State of Illinois

Environmental Protection Agency

Illinois Green Infrastructure Grant Program for Stormwater Management Final Biannual Report

FAA No. IGIG1301 – The City of Springfield's Bio-Swale and Stormwater Capture and Reuse Project included a 98,518 gallon water reuse cistern system and a 313 linear foot bio-swale to remove urban runoff nonpoint source pollutants while reducing runoff volume and velocity.

Illinois Environmental Protection Agency
Bureau of Water
Watershed Management Section
Nonpoint Source Unit

January 2020

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This report has been prepared to document the status of grants issued under the Illinois Green Infrastructure Grant Program for Stormwater Management (IGIG) and to publicize the Illinois Environmental Protection Agency's accomplishments under IGIG. For more information on IGIG or on specific IGIG projects, contact:

Illinois Environmental Protection Agency
Bureau of Water
Watershed Management Section
Nonpoint Source Unit
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
(217)782-3362

INTRODUCTION

Urban Stormwater Management for Water Quality Protection

According to the *Illinois Integrated Water Quality Report and Section 303(d) List – 2016*, approximately 60.6 percent of Illinois' assessed stream miles and 98.2 percent of its assessed lake acres are not attaining full support ratings for their designated uses.[1] Urban runoff is one of the major sources of impairment preventing Illinois' lakes and streams from meeting this and other beneficial designated uses. In urban and suburban areas much of the land surface is covered by buildings, pavement, and compacted terrain that do not allow rain and snowmelt to soak into the ground. These impervious surfaces greatly increase the volume and velocity of stormwater runoff. As it flows over urban land surfaces, stormwater runoff also picks up pollutants that can adversely affect water quality if discharged untreated into lakes or streams.

Pollutants from urban runoff include:

- Sediment;
- Oil, grease and toxic chemicals from motor vehicles;
- Pesticides and nutrients from lawns and gardens;
- Viruses, bacteria and nutrients from pet waste and failing septic systems;
- Road salts;
- Heavy metals from roof shingles, motor vehicles and other sources; and
- Thermal pollution from dark impervious surfaces such as streets and rooftops

These pollutants can harm fish and wildlife populations, kill native vegetation, foul drinking water, and make recreational areas unsafe and unpleasant.

Polluted stormwater runoff is commonly transported through Municipal Separate Storm Sewer Systems (MS4s), from which it is often discharged untreated into local waterbodies. To prevent harmful pollutants from being washed or dumped into an MS4, operators must obtain a NPDES permit and develop a stormwater management program.[2]

An MS4 is a system of conveyances that is:

- Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.;
- Designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.);
- Not a combined sewer; and
- Not part of a Publicly Owned Treatment Works (sewage treatment plant).

Combined sewer overflows, or CSOs, are a related problem. In the past, communities built sewer systems to collect both stormwater runoff and sanitary sewage in the same pipe. During dry weather, these "combined sewer systems" transport wastewater directly to the sewage treatment plant. In periods of rainfall or snowmelt, however, the wastewater volume in a combined sewer system can exceed the capacity of the sewer system or treatment plant. For this reason, combined sewer systems are designed to overflow occasionally and discharge excess wastewater directly to nearby streams, rivers, lakes, or estuaries. CSOs contain not only

[1] https://www2.illinois.gov/epa/topics/water-quality/watershed-management/tmdls/Pages/303d-list.aspx

[2] https://www2.illinois.gov/epa/topics/forms/water-permits/storm-water/Pages/ms4.aspx

stormwater but also untreated human and industrial waste, toxic materials, and debris. This is a major water pollution concern for cities with combined sewer systems.

The primary method to control stormwater discharges, and to some degree CSOs, is the use of best management practices (BMPs). Some of these BMPs fall under the classification of green infrastructure.

Green Infrastructure for Stormwater Management

For the purposes of this report, green Infrastructure means any stormwater management technique or practice employed with the primary goal of preserving, restoring, mimicking, or enhancing natural hydrology. Green infrastructure includes, but is not limited to, methods of using soil and vegetation to promote soil percolation, evapotranspiration, and filtering or the harvesting and reuse of precipitation.

Examples of green infrastructure BMPs for stormwater management include:

- Vegetated swales, Bio-swales, Bio-retention swales
- Stormwater wetlands
- Porous/permeable pavements
- Infiltration basins/trenches, Sand filters
- Restoration of Floodplains, Streams, Wetlands, Prairies, Riparian zones
- Downspout and illicit inflow disconnections (from CSOs and SSOs)
- Cisterns
- Stormwater reuse systems
- Green roofs
- Trees and tree boxes
- Rain gardens
- Vegetated filter strips
- Rain barrels

Public Act 96-26, the Green Infrastructure for Clean Water Act[3], directed the Illinois EPA to assess and evaluate using green infrastructure to help manage stormwater in Illinois. Illinois EPA contracted with the University of Illinois – Chicago to research and assess effective BMPs, green infrastructure standards, and institutional and policy frameworks to support the development of a Green Infrastructure Plan for Illinois. The University provided a report[4] to the Illinois EPA outlining recommendations based on their research of this topic. The Illinois EPA then provided its recommendation[5] concerning green infrastructure to the Governor and the General Assembly.

Based on those recommendations, the Governor and Illinois General Assembly established the Illinois Green Infrastructure Grant Program for Stormwater Management (IGIG)[6] in 2011 to help local units of government and other organizations fund the implementation of green

[3] http://www.epa.state.il.us/green-infrastructure/docs/public-act-96-26.pdf

[4] http://www.epa.state.il.us/green-infrastructure/docs/draft-final-report.pdf

[5] http://www.epa.state.il.us/green-infrastructure/docs/public-act-recommendations.pdf

[6] https://www2.illinois.gov/epa/topics/grants-loans/water-financial-assistance/Pages/igig.aspx

infrastructure BMPs for stormwater management that are designed to protect or improve water quality in CSO areas and MS4 areas in Illinois.

ILLINOIS GREEN INFRASTRUCTURE GRANT PROGRAM

Program Description

Administered by the Illinois EPA, the Illinois Green Infrastructure Grant Program for Stormwater Management (IGIG) started in State Fiscal Year 2011 and was suspended after State Fiscal Year 2014. Grants were available to local units of government and other organizations to implement green infrastructure best management practices (BMPs) to control stormwater runoff for water quality protection in Illinois. Projects had to be located within a Municipal Separate Storm Sewer System (MS4) or Combined Sewer Overflow (CSO) area. Funds were limited to the implementation of projects to install BMPs.

