Moline

912 16<sup>th</sup> Avenue

East Moline. Illinois 61244

## **Project Reports and Other Informational Materials:**

"Mitchell Park Ravine Watershed Project - Final Report." July 2001. 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	2 (no.)	?	?	?
350	Sediment Basin	3 (no.)	?	?	?
910	Rock Outlet Protection	1 (no.)	?	?	?
840	Grassed Lined Channel	? ac.	?	?	?
580	Streambank/Shoreline Protection	? ft.	?	?	?
98-5(319)ST					

**Title:** Ground Water Protection through Pollution Prevention

**Purpose:** The purpose of this project was to impact water quality as it relates to ground water resources in rural areas in the most positive way by implementing viable prevention programs on the local level. The scope of this project was integrated with ongoing activities related to the Illinois Department of Agriculture's (IDOA) Ground Water Protection Program, Illinois FarmAsyst support mechanisms, as well as other related water quality efforts.

**Project Location:** Statewide

Subgrantee: Illinois Department of Agriculture

Post Office Box 19281

Springfield, Illinois 62794-9281

98-6(319)JC

**Title:** Reducing Herbicides with GPS Application

Purpose: Global Positioning System (GPS) equipment was mounted on an ordinary field sprayer and used to apply herbicides to cropland at four (4) field demonstrations over a two year period. The project was conducted in the Little Cache River (ILADDB01) watershed. This was done to demonstrate how GPS can reduce the amount of herbicide and still get acceptable crop production results. Field days were held at the demonstration area and special edition newsletters were distributed to promote and highlight this project.

**Project Location:** Johnson County

Subgrantee: Johnson County Soil & Water Conservation District

> 807 North 1<sup>st</sup> Street Vienna, Illinois 62995

## **Project Reports and Other Informational Materials:**

"Reducing Herbicides with GPS Applications – Final Report." May 1, 2000. Johnson County Soil & Water Conservation District.

98-7(319)ST

**Title:** Shelby Creek Restoration and Watershed Management Project

Purpose: This project improved the water quality of Shelby Creek and the LaMoine River (ILDG01) through the implementation of conservation practices on upland cropland and destabilized streambanks. Implementation of best management practices included 1,700 feet of terraces and diversions, 104 water and sediment control basins (19,095 feet), 1.5 acres of grassed waterways, and 225 feet of streambank stabilization with willow posts. The project also provided education to the watershed community through news releases, newsletters, and tours.

**Project Location: Brown County** 

**Subgrantee:** Brown County Soil & water Conservation District

Rural Route #4

Mt. Sterling, Illinois 62353

## **Project Reports and Other Informational Materials:**

"Shelby Creek Restoration & Watershed Management Project – Final Report." July 7, 2000. Brown 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)
600	Terrace	1,700 ft.	108	?	?
638	Water & Sediment Control Basin	19,905 ft.	2,339	?	?
412	Grassed Waterway	1.5 ac.	247	?	?
580	Streambank/Shoreline Protection	225 ft.	162	?	?
98-8(319)JC					

**Title:** Model Watershed for Water Quality

Purpose: This project provided a hands-on opportunity for the public to learn about watershed management by viewing best management practices (BMPs) in a defined watershed. In addition to the BMPs, information on signs and handout materials are available that will foster educated decisions regarding individual actions that will help improve water quality. Complete with a flowing stream, a wetland and a lake, a new exhibit was constructed on the grounds of the Illinois State Fair in 2001. Visitors can stroll through a 13-station miniature "watershed". Approximately one acre in size, the watershed park is located not far inside the Fair's main gates, behind and below the Department of Agriculture headquarters. Its stream, wetland and lake are all designed to provide fun and relaxation along with information about different land uses and environments in Illinois. A mix of static, hands-on and electronic displays was offered. Illustrating such diverse topics as urban stormwater runoff, geology, mined land and beneficial bugs, Watershed Park offers fair visitors benches, drinking water and a water drop mascot named "Splash." Recognizing the Fair's historic role as an agriculture exposition, there were stations illustrating farm and home safety, Illinois soil types, soil conservation and pasture management.

**Project Location:** Sangamon County

**Subgrantee:** Illinois Department of Agriculture

State Fairgrounds, P.O. Box 19281 Springfield, Illinois 62794-9281

#### **Project Reports and Other Informational Materials:**

"Model Watershed for Water Quality – Final Report." January 31, 2002. Illinois Department of Agriculture.

"Watershed Park. Where all of us make a difference!" (brochure) August 2001. Illinois Department of Agriculture.

98-9(319)CD

**Title:** Old Tavern Park Shoreline Stabilization Project

Purpose: The purpose of this project was to stabilize 1,250 linear feet of shoreline and create approximately 9,000 square feet of buffer zone in and around the retention basin located within Old Tavern Park. Shoreline stabilization was accomplished by using bioengineering techniques and the buffer zone will consist of a "no mow" grass mix and a low growing wet prairie mix. The project was located in the East Branch of the DuPage River (ILGBL05).

**Project Location: DuPage County** 

**Subgrantee:** Lisle Park District

1825 Short Street Lisle, Illinois 60532

## **Project Reports and Other Informational Materials:**

"Old Tavern Park Shoreline Stabilization Project - Final Report." April 25, 2000. Lisle Park 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	1,250	6	5	11
98-10(319)ST					

Title: Streambank Restoration on the West Branch, DuPage River

Purpose: This project stabilized eroding streambanks along two (2) sites on the West Branch, DuPage River (ILGBK05) (610 feet), along three (3) sites on the East Branch, DuPage River (ILGBL10) (1,315 feet), and along one (1) site on Keeneyville Ditch, a direct tributary to Mallard Lake (ILWGX) (1,140 feet). The Project utilized bioengineering techniques (A-jacks, lunkers, brush clearing, re-grading, and native vegetation) to stabilize the streambank and enhance water quality, improve riparian corridor and restore wildlife habitat. The proposal also included a significant educational component geared towards the general public, stream users, streamside landowners, municipalities, and local schools.

**Project Location: DuPage County** 

**Subgrantee:** The Conservation Foundation

10 S 404 Knoch Knolls Road Naperville, Illinois 60565

#### **Project Reports and Other Informational Materials:**

"Streambank Restoration on West Branch DuPage River - DuPage County, IL. - Final Report." April 12, 2000. The Conservation Foundation.

"Streanbank Stabilization: Soft Solutions Produce Hard Results." (11 min. videotape) April 2000. The Conservation Foundation.

#### **BMP Implementation Summary:**

•	•		Es	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	3,065 ft.	81	70	137
98-11(319)CD					

**Title:** Greater Eliza Watershed Project

Purpose: The purpose of this project was to protect and improve the water quality of the 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 (i.e., sediment basins, ponds, terraces, waterways, grade stabilization structures, water and sediment control basins, vegetative filter strips). An educational program was also implemented to educate the public about the importance of streambank stabilization and nonpoint source pollution.

**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 – Final Report." August 1, 2001. Mercer County Soil & Water Conservation District.

## **BMP Implementation Summary:**

			Estimated Load Reduc		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	1 (no.)	2,159	?	?
378	Pond	4 (no.)	670.6	?	?
393	Filter Strip	1.5 ac.	73.5	?	?
410	Grade Stabilization Structure	4 (no.)	741.4	?	?
412	Grassed Waterway	6.4 ac	777	?	?
600	Terrace	7,550 ft.	732.4	?	?
638	Water & Sediment Control Basin	4,835	2,315.6	?	?
98-12(319)JC					

**Title:** Mackinaw River Project (Phase 2)

Purpose: This project continued to build widespread community and individual support for the adoption of best management practices consistent with the consensus derived statement of objectives and strategies of the Mackinaw River Watershed Management Plan. The project focuses on education/outreach and the placement of highly visible best management practices at locations throughout the watershed. The project implemented four wetland restoration projects (20 acres); two sediment retention basins (5 acres); two streambank stabilization projects (1,100 feet) using re-grading, willows, and native vegetation; and woodland management (1.5 acres).

**Project Location:** Mason, Tazewell, Woodford, McLean, & Ford Counties

**Subgrantee:** The Nature Conservancy

1201 South Main Street Eureka, Illinois 61530

## **Project Reports and Other Informational Materials:**

"Mackinaw River Project – Phase 2 – Final Report." September 30, 2001. The Nature Conservancy.

## **BMP Implementation Summary:**

			Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	2 (no.)	?	?	?
580	Streambank/Shoreline Protection	1,100 ft.	48	41	82
657	Wetland Restoration	20 ac.	?	?	?
666	Woodland Improvement	1.5 ac.	?	?	?
98-13(319)CD					

**Title:** Waukegan River National Monitoring Program (Phase 5)

**Purpose:** This project continued 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

## **Project Reports and Other Informational Materials:**

"Biological & Physical Monitoring of Waukegan River Restoration Efforts in Biotechnical Bank Protection & Pool/Riffle Creation – National Watershed Monitoring Project." May 2000. Illinois State Water Survey.