The total amount of funding available under IGIG was approximately 5 million dollars annually. IGIG was a reimbursement program. Grant recipients had to perform the work, pay project costs, and submit invoice(s) (periodically throughout the project period) with supporting documentation before Illinois EPA would reimburse recipients for any approved costs.

Under IGIG, the Illinois EPA accepted proposals for the following three program categories:

1. Combined Sewer Overflow (CSO) Rehabilitation Category
    - Maximum IGIG amount is $3,000,000 or 85 percent of the eligible project cost, whichever is lower.
    - Minimum local match requirement is 15 percent.
    - Illinois EPA anticipates awarding up to 10 of these grants per year
    - Typical grant range is $300,000 - $3,000,000 of IGIG funds (total grant funds available $3 million)
    - Project length ranges from 6-36 months
2. Stormwater Retention and Infiltration Category
    - Maximum IGIG amount is $750,000 or 75 percent of the eligible project cost, whichever is lower.
    - Minimum local match requirement is 25 percent.
    - Illinois EPA anticipates awarding up to 18 of these grants per year
    - Typical grant range is $100,000 - $750,000 of IGIG funds (total grant funds available $1.8 million)
    - Project length ranges from 6-36 months
3. Green Infrastructure Small Projects Category.
    - Maximum IGIG amount is $75,000 or 75 percent of the eligible project cost, whichever is lower.
    - Minimum local match requirement is 25 percent.
    - Illinois EPA anticipates awarding up to 13 of these grants per year
    - Typical grant range is $15,000 - $75,000 of IGIG funds (total grant funds available $200,000)
    - Project length ranges from 6-24 months

Program Implementation

The following table summarizes the grant funds that were awarded by the Illinois EPA each State fiscal year under IGIG.

Summary of IGIG Grants by State Fiscal Year

				Combined Sewer Overflow Rehabilitation Category		Stormwater Retention & Infiltration Category		Green Infrastructure Small Projects	
SFY	Total IGIG Award Amount	Total No. of Projects	No. of Projects Complete	Award Amount	No. of Projects	Award Amount	No. of Projects	Award Amount	No. of Projects
2011	$4,650,945	13	13	$2,770,088	6	$1,645,135	4	$235,722	3
2012	$4,096,226	9	9	$2,860,584	3	$1,045,232	2	$190,410	4
2013	$5,630,949	13	13	$2,526,066	5	$2,852,240	4	$252,643	4
2014	$5,473,518	5	5	$1,882,558	2	$3,590,960	3	$0	0
Total	**$19,851,638**	**40**	**40**						

The status of individual projects funded under IGIG was documented in the next section of this report every six months. Furthermore, although it was a State funded grant program, IGIG projects were tracked by Illinois EPA through USEPA's Grants Reporting and Tracking System (GRTS) website.[7] This allowed Illinois EPA to better coordinate the implementation of IGIG projects with nonpoint source pollution control projects implemented in Illinois with funding under Section 319 of the Clean Water Act[8] and to better integrate IGIG activities into *Illinois' Nonpoint Source Management Program*.[9]

Individual BMPs implemented in Illinois with funding under IGIG were tracked geographically through the University of Illinois and Illinois EPA's Resource Management Mapping Service (RMMS) website.[10] The following table quantifies the BMPs implemented under IGIG since State Fiscal Year 2011 along with associated annual pollutant load reductions.

[7] http://www.epa.gov/polluted-runoff-nonpoint-source-pollution/ongoing-nonpoint-source-work

[8] https://www2.illinois.gov/epa/topics/water-quality/watershed-management/nonpoint-sources/Pages/grants.aspx

[9] https://www2.illinois.gov/epa/topics/water-quality/watershed-management/nonpoint-sources/Documents/NPS-Management-Program.pdf

[10] http://www.rmms.illinois.edu

IGIG - Summary of Completed BMPs

	Number	Acres	Feet	Nitrogen Load Reduction (lbs/year)	Phosphorus Load Reduction (lbs/year)	Total Suspended Solids Load Reduction (lbs/year)	Sediment Load Reduction (tons/year)
HYDROLOGIC							
Stream Channel Restoration(9)	-	-	1,880	446	223		223.20
Wetland Restoration(657)	-	0.01	-	182	14	18,145	
OTHER2							
Cistern(12)	144	-	-	26	-	3,631	0.05
buffer zone enhancement / installation(35)	-	0.55	-	60	30	344	0.01
URBAN							
Green Roof(11)	-	0.14	-	80	5	6,129	
Rain Garden(13)	185	-	-	211	34	16,215	1.40
Downspout/Footing Tile Disconnection(37)	4,695	-	-	-	-	-	-
Infiltration Planter(40)	36	-	-	-	-	418	
Critical Area Planting(342)	-	11.03	-	20	2	934	0.46
Structure for Water Control(587)	2	-	-				
Tree Planting(612)	-	1.00	-	-	-	40	
Urban Stormwater Wetlands(800)	4	-	-	65	9	13,625	0.22
Dry Detention Basin(809)	1	-	-	20	2	4,554	
Bio-retention Facility(812)	-	1.38	-	325	60	30,765	
Bioswale(814)	-	1.63	-	237	25	31,039	0.11
Diversion(815)	-	-	74	-	-	465	
Urban Filter Strip(835)	-	0.94	-	6	1	1,693	-
Infiltration Trench(845)	2	-	-	-	-	2	-
Permanent Seeding(880)	-	0.02	-	-	-	13	
Porous Pavement(890)	-	14.28	-	311	30	39,498	-
			Totals	**1,989**	**435**	**167,510**	**225**

SFY 2011 STATE FUNDED IGIG PROJECTS
Combined Sewer Overflow Rehabilitation Category

Title: Village of Niles Bioinfiltration Facility

Purpose: This project constructed a 0.16 acre bioinfiltration facility with an integrated filter strip capable of providing 50,000 cubic feet of storage so as to reduce stormwater volume and nonpoint source pollution to the Middle Fork of the North Branch of the Chicago River (ILHCC07) from the Village of Niles in Cook County, Illinois.

Project Location: Cook County

Waterbody Name (ID): Middle Fork North Branch Chicago River (ILHCC07)

Subgrantee: Village of Niles
1000 Civic Center Drive
Niles, Illinois 60714

Project Period: 08/30/11 through 12/31/13 **Status**: Completed.