98-14(319)ST

Title: Pittsfield National Monitoring Program

Purpose: This project continued the identification of sources of sediment and the efficiency of

sediment control practices on the tributary watershed of Lake Pittsfield (ILRDP). This project was previously funded under Section 319 in federal fiscal years 1992,

1993, 1994, 1995, 1996, and 1997.

Project Location: Pike County

Subgrantee: Illinois State Water Survey

Post Office Box 697 Peoria, Illinois 61652-0697

## **Project Reports and Other Informational Materials:**

"Evaluation of Sediment Delivery to Lake Pittsfield after Best Management Practice Implementation – National Monitoring Project. September 1999. Illinois State Water Survey.

98-15(319)ST

**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.

**Project Location:** Cook County

**Subgrantee:** Chicago Zoological Society

3300 South Golf Road Brookfield, Illinois 60513

98-16(319)BL

Title: Northeastern 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 Resource Conservation Service

603 East Diehl Road, Suite 131 Naperville, Illinois 60563-7808

Title: Water Quality Enhancement Training

Purpose: A USDA - Natural Resources Conservation Service (NRCS) detailed a soil conservationist to the Illinois EPA's Bureau of Water to assist the Illinois EPA in implementing Illinois' Nonpoint Source Management Program. employee 1) facilitated the integration of NRCS programs such as EQIP with the Illinois EPA's watershed management planning program; 2) provided technical support in the development of program cross-training modules for staff of the Illinois EPA, NRCS, soil and water conservation districts, and the Illinois Farm Bureau; 3) provided updates on activities associated with the NRCS Watershed Science Institute, Water Science and Technology Team, Wetland Science Institute, and other special groups of the NRCS having activities impacting water quality and watershed planning; 4) assisted in Illinois EPA efforts to further promote the state water quality focus group under the guidance of the Natural Resources Coordinating Council and Watershed Management Committee; 5) trained Illinois EPA, NRCS, SWCDs, and the Illinois Farm Bureau in the use of NRCS Resource Planning Guidebook and updates; 6) incorporated use of the NRCS's nine steps of planning for watershed planning; etc.

**Project Location:** Statewide

**Subgrantee:** USDA – Natural Resources Conservation Service

1902 Fox Drive

Champaign, Illinois 61820

98-18(319)SR

**Title:** Roosevelt Park Pond & Waukegan River Restoration

Purpose: This project included the design and installation of an interpretive signage and pathway, streambank (rock boulders with vegetation) and wetland restoration techniques (modification and installation of two riffles, wetland planting, deepen the existing forebay area) on the South Branch of the Waukegan River (ILQ01) by the retrofit of the existing Roosevelt Park sediment basin. These stream and wetland restoration efforts helped to improve water quality, create wildlife habitat, and provide for environmental education opportunities.

**Project Location:** Lake County

Subgrantee: Waukegan Park District

2000 Belvidere Street Waukegan, Illinois 60085

# **Project Reports and Other Informational Materials:**

"Roosevelt Park Pond/Waukegan River Restoration Project." December 2004. Waukegan Park 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	1,135 ft.	24	21	41
584	Stream Channel Stabilization	500 ft.	?	?	?
800	Urban Stormwater Wetland	1 (no.)	?	701	2,354
835	Urban Filter Strip	1 àc.	?	?	?
870	Level Spreaders	2 (no.)	?	18	124
98-19(319)ST					

**Title:** Jacksonville Branch Restoration Project – Phase 1

Purpose: This project installed best management practices (BMPs) along 1,960 feet of bank on Jacksonville Branch, a tributary to Jacksonville Branch, and a side channel reservoir (Lower Lagoon) of Jacksonville Branch (ILELA11) located at Washington Park in Springfield, Illinois. The BMPs were designed to arrest streambank and shoreline erosion and reduce nonpoint source pollution while enhancing aquatic habitat and aesthetics. The project included an educational component to inform residents and local government representatives about the project and nonpoint source pollution through a public meeting and signs.