Total Project Cost: $191,746.39
Illinois EPA: $162,984.43
Subgrantee: $28,761.96

Project Reports and Other Informational Materials:

"Village of Niles Bioinfiltration Facility Final Report." December 31, 2013. Hey and Associates, Inc.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
812	Bio-retention Facility	0.16 ac.	219	24	14,732	-


Bioinfiltration facility pre-construction.


Bioinfiltration facility post-construction

Title: Lord Street Basin CSO Green Infrastructure Retrofit Project

Purpose: Best management practices (BMPs) were implemented to reduce stormwater volume and nonpoint source pollution to the Fox River from the Lord Street CSO basin area in Elgin, Illinois. The project involved the construction of twenty-four bio-retention basins with a combined total area of 11,131 square feet and the replacement of one existing asphalt alley with 3,204 square feet of porous pavement (permeable interlocking concrete pavement) and concrete restraining edge constructed over a 30-34 inch deep layer of open-graded stone that will serve as the structural base as well as provide temporary storage of runoff before it infiltrates into the sub-grade or slowly drains via perforated pipe in the stone base.

Project Location: Kane County

Waterbody Name (ID): Fox River (ILDT-18)

Subgrantee: City of Elgin
150 Dexter Court
Elgin, Illinois 60120

Project Period: 09/28/11 through 10/15/14 **Status**: Completed.

Total Project Cost: $785,802.60
Illinois EPA: $634,000.00
Subgrantee: $151,802.60

Project Reports and Other Informational Materials:

"Lord Street Basin CSO Green Infrastructure Retrofit Project." October 1, 2014. City of Elgin.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
812	Bio-retention Facility	0.181 ac.	35	24	2,127	-
890	Porous Pavement	0.075 ac	2	1	178	-


Bio-retention facility during construction.


Bio-retention facility post-construction.

Title: Footing Drain Disconnection Program

Purpose: This project separated the footing tile connections of 102 homes from the sanitary sewer system in the City of Galesburg, which discharges into the City's combined sewer system. In separating these footing tile connections, the Recipient excavated the exterior of each home where the footing tiles were connected to the sanitary sewer, disconnected the footing tiles from the sanitary sewer and redirected the water to a sump pit equipped with a sump pump that removes the ground water and discharges outside the home. At each footing tile separation site, the Recipient restored the sanitary sewer with an outside cleanout in accordance with current codes.

Project Location: Knox County

Waterbody Name (ID): Cedar Creek (IL_LDD-A1) & Court Creek (IL_DJJ-03)

Subgrantee: Galesburg Sanitary District
2700 West Main Street
Galesburg, Illinois 61401

Project Period: 09/13/11 through 04/01/14 **Status**: Completed.

Total Project Cost: $302,289.00
Illinois EPA: $255,000.00
Subgrantee: $47,289.00

Project Reports and Other Informational Materials:

"Footing Drain Disconnection Program – Final Report." February 2014. Galesburg Sanitary District.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
037	Downspout/Footing Tile Disconnection	102 no.	-	-	-	-

Title: Elmwood Park Green Alleys Project

Purpose: Best management practices (BMPs) were implemented to reduce stormwater volume and nonpoint source pollution to the DesPlaines River (ILG-30) from the Village of Elmwood Park in Cook County, Illinois. The project involved 1) the replacement of an existing asphalt alley located between Oakleaf Avenue and Cressett Drive with an alley that is sloped to a center section composed of 641 square yards of permeable interlocking pavers above an 18" deep aggregate base and 2) the replacement of an existing asphalt alley located at the 1700 block between 76th Court and 76th Avenue an alley that is sloped to a center section composed of 400 square yards of permeable interlocking pavers above an 18" deep aggregate base in Elmwood Park, Illinois.

Project Location: Cook County

Waterbody Name (ID): DesPlaines River (ILG-30)

Subgrantee: Village of Elmwood Park
11 Conti Parkway
Elmwood Park, Illinois 60707

Project Period: 08/29/11 through 07/15/13 **Status**: Completed.

Total Project Cost: $465,224.75
Illinois EPA: $395,441.04
Subgrantee: $69,783.71

Project Reports and Other Informational Materials:

"Village of Elmwood Park Green Alleys Project." April 17, 2013. Village of Elmwood Park.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
890	Porous Pavement	0.23 ac.	6	0	1,037	-


Permeable pavement alley during construction.


Permeable pavement alley post-construction.

Title: Riverside Green Pavement Projects

Purpose: Best management practices (BMPs) were implemented to reduce stormwater volume and nonpoint source pollution to the DesPlaines River from the Village of Riverside in Cook County, Illinois. The project included 1) the replacement of an existing asphalt alley located between Selbourne Road and Harlem Avenue and between York Road and Kent Road with an alley that is sloped to a center section composed of 989 square yards of permeable interlocking pavers above an 18" deep aggregate base and 2) the construction of a new 631 square yard permeable interlocking concrete pavement parking lot above an 18" deep aggregate base with a 702 square foot rain garden on Burlington Street in Riverside, Illinois.

Project Location: Cook County

Waterbody Name (ID): DesPlaines River (ILG-39) & Chicago Ship Canal (ILGI-06)

Subgrantee: Village of Riverside
27 Riverside Road
Riverside, Illinois 60646

Project Period: 09/21/11 through 07/15/13 **Status**: Completed.

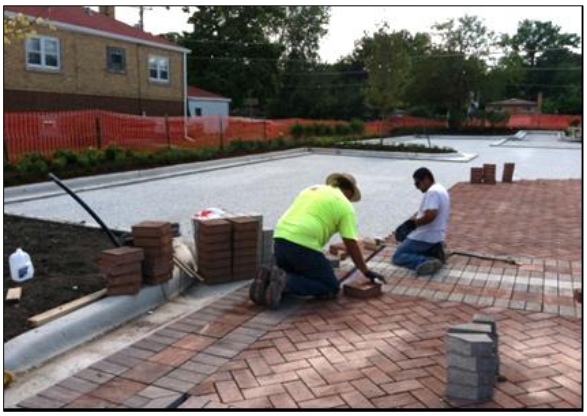
Total Project Cost: $591,369.00
Illinois EPA: $502,663.00
Subgrantee: $88,706.00

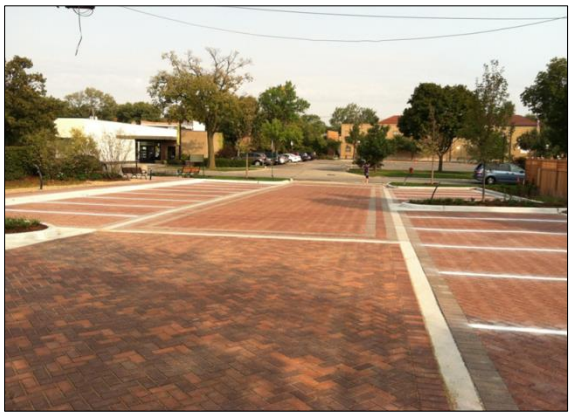
Project Reports and Other Informational Materials:

"Village of Riverside Green Pavement Project." February 5, 2013. Village of Riverside.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
890	Porous Pavement	0.33 ac.	5	0	1,051	-
013	Rain Garden	1 no.	0	0	192	-


Permeable pavement parking lot during construction.