**Project Location:** Sangamon County

Subgrantee: Springfield Park District

2500 South 11<sup>th</sup> Street Springfield, Illinois 62703

## **Project Reports and Other Informational Materials:**

"Washington Park Lower Lagoon Streambank Stabilization – Final Report." October 2004. Springfield Park 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	1,960 ft.	85	72	144
910	Rock Outlet Protection	1 (no.)	?	?	?
98-20(319)ST					

Title: Lake Pittsfield Shoreline Restoration Project

Purpose: This project stabilized approximately 2,100 feet of eroding shoreline along Lake Pittsfield (ILRDP) and established, where possible, a buffer of native vegetation along this segment of shoreline to reduce erosion, filter runoff, and enhance aquatic habitat.

**Project Location:** Pike County

Subgrantee: City of Pittsfield

215 North Monroe Street Pittsfield, Illinois 62363

## **Project Reports and Other Informational Materials:**

"Lake Pittsfield Shoreline Restoration Project – Final Report." May 2004. Benton & 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	2,100 ft.	35	29	59	

98-21(319)ST

**Title:** Willoway Brook Streambank Stabilization Project – Phase 2

Purpose: This project stabilized approximately 1,050 feet of eroding streambank along Willoway Brook located in the Morton Arboretum. The streambank was stabilized using bioengineering techniques to reduce erosion and improve water quality. Willoway Brook is a tributary of the East Branch DuPage River (ILGBL10). The project included reshaping the streambank, erosion control blankets, native forbs and woody plants, vegetated geogrids, and fifteen rock riffles.

**Project Location:** DuPage County

**Subgrantee:** The Morton Arboretum

4100 Illinois Route 53 Lisle, Illinois 60532-1293

## **Project Reports and Other Informational Materials:**

"Willoway Brook Streambank Stabilization Project – Phase 2." November 2, 2004. Landscape Resources, Inc.

## **BMP Implementation Summary:**

			timated Load Re	d Load Reduction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount (tons/y	(tons/year)	(lbs/year)	(lbs/year)
584	Stream Channel Stabilization	1,050 ft.	59	50	101
98-22(319)CD					

Title: Lakeshore & Streambank Litter Collection Assistance Program

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 \$2,000 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 2003." June 2004. Illinois Environmental Protection Agency.

"Pilot "Streambank Cleanup And Lakeshore Enhancement" Program, SCALE." July 2005. Illinois Environmental Protection Agency.

98-23(319)CD

## FFY 1999 Federally Funded Section 319 Project

**Title:** Palzo Surface Mine Project

Purpose: This project addressed surface mine drainage entering Sugar Creek (ILATHG01) from the abandoned portion of the Palzo Mine site. Sugar Creek is a tributary to the Saline River. The Palzo Surface Mine site has severely impacted water quality by perennially draining water of unacceptably high pH, acidity, total iron, and total manganese into the creek. The Illinois Abandoned Mine Lands Reclamation Division designed, constructed and supervised the construction and implementation of structures and techniques to remediate both surface and groundwater nonpoint source drainage into receiving waters. The project reclaimed 60 acres by grading spoil ridges to encourage surface runoff and constructing a reduced-permeability cap to further reduce infiltration, thereby reducing acid groundwater volumes and acid mine seepage. Use of an alkaline material for construction of the cap also provided some treatment to any rainfall that did infiltrate the area.

**Project Location:** Williamson County

**Subgrantee:** IDNR – Abandoned Mine Lands Reclamation Division

1907 A Industrial Park Drive

Marion. Illinois 62959

## **Project Reports and Other Informational Materials:**

"Palzo Surface Mine Reclamation Project." October 28, 2003. Illinois Department of Natural Resources.

99-2/1(319)JC

**Title:** Indian Lake Festival (Dragonfly Marsh Opening)

Purpose: In cooperation with the Illinois EPA, the Brookfield Zoo held a celebration on August 14, 1999 for the official opening of the Dragonfly marsh" exhibit, developed with Section 319 funds under fiscal years 1995 and 1996. The celebration was designed to 1) announce the opening of the Dragonfly Marsh" exhibit, 2) recognize the participants in the exhibit's creation, 3) explain the exhibit's purpose and the importance of nonpoint source pollution control and wetland protection, 4) encourage continued educational activities, and 5) promote cooperation among public and private groups for enhance environmental awareness programs. Attendance at the celebration was by invitation only for selected representatives of environmental organizations, educational institutions, businesses, and governmental agencies.

**Project Location:** Cook County **Subgrantee:** Chicago Zoological Society

Brookfield Zoo 3300 Golf Road

Brookfield, Illinois 60513

## **Project Reports and Other Informational Materials:**

"Salt Creek Wilderness, Indian Lake, Dragonfly Marsh Opening – Final Report." March 2000. Brookfield Zoo.