Permeable pavement parking lot post-construction.

Title: Footing Tile Separation Program

Purpose: This project separated the footing tile connections of 154 homes from the sanitary sewer system in the City of Joliet, which discharges into the city's combined sewer system. In separating these footing tile connections, the city excavated the exterior of each home where the footing tiles were connected to the sanitary sewer, disconnected the footing tiles from the sanitary sewer and redirected the water to a newly installed fiberglass sump pit equipped with a sump pump that removes the ground water and discharges outside the home at a point approximately five (5) feet from the sump pit. The city also installed a dedicated electric circuit to run each pump so as to not overload any existing circuits and, at each footing tile separation site, the city restored the sanitary sewer with an outside cleanout in accordance with current codes.

Project Location: Will County

Waterbody Name (ID): Rock Run (ILGBAA-01)

Subgrantee: City of Joliet
921 East Washington Street
Joliet, Illinois 60433

Project Period: 09/15/11 through 04/01/14 **Status**: Completed.

Total Project Cost: $964,705.88
Illinois EPA: $820,000.00
Subgrantee: $144,705.88

Project Reports and Other Informational Materials:

"Footing Tile Separation Program." December 2013. City of Joliet.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
037	Downspout/Footing Tile Disconnection	154 no.	-	-	-	-

Stormwater Retention & Infiltration Category

Title: Danville High School Campus Improvement

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to Stoney Creek (ILBPF-01) from the Danville High School in Vermilion County, Illinois. BMPs included the construction of 1) a permeable multi-use practice field / green overflow parking area (57,600 square feet) consisting of reinforced turf and a granular base strong enough to withstand bus traffic even under saturated conditions, 2) a permeable parking lot and sidewalk (8,510 square feet) over a layer of open-graded stone that will serve as the structural base as well as provide temporary storage of runoff before it infiltrates into the sub-grade, 3) a system of vegetated bioswales (12,601 square feet), 4) infiltration basins (5,670 square feet), and 5) seven infiltration planters.

Project Location: Vermilion County

Waterbody Name (ID): Stoney Creek (ILBPF-01)

Subgrantee: City of Danville
1155 E. Voorhees Street, Suite A
Danville, Illinois 61832

Project Period: 09/22/11 through 12/01/13 **Status**: Completed.

Total Project Cost: $820,800.39
Illinois EPA: $615,600.29
Subgrantee: $205,200.10

Project Reports and Other Informational Materials:

"Danville High School Campus Improvement Project." October 2013. City of Danville Engineering Division.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
040	Infiltration Planter	7 no.	0	0	1	-
812	Bio-retention Facility	0.13 ac.	5	1	1,167	-
814	Bioswale	0.29 ac.	4	0	2,460	-
890	Porous Pavement	1.51 ac.	2	0	287	-

Infiltration basins pre-construction.
11-07(IGIG) SR

Infiltration basins post-construction.

Title: Greenbriar School

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to the West Fork of the North Branch of the Chicago River (ILHCCB-05) from the Greenbriar School in Cook County, Illinois. BMPs included 1) 31,478 square feet of permeable pavement for the bus drop-off/pick up and staff and visitor parking, 2) 2,921 square feet of green roof, 3)14,943 square feet of rain gardens and 4) one dry detention basin with native plantings.

Project Location: Cook County

Waterbody Name (ID): West Fork North Branch Chicago River (ILHCCB-05)

Subgrantee: Northbrook School District 28
1475 Maple Avenue
Northbrook, Illinois 60062

Project Period: 08/30/11 through 08/31/12 **Status**: Completed.

Total Project Cost: $437,787.00
Illinois EPA: $326,910.00
Subgrantee: $110,877.00

Project Reports and Other Informational Materials:

"Greenbriar Elementary School Water Quality Improvements Project." August 2012. Wight & Company.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
011	Green Roof	0.067 ac.	0	0	22	-
013	Rain Garden	2 no.	1	0	858	-
809	Dry Detention Basin	1 no.	20	2	4,554	-
890	Porous Pavement	0.72 ac.	10	1	1,295	-


Green roof post-construction.


Rain garden post-construction.

Title: Milwaukee Avenue Green Development Corridor Sub-granting Program

Purpose: This project established a sub-grant program for private property owners within the Milwaukee Avenue Green Development Corridor to install stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution. BMPs eligible under the sub-grant program included green roofs, rain gardens, permeable pavement, bioswales, rainwater harvesting systems, infiltration planters and green walls.

Project Location: Cook County

Waterbody Name (ID): North Br. Chicago River (ILHCC-08), Calumet Sag Channel (ILH-02)

Subgrantee: Metropolitan Planning Council
140 S. Dearborn Ave. Suite 1400
Chicago, Illinois 60616

Project Period: 11/29/11 through 07/15/15 **Status**: Completed.