99-2(319)SK

**Title:** Explore! A Child's Nature

Purpose: The Brookfield Zoo designed the "Explore! A Child's Nature" exhibit to present key concepts and interactive experiences which will highlight man's relationships with animals and nature; examine the ecological, economic, and philosophical connections between people and nature. Information on nonpoint source pollution and related water quality issues was incorporated into the exhibit. The exhibit communicates the impacts of nonpoint source pollution, the importance of water quality protection, and what can be done to minimize nonpoint source pollution and protect water quality.

Project Location: Cook County

**Subgrantee:** Chicago Zoological Society

Brookfield Zoo

3300 South Golf Road Brookfield, Illinois 60513

99-3(319)JW

Title: Conservation Reserve Enhancement Program (CREP) Assistance

Purpose: The Cass County Soil & Water Conservation District SWCD) facilitated 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 Cass County SWCD completed the Conservation Reserve Program - 2 form, type the Conservation Plan of Operations, obtain the necessary producer signatures on required documents, and complete all state CREP enrollment forms. The Cass County SWCD 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 Subgrantee: Cass County SWCD

652 South Main Street Virginia, Illinois 62691

99-4(319)JC

**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.

**Project Location:** Cook County

**Subgrantee:** Chicago Zoological Society

3300 South Golf Road Brookfield, Illinois 60513

99-5(319)BL

**Title:** North Branch Chicago River Watershed Project – Phase 2

**Purpose:** Project partners implemented a variety of BMPs within the watershed. The types of BMPs 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

**Subgrantee:** Friends of the Chicago River

407 S. Dearborn Street, Suite 1580

Chicago, Illinois 60605

### **Project Reports and Other Informational Materials:**

"North Branch Chicago River Project – Final Report." December 15, 2003. Friends of the Chicago River.

## **BMP Implementation Summary:**

			Latillated Load Neddelloll		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
010	Oil & Grit Separator	4 (no.)	?	?	2
580	Streambank /Shoreline Protection	13,050 ft.	1,751	1,738	3,472
581	Ditch Stabilization	350 ft.	?	6	20
584	Stream Channel Protection	3,170 ft.	286	286	752
657	Wetland Restoration	157 ac.	?	2	2
800	Urban Stormwater Wetland	1 (no.)	?	3	8
835	Urban Filter Strip	1 ac.	?	?	?
840	Grassed Line Channel	1 ac.	?	?	?
910	Rock Outlet Protection	1 (no.)	?	?	?

Estimated Load Reduction

99-6(319)CD

**Title:** East Branch DuPage River WRAS Implementation – Phase 1

Purpose: Best management practices (BMPs) were installed in the East Branch DuPage River (ILGBL10) watershed to reduce nonpoint source (NPS) pollution. An existing storm sewer was "day lighted" and the flow redirected through a constructed wetland (0.69 ac.) before discharging to the East Branch. Both banks of a concrete lined channel were removed along a 1,400-foot segment of the East Branch DuPage River and a more natural stream channel restored as another urban runoff BMP. An existing detention pond was converted into a 1.65-acre stormwater wetland for enhanced pollutant removal. NPS pollution was reduced on Lacy Creek through approximately 6,902 ft. of bioengineering streambank stabilization, a 25-foot wide riparian buffer, and the retrofit of an in-stream pond to restore a 1.15-acre wetland system. Bioengineering techniques were applied to stabilize approximately 2,845 ft. and 1,325 ft. of streambank on Willow Way Brook and St. Joseph's Cr., respectively, both direct tributaries of the East Branch. The project also included an education program. The East Branch DuPage River is a Category 1 watershed in the Unified Watershed Assessment. The TMDL and implementation plan for the East Branch DuPage River are complete.

**Project Location: DuPage County** 

**Subgrantee:** The Conservation Foundation

10 S 404 Knoch Knolls Road Naperville, Illinois 60565

### **Project Reports and Other Informational Materials:**

"East Branch DuPage River Watershed Restoration Action Strategy Implementation – Final Report." May 2003. The Conservation Foundation.

# **BMP Implementation Summary:**

•	•		Estimated Load Reduction		
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
009	Stream Channel Restoration	2,800 ft.	?	?	?
580	Streambank /Shoreline Protection	11,072 ft.	571	532	1,064
657	Wetland Restoration	1.84 ac.	?	14	48
800	Urban Stormwater Wetland	1 (no.)	?	337	1,158
835	Urban Filter Strip	1 ac.	?	?	?
870	Level Spreader	1 (no.)	?	?	?
99-08(319)SR					

**Title:** Macoupin Creek WRAS Development

Purpose: The Illinois EPA assisted local stakeholders with the development of a Watershed Restoration Action Strategy (WRAS) for the Macoupin Creek (ILDA04) watershed,

which is a Category 1 watershed identified in the Unified Watershed Assessment. The WRAS is consistent with the Illinois EPA's draft "Guidance for Developing Watershed Implementation Plans." The WRAS identifies all of the resources, identifies the sources and causes of pollution, and specifies the recommended best management practices for restoration and protection of the watershed.

**Project Location:** Macoupin County

Subgrantee: Macoupin County Soil & Water Conservation District

300 Carlinville Plaza Carlinville, Illinois 62626

# **Project Reports and Other Informational Materials:**

"Upper Macoupin Creek Watershed Restoration Action Strategy." May 1, 2003. Macoupin County Soil & Water Conservation District.

99-9(319)GE

Title: Little Vermilion River WRAS Development

Purpose: The Illinois EPA assisted local stakeholders with the development of a Watershed

Restoration Action Strategy (WRAS) for the Little Vermilion River (ILDR01) watershed, which is a Category 1 watershed identified in the Unified Watershed Assessment. The WRAS is consistent with the Illinois EPA's draft "Guidance for Developing Watershed Implementation Plans." The WRAS identifies all of the resources, identifies the sources and causes of pollution, and specifies the recommended best management practices for restoration and protection of the

watershed.

**Project Location:** LaSalle County Subgrantee: LaSalle County Soil & Water Conservation District

1691 North 31<sup>st</sup> Road Ottawa, Illinois 61350

### **Project Reports and Other Informational Materials:**

"A Watershed Restoration Action Strategy for the Little Vermilion River Watershed, LaSalle County, Illinois." 2003. LaSalle County Soil & Water Conservation District.

99-10(319)GE

**Title:** Total Maximum Daily Load & Implementation Plan Development

Purpose: This project developed Total Maximum Daily Loads (TMDLs) and implementation plans for each pollutant within two (2) specific watersheds (East Fork, Kaskaskia (ILOK01); Rayse Creek (ILNK01)) on the 303(d) list through the computer modeling. The two watersheds were also Category 1 watersheds in the Unified Watershed 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: Counties of Clinton, Marion, Fayette, and Jefferson

**Subgrantee:** Harza Engineering Company

233 South Wacker Drive Chicago, Illinois 60606-6392

### **Project Reports and Other Informational Materials:**

"Rayse Creek (ILNK01) TMDL and Implementation Plan." September 2003. MWH.

"East Fork, Kaskaskia River (ILOK01) TMDL and Implementation Plan." August 2003. MWH.

99-11(319)GE

Title: Total Maximum Daily Load & Implementation Plan Development

Purpose: This project developed Total Maximum Daily Loads (TMDLs) and implementation plans for each pollutant within two (2) specific watersheds, Salt Creek (ILGL09) and E. Br. DuPage River (ILGBL10), on the 303(d) list through computer modeling. The two watersheds were also Category 1 watersheds in the Unified Watershed 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:** Counties of Cook, DuPage, and Will

Subgrantee: CH2MHill

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

99-12(319)BY

Title: Conservation Reserve Enhancement Program (CREP) Assistance

Purpose: The McDonough County Soil & Water Conservation District SWCD) facilitated the enrollment process of the Conservation reserve Enhancement Program (CREP) by setting appointments with producers to discuss CREP and conducting field visits to determine program eligibility. The McDonough County SWCD 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 McDonough County SWCD 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 McDonough and Hancock

Subgrantee: McDonough County SWCD

1607 West Jackson Street Macomb, Illinois 61455

99-13(319)JW

Title: Conservation Reserve Enhancement Program (CREP) Assistance

Purpose: The Peoria County Soil & Water Conservation District SWCD) facilitated the enrollment process of the Conservation reserve Enhancement Program (CREP) by setting appointments with producers to discuss CREP and conducted field visits to determine program eligibility. The Peoria County SWCD 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 Peoria County SWCD 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 Peoria and Tazewell **Subgrantee:** Peoria County SWCD