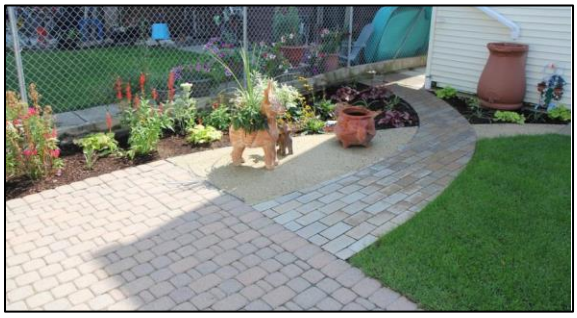
Total Project Cost: $264,165.61
Illinois EPA: $192,459.06
Subgrantee: $71,706.42

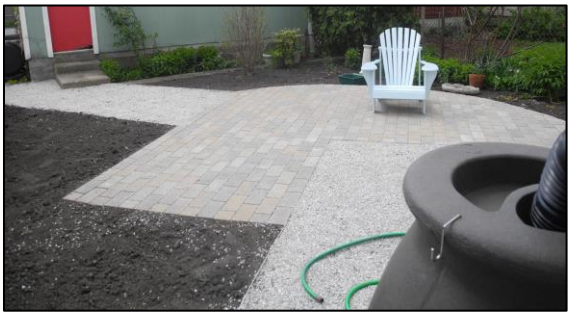
Project Reports and Other Informational Materials:

"Milwaukee Avenue Green Development Corridor Sub-Granting Program." January 26, 2015. Metropolitan Planning Council.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
012	Cistern	140 no.	-	-	143	0.05
013	Rain Garden	19 no.	-	-	13	-
040	Infiltration Planter	5 no.	-	-	395	-
342	Critical Area Planting	0.034 ac.	-	-	22	-
814	Bioswale	0.005 ac.	-	-	3	-
815	Diversion	74 ft.	-	-	465	-
835	Urban Filter Strip	0.015 ac.	-	-	3	-
845	Infiltration Trench	2 no.	-	-	2	-
890	Porous Pavement	0.105 ac.	-	-	36	-


Permeable pavement & rain barrel post-construction.


Permeable pavement & rain barrel post-construction.

Title: Alton Municipal (Wadlow) Golf Course Riparian Zone Restoration

Purpose: This project constructed 1,880 feet of two-stage ditch along a tributary to West Fork Wood River (ILJRB) located within the Wadlow Golf Course. The channel was widened, the streambed returned to the proper height, and grade controls and native vegetation installed in order to reduce stormwater volume and nonpoint source pollution.

Project Location: Madison County

Waterbody Name (ID): West Fork Wood River (ILJRB)

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

Project Period: 09/20/11 through 02/28/13 **Status**: Completed.

Total Project Cost: $680,219.99
Illinois EPA: $510,165.00
Subgrantee: $170,054.99

Project Reports and Other Informational Materials:

"Alton Municipal (Wadlow) Golf Course Riparian Zone Restoration." December 28, 2012. Heartlands Conservancy.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
009	Stream Channel Restoration	1,800 ft.	446	223	-	223


Two-stage ditch pre-construction.


Two-stage ditch post-construction.

Green Infrastructure Small Projects Category

Title: Beverly Area Planning Association Green Parking Lot & Rain Garden

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to the Calumet-Sag Channel (ILH-02) from the Beverly Area Planning Association in Cook County, Illinois. BMPs included 1) the replacement of an existing 4,700 square foot asphalt parking lot with a 3,700 square foot permeable paver parking lot and 652 square feet of natural landscaping and 2) the construction of a 300 square foot landscaped bioinfiltration rain garden.

Project Location: Cook County

Waterbody Name (ID): Calumet-Sag Channel (ILH-02)

Subgrantee: Beverly Area Planning Association
11107 South Longwood Drive
Chicago, IL 60643

Project Period: 11/02/11 through 09/01/13 **Status**: Completed.

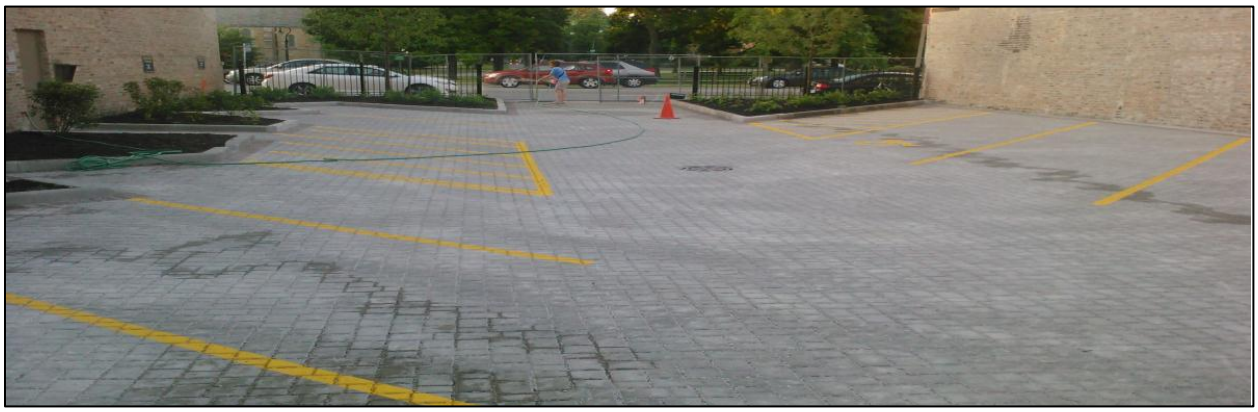
Total Project Cost: $138,092.48
Illinois EPA: $72,273.00
Subgrantee: $65,819.48

Project Reports and Other Informational Materials:

"Beverly Area Planning Association Green Parking Lot & Rain Garden Project." August 6, 2013. Beverly Area Planning Association.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
013	Rain Garden	1 no.	0	0	80	-
880	Permanent Seeding	0.015 ac.	0	0	13	-
890	Porous Pavement	0.08 ac.	2	0	88	-



Permeable paver parking lot post-construction.
11-11 (IGIG) CD

Title: Green Infrastructure BMPs at Illinois State Fairgrounds

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to Spring Creek (ILEL-01) from the Illinois State Fairgrounds in Springfield, Illinois. BMPs included 1) 5,403 square feet of bioswales, 2) 1,435 square feet of permeable pavers, and 3) 250 square feet of bio-island.

Project Location: Sangamon County

Waterbody Name (ID): Spring Creek (ILEL-01)

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

Project Period: 09/26/11 through 07/15/13 **Status**: Completed.

Total Project Cost: $140,821.53
Illinois EPA: $93,962.19
Subgrantee: $46,859.34

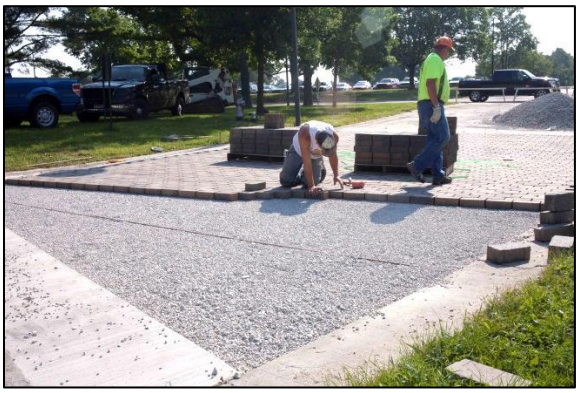
Project Reports and Other Informational Materials:

"Green Infrastructure BMPs at Illinois State Fairgrounds – Final Report." July 18, 2013. Nelson Land Management LLC.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
800	Urban Stormwater Wetlands	1 no.	8	1	2,065	-
814	Bioswale	0.08 ac.	5	2	400	-
890	Porous Pavement	0.034 ac.	0	2	3,847	-


Bioswale during construction.


permeable pavement during construction.

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Title: Downer Place Bioinfiltration Project

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to the Fox River (ILDT-38) from the intersection of Stolp Avenue and Downer Place on Stolp Island in Kane County, Illinois. BMPs included the construction of five (5) bioinfilatration basins (1,600 square feet). The basins ranged from 75 feet to 155 feet in length and 5 to 8 feet wide at their widest point. Construction of the basins included the removal and re-alignment of the curb and gutter, the removal of existing impervious pavement and sidewalk, excavation to create shallow basins, placement of open graded gravel and engineered topsoil, and the installation of native plantings.

Project Location: Kane County

Waterbody Name (ID): Fox River (ILDT-38)

Subgrantee: City of Aurora-Public Works Division
44 East Downer Place
Aurora, Illinois 60507

Project Period: 10/11/11 through 08/01/13 **Status**: Completed.

Total Project Cost: $144,626.40
Illinois EPA: $69,486.00
Subgrantee: $75,140.40

Project Reports and Other Informational Materials:

"Downer Place Bioinfiltration Project – Final Report." July 2013. City of Aurora's Engineering Division.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
013	Rain Garden	5 no.	6	1	398	-


Bioinfilatration basins post construction.


Bioinfilatration basins post construction.

11-14(IGIG) JC

SFY 2012 STATE FUNDED IGIG PROJECTS
Combined Sewer Overflow Rehabilitation Category

Title: Village of Franklin Park Police Station

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to the DesPlaines River (ILG30) from the Franklin Park Police Station in Franklin Park, Illinois. BMPs included a 3,200 gallon water reuse cistern system; 11,000 square feet of permeable paver parking areas; 27,000 square feet of porous pavement; 1,130 lineal feet of bio-swales; and constructed wetland basins with a minimum of 4.68 acre-feet of retention volume.

Project Location: Cook County

Waterbody Name (ID): DesPlaines River (ILG30)

Subgrantee: Village of Franklin Park
9500 Belmont Avenue
Franklin Park, Illinois 60131

Project Period: 06/19/12 through 01/15/14 **Status**: Completed.

Total Project Cost: $1,194,161.28
Illinois EPA: $985,000.00
Subgrantee: $209,161.28

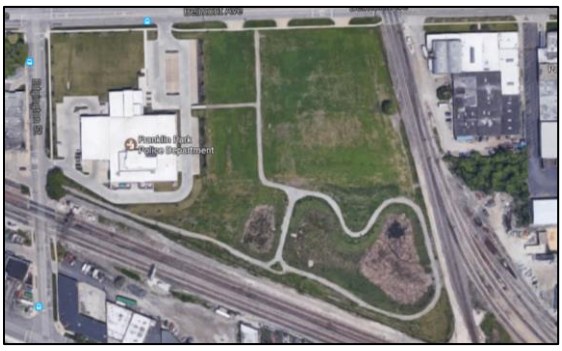
Project Reports and Other Informational Materials:

"Village of Franklin Park Police Station Final Report." January 14, 2014. Village of Franklin Park.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
012	Cistern	1 no.	-	-	-	-
800	Urban Stormwater Wetlands	2 no.	52	7	11,117	-
814	Bioswale	0.26 ac.	0	3	2,847	-
890	Porous Pavement	0.87 ac.	51	3	3,037	-

Police station site pre-construction.
12-01(IGIG) JC


Police station site post-construction.

Title: Parking Lot 13 Green Infrastructure Retrofit

Purpose: This project replaced an existing 161-stall impervious asphalt commuter parking lot with 47,097 square feet of permeable pavers thereby reducing stormwater runoff rates, volumes, and pollutant loads and restoring some natural hydrology at the site. The project will reduce the amount of water entering the village's combined sewer system, which will help reduce combined sewer overflow events and improve water quality in Salt Creek.

Project Location: Cook County

Waterbody Name (ID): Salt Creek (ILGL19)

Subgrantee: Village of La Grange
320 East Avenue
La Grange, Illinois 60525

Project Period: 08/16/12 through 07/15/14 **Status:** Completed.

Total Project Cost: $592,892.49
Illinois EPA: $423,918.14
Subgrantee: $168,974.35

Project Reports and Other Informational Materials:

"Parking Lot 13 Green Infrastructure Retrofit Project." May 30, 2014. Baxter & Woodman Consulting Engineers.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
890	Porous Pavement	1.08 ac.	12	1	2,237	-


Permeable pavement parking lot post-construction.


Permeable pavement parking lot post-construction.

Title: Green Infrastructure Combined Sewer Overflow Control Program

Purpose: This project constructed rain gardens at each of the four corners of 17 road intersections (130 rain gardens in all with a combined area of 41,411 square feet) in an area with combined sewers experiencing extensive overflow events. Construction of the rain gardens generally consisted of the realignment of the existing curb and gutter, excavation to create infiltration basins, installation of porous granular embankment and engineered top soil, and the installation of native plantings.

Project Location: DuPage County

Waterbody Name (ID): Fox River (ILDT38)

Subgrantee: City of Aurora, Public Works Division
44 Easy Downer Place
Aurora, Illinois 60507

Project Period: 06/27/12 through 03/15/15 **Status:** Completed.

Total Project Cost: $1,869,073.64
Illinois EPA: $1,451,666.00
Subgrantee: $417,407.64

Project Reports and Other Informational Materials:

"Green Infrastructure for CSO Control – Final Report." November 2014. City of Aurora Engineering Division.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
013	Rain Garden	130 no.	199	31	13,682	-

Rain garden post-construction.