2412 West Nebraska Avenue

Peoria, Illinois 61604

99-14(319)JW

**Title:** Watershed Management Coordination

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, undertaking comprehensive watershed management initiatives in northeastern Illinois. NIPC assisted these entities with the development of Watershed Restoration Action Strategies (WRASs) 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 and/or the Unified Watershed Assessment and Watershed Restoration Priorities for Illinois 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 Lake, McHenry, Kane, Cook, DuPage, & Will

**Subgrantee:** Northeastern Illinois Planning Commission

222 South Riverside Plaza, Suite 1800

Chicago, Illinois 60606-6097

99-15(319)SR

**Title:** GIS Programming for BMP Location

Purpose: The Illinois EPA developed a strategy to establish a geographic information system (GIS) interface with the Illinois EPA's Projects 2000 database and perform specific queries of the Projects 2000 database. The Projects 2000 database contains the location and other information of best management practices (BMPs) implemented by the Illinois EPA with funding under Section 319 of the Clean Water Act. Programs were developed to allow Illinois EPA to query and map information contained in the Projects 2000 database. The maps identify the type and location of BMPs implemented in selected watersheds along with political subdivisions, surface waters, roads, railways, and other appropriate physical and institutional features.

**Project Location:** Statewide

Subgrantee: Not Applicable

99-16(319)CD

**Title:** Mackinaw River Watershed Project – Woodford County

Purpose: This project supplemented Phase 1 and Phase 2 of the Mackinaw River Watershed Project. The project focused on the implementation of a cost-share program to assist landowners in the installation of sediment and stormwater retention and streambank stabilization best management practices (BMPs) in the Woodford County portion of the Mackinaw River (ILDK13) watershed. implemented in accordance with the Mackinaw River Watershed Management Plan and the three subwatershed plans as approved by the Illinois EPA. implemented under this project included twelve ponds (15.2 ac.), one block chute, three grassed waterways (4.3 ac.), 1,175 feet of streambank stabilization, seven riffles to stabilize 635 feet of streambed, and two water and sediment control basins (1,100 ft.).

Project Location: Woodford County

**Subgrantee:** Woodford County Soil & Water Conservation District

937 West Center Street Eureka, Illinois 61530

## **Project Reports and Other Informational Materials:**

"Mackinaw River Project - Woodford County - Final Report." December, 2003. Woodford 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	12 (no.)	404	96	194
410	Grade Stabilization Structure	1 (no.)	14	14	28
412	Grassed Waterway	4.3 ac	105	105	210
580	Streambank/Shoreline Protection	1,175 ft.	419	119	237
584	Stream Channel Stabilization	635 ft.	?	?	?
638	Water & Sediment Control Basin	1,100 ft.	21	21	42
99-17(319)CD					

**Title:** Mackinaw River Watershed Project – Tazewell County

**Purpose:** This project supplemented Phase 1 and Phase 2 of the Mackinaw River (ILDK13) Watershed Project. The project was focused on the implementation of a cost-share program to assist landowners in the installation of streambank stabilization best management practices (BMPs) in the Tazewell County portion of the Mackinaw River watershed. All work to be implemented was in accordance with the Mackinaw River Watershed Management Plan and the three subwatershed plans as approved by the Illinois EPA.

Project Location: Tazewell County **Subgrantee:** Tazewell County Soil & Water Conservation District

2934 Court Street Pekin, Illinois 61554

### **Project Reports and Other Informational Materials:**

"Final Report for Mackinaw River Project - Tazewell County." July 2004. 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	5,470 ft.	2,251	1,940	3,880
584	Stream Channel Stabilization	2,400 ft.	313	266	532
99-18(319)CD	)				

**Title:** Mackinaw River Watershed Project – NRCS Technical Support

Purpose: The Natural Resources Conservation Service provided technical assistance to the Woodford and Tazewell County Soil and Water Conservation Districts for the implementation of best management practices (BMPs) in the Mackinaw River (ILDK13) watershed. Technical assistance included survey, design, permitting and final construction checks. This project supplemented Phase 1 and Phase 2 of the Mackinaw River Watershed Project. All work implemented was in accordance with the Mackinaw River Watershed Management Plan and the three subwatershed plans as approved by the Illinois EPA.