Stormwater Retention & Infiltration Category

Title: 21st Century Sustainable Schoolyard

Purpose: This project renovated a 55,650 square foot schoolyard space that was either impervious or had extremely limited infiltration rates. Best Management Practices implemented at the site included 2,150 square feet of rain gardens; 7,300 square feet of permeable concrete; 4,000 square feet of permeable poured rubber playground surfacing; 7,500 square feet of enhanced natural turf area (bio-retention facility); a 14,700 gallon rainwater harvesting and reuse cistern system; and 2,081 square feet of engineered wood fiber permeable surface with 14 trees.

Project Location: Cook County

Waterbody Name (ID): North Branch Chicago River (ILHCC08)

Subgrantee: Chicago Public Schools
125 S. Clark Street, 17th Floor
Chicago, Illinois 60603

Project Period: 06/21/12 through 07/31/14 **Status:** Completed.

Total Project Cost: $1,323,337.99
Illinois EPA: $750,000.00
Subgrantee: $573,337.99

Project Reports and Other Informational Materials:

"21st Century Sustainable Schoolyard – Final Report for Goethe." August 25, 2014. Chicago Public Schools.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
012	Cistern	1 no.	-	-	250	-
013	Rain Garden	4 no.	-	-	48	-
812	Bio-retention Facility	0.17 ac.	1	0	170	-
890	Porous Pavement	0.31 ac.	2	0	286	-


Enhanced natural turf area post-construction.


Rainwater harvesting & reuse cistern post-construction.

12-04(IGIG) JC

Title: Bronzeville Cookin' Demonstration Roof & Parking Facility

Purpose: This project designed best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to the Chicago River from the Bronzeville Cookin' initiative at 300 – 314 East 51st Street, Chicago, Illinois. BMPs included 1) reinforcement of the roof substructure, 2) 5,012 square feet of semi-intensive and intensive green roof on the lower roof, 3) a rooftop water storage and distribution system to collect stormwater from the 3,000 square foot upper roof, 4) two downspout disconnections, 5) 14,800 square feet of permeable pavers and 1,200 square feet of bioswale on the adjacent parking area.

Project Location: Cook County

Waterbody Name (ID): S. Fk. S. Br. Chicago River (ILHCA01)

Subgrantee: Urban Juncture, Inc.
4245 S. King Drive
Chicago, Illinois 60653

Project Period: 08/27/12 through 12/15/15 **Status:** Completed.

Total Project Cost: $517,024.40
Illinois EPA: $295,231.27
Subgrantee: $221,793.13

Project Reports and Other Informational Materials:

Green Infrastructure Small Projects Category

Title: I Hotel & Conference Center Green Roof System

Purpose: This project installed a 3,200 square foot green roof system (2,860 square feet of vegetation in 2.5 inch deep modules and 340 square feet of rock) on the I Hotel and Conference Center located on the University of Illinois campus in Champaign, Illinois. The stormwater runoff from this campus area discharges to a tributary of the Embarras River (ILBE25) in east-central Illinois. The green roof system complements the green practices that have already been implemented in the University of Illinois, Research Park area to reduce peak and total stormwater runoff and pollutants discharging into the Embarras River.

Project Location: Champaign County

Waterbody Name (ID): Embarras River (ILBE25)

Subgrantee: Fox-Atkins Development LLC
1909 Fox Drive
Champaign, Illinois 61820

Project Period: 06/22/12 through 12/31/13 **Status:** Completed.

Total Project Cost: $44,395.72
Illinois EPA: $33,296.79
Subgrantee: $11,098.93

Project Reports and Other Informational Materials:

"I Hotel & Conference Center Green Roof System." December 2013. Fox-Atkins Development LLC.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
011	Green Roof	0.07 ac.	80	5	6,107	-


Green roof post-construction.


Green roof post-construction.

Title: Terada Park Green Infrastructure Improvements

Purpose: This project retrofitted an existing pond at Terada Park in Schaumburg, Illinois. A trash collection devise and two riffles were installed in one inlet to the pond. A 1,400 square foot bioswale and 7,700 square foot infiltration basin were constructed at the second inlet to the pond. An existing 48 inch storm sewer outfall draining water from the pond was eliminated and water draining out of the pond was diverted into a new 9,250 square foot meandering bioswale with a 600 square foot pocket wetland at the entrance to the bioswale and new outfall structure. The perimeter of the pond was re-graded and planted with 15,252 square feet of native vegetation to minimize bank erosion and discourage geese using the pond.

Project Location: Cook County

Waterbody Name (ID): West Branch DuPage River (ILGBK14)

Subgrantee: Village of Schaumburg
101 Schaumburg Court
Schaumburg, Illinois 60193

Project Period: 06/26/12 through 10/31/14 **Status:** Completed.

Total Project Cost: $189,106.00
Illinois EPA: $75,000.00
Subgrantee: $114,106.00

Project Reports and Other Informational Materials:

"Terada Park Green Infrastructure Improvements - Project Evaluation Report." October 31, 2014. Village of Schaumburg.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
035	Buffer Zone Enhancement	0.35	60	30	329	-
812	Bio-retention Facility	0.176 ac.	25	5	5,813	-
814	Bioswale	0.242 ac.	164	13	18,448	-
587	Structure for Water Control	2 no.	-	-	-	-
657	Wetland Restoration	0.014 ac.	182	14	18,145	-


Bioswale post-construction.


Shoreline buffer of native vegetation post-construction.

12-08(IGIG) JC

Title: Woodlawn Center North Apartments

Purpose: This project installed 9,320 square feet of permeable pavement and 4,196 square feet of bio-infiltration planters at Woodlawn Center North Apartments in Chicago, Illinois. Downspouts at the site were redirected into the bio-infiltration planters. The project demonstrated to the residents and their neighbors how green infrastructure and water quality can become part of neighborhood revitalization planning being undertaken in this near-North neighborhood.

Project Location: Cook County

Waterbody Name (ID): Washington Park Lagoon (ILQZF)

Subgrantee: Preservation of Affordable Housing
77 West Washington, Suite 1001
Chicago, Illinois 60602

Project Period: 07/02/12 through 12/31/13 **Status:** Completed.

Total Project Cost: $279,679.00
Illinois EPA: $75,000.00
Subgrantee: $204,679.00

Project Reports and Other Informational Materials:

"Woodlawn Center North Apartments – Final Report." January 2014. Preservation of Affordable Housing.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
040	Infiltration Planter	24 no.	0	0	22	-
890	Porous Pavement	0.21 ac.	1	0	60	-

Bio-infiltration planter and permeable pavement during construction.

Title: Waukegan Road Urban Rain Garden

Purpose: This project constructed a 1,200 square foot, highly visible rain garden along a heavily traveled suburban intersection (Waukegan Road, Dewes Street, and River Road) in the Village of Glenview, Illinois. The rain garden was designed to help infiltrate stormwater runoff, improve water quality, and increase biodiversity and public awareness of the benefits of site-level green infrastructure.

Project Location: Cook County

Waterbody Name (ID): West Fork North Branch Chicago River (ILHCCB05)

Subgrantee: Village of Glenview
1333 Shermer Road
Glenview, Illinois 60026

Project Period: 06/14/12 through 07/31/13 **Status:** Completed.

Total Project Cost: $15,631.75
Illinois EPA: $7,113.00
Subgrantee: $8,518.75

Project Reports and Other Informational Materials:

"Final Report - Waukegan Road Urban Rain Garden." June 15, 2013. Village of Glenview.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
013	Rain Garden	1 no.	0.12	0.04	-	0.012


Rain garden during construction.


Rain garden post-construction.

SFY 2013 STATE FUNDED IGIG PROJECTS
Combined Sewer Overflow Rehabilitation Category

Title: Bio-Swale and Stormwater Capture and Reuse Project

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution discharged to Sugar Creek from an existing city maintenance facility into the combined sewers in Springfield, Illinois. BMPs included a 313 linear foot bio-swale (13,000 square feet) and a 98,518 gallon water reuse cistern system with a vortex style pretreatment devise. The BMPs were designed to filter runoff so as to remove suspended sediment, heavy metals, oil and grease, nutrients, and other suspended and soluble nonpoint source pollutants as well as reduce runoff volume and velocity while providing other beneficial hydrologic functions.

Project Location: Sangamon County

Waterbody Name (ID): Sugar Creek (ILEOA01)

Subgrantee: City of Springfield
Room 201, Municipal Center West
Springfield, Illinois 62701

Project Period: 12/20/13 through 06/30/15 **Status:** Completed.

Total Project Cost: $817,601.00
Illinois EPA: $594,000.00
Subgrantee: $223,601.00

Project Reports and Other Informational Materials:

"Bio-Swale and Stormwater Capture and Reuse Project – Final Report." May 20, 2015. Hanson Professional Services.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
012	Cistern	1 no.	25	-	3,238	-
814	Bioswale	0.3 ac.	36	2	2,531	-

Water reuse cistern system during construction.
13-01(IGIG) JC

Bio-swale post-construction.

Title: Downspout Disconnection Assistance Program

Purpose: This project disconnected 4,407 roof drain downspouts at 1,847 homes from the combined sewer system in the Village of LaGrange Park, Illinois. The disconnected downspouts were discharged to the ground surface and the rainwater flow path routed so as avoid creating new drainage issues at the site or on adjacent properties. Disconnection activities include elbows, splash pads, discharge extensions, guttering, and best management practices such as rain barrels, rain gardens or infiltration swales where needed.

Project Location: Cook County

Waterbody Name (ID): Salt Creek (ILGL09, ILGL19)

Subgrantee: Village of LaGrange Park
447 N. Catherine Park
LaGrange Park, Illinois 60526-2099

Project Period: 03/24/14 through 11/30/18 **Status:** Completed.

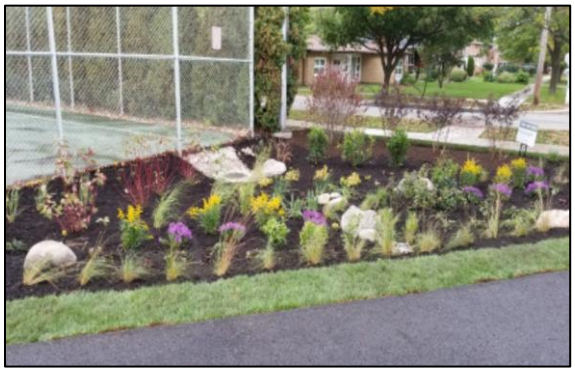
Total Project Cost: $274,592.72
Illinois EPA: $233,403.51
Subgrantee: $41,189.21

Project Reports and Other Informational Materials:

"Final Report - Downspout Disconnection Assistance Program." December 2018. Village of La Grange Park.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
013	Rain Garden	1 no.	1	1	-	1
037	Downspout/Footing Tile Disconnection	4,407 no.	-	-	-	-


Rain garden post-construction.


Downspout disconnection post-construction.

Title: River Forest Green Alleys

Purpose: The project replaced 28,600 square feet of existing asphalt with 25,320 square feet of interlocking permeable pavement over four separate alleys in order to reduce stormwater volume and nonpoint source pollution to the DesPlaines River (ILG30) from the Village of River Forest in Cook County, Illinois. The alleys are located in an area bounded by North Avenue on the north, Greenfield Street on the south, Harlem Avenue on the east, and Clinton Place on the west.

Project Location: Cook County

Waterbody Name (ID): DesPlaines River (ILG30)

Subgrantee: Village of River Forest
400 park Avenue
River Forest, Illinois 60305

Project Period: 11/18/13 through 10/31/15 **Status:** Completed.

Total Project Cost: $553,482.45
Illinois EPA: $470,460.08
Subgrantee: $83,022.37

Project Reports and Other Informational Materials:

"Green Alley Improvements Village of River Forest." Hancock Engineering. January 11, 2016.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
890	Porous Pavement	0.58 ac.	13	1	756	-


Permeable pavement alley during construction.


Permeable pavement alley post-construction

Title: Village of Skokie Green Alley Program

Purpose: The project replaced four existing oiled alleys (27,520 square feet) with 12,498 square feet of porous pavement (permeable interlocking concrete pavement) constructed between an edge ribbon of concrete (15,022 square feet) in order to reduce stormwater volume and nonpoint source pollution to the North Shore Channel (IL_HCCA-02). The porous pavement was constructed over an 18 inch thick layer of open-graded stone that will serve as the structural base as well as provide temporary storage of runoff before it infiltrates into the sub-grade or slowly drains via a perforated pipe in the stone base. The alleys are located in an area bounded by Washington Street on the north, Keating Avenue on the west, Kilpatrick Avenue on the east, and Keeney Street on the south in Skokie, Illinois.

Project Location: Cook County

Waterbody Name (ID): North Shore Channel (IL_HCCA-02)

Subgrantee: Village of Skokie
5127 Oakton Street
Skokie, Illinois