Counties of Tazewell and Woodford **Project Location:** 

**Subgrantee:** USDA – NRCS

1902 Fox Drive

Champaign, Illinois 61820

99-19(319)CD

**Title:** Village of Royal Lakes – Shad Lake Restoration Project

Purpose: The Village of Royal Lakes continued work with the Natural Resources Conservation Service (NRCS) and the Illinois EPA to stabilize eroding lake shoreline and to install a water and sediment retention basin (wetland) upstream of Shad Lake. Shad Lake is located within the Illinois River watershed. This project was the second phase of a major watershed management effort. The first phase included working with landowners and operators in the watershed to install best management practices to reduce soil erosion and stormwater runoff. Phase two implemented lakeshore and in-lake best management practices. The basin/wetland will retain stormwater runoff and trap sediment from a 320-acre subwatershed. The third and final phase

completed dredging of Shad Lake. The project site demonstrates a "total" lake restoration project, (planning, watershed implementation, lake implementation and finally dredging). In addition to the sediment basin implemented with Section 319 funding, the project also included 520 feet of shoreline stabilization (PLWIP) and construction of ten water and sediment control basins (CPP).

**Project Location:** Macoupin County

Subgrantee: Village of Royal Lakes

549 West Shipman Road Shipman, Illinois 62685

### **Project Reports and Other Informational Materials:**

"Village of Royal Lakes - Shad Lake Restoration Project - Final Report." October 2002. Village of Royal Lakes.

## **BMP Implementation Summary:**

			Es	eduction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
350	Sediment Basin	1 (no.)	244	25	144
580	Streambank/Shoreline Protection	520 (ft.)	265	265	530
638	Water & Sediment Control Basin	2,000 ft.	58	?	?
99-20(319)CD					

**Title:** Lincoln Memorial Garden NPS Control – Phase 2

Purpose: This project was a continuation of the Lincoln Memorial Garden NPS Pollution Control Project funded under the FFY 1995 Section 319 grant. Lincoln Memorial Garden is listed on the National Historic Register as a "historic landscape". The project area, recently acquired by the Garden, is across the street from the original The project site is located upstream of a number of in-stream best management practices applied during the original project, all of which are located upstream of Lake Springfield (ILREF). Lincoln Memorial Garden staff coordinated the retrofit of an existing water detention basin into a wetland. In addition, staff coordinated the removal of an accumulation of materials left by the previous landowner (deceased). Garden staff inventoried the materials removed, and identified the most interesting items found. The inventory and special items were used to promote the need to stop illegal dumping and littering.

**Project Location:** Sangamon County

**Subgrantee:** Lincoln Memorial Garden

2301 East Lake Drive Springfield, Illinois 62707

# **Project Reports and Other Informational Materials:**

"Lincoln Memorial Garden NPS Control – Phase 2 – Final Report." January 30, 2004. Lincoln Memorial Garden.

## **BMP Implementation Summary:**

			Es <sup>-</sup>	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
657	Wetland Restoration	0.7 (ac.)	6	?	?
562	Recreational Area Improvement	6 (ac.)	?	?	?
99-21(319)CD					

**Title:** Salt Creek Stabilization – Rolling Meadows

Purpose: This project reduced erosion and nonpoint source pollution through the stabilization of 1,800 feet of eroding streambank along a 3,000-foot segment of Salt Creek (ILGL09) located in Rolling Meadows, Illinois. Bioengineering techniques (i.e., vegetated gabion baskets, re-grading and stone toe protection, and clearing and revegetation with native vegetation) were used. Salt Creek is a Category 1 watershed in the Unified Watershed Assessment. The TMDL and implementation plan for Salt Creek are complete.

**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 Project – Final Report." January 2004. Christopher B. Burke Engineering, Ltd.

#### **BMP Implementation Summary:**

			Es <sup>-</sup>	duction	
			Sediment	Phosphorus	Nitrogen
BMP Code	BMP Name	Amount	(tons/year)	(lbs/year)	(lbs/year)
580	Streambank/Shoreline Protection	1,800 (ft.)	297	252	504
99-22(319)SR					

**Title:** Northwest Illinois Livestock Project

Purpose: This project involved the implementation of best management practices (BMPs) for milk house waste that are appropriate for northwestern Illinois. explained the benefits and limitations for each BMP. Cost share and incentive payments were used to facilitate implementation of new or upgraded milk house waste handing facilities, based on water quality criteria.

Project Location: Counties of Carroll, Jo Daviess, Stephenson, and Whiteside

**Subgrantee:** Blackhawk Hills RC&D, Inc.

102 East Route 30, Suite 2 Rock Falls, Illinois 61071

# **Project Reports and Other Informational Materials:**

"Northwest Illinois Livestock Project." March 2005. 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)
313	Waste Storage Structure	17 (no.)	?	?	?

99-23(319)ST (JC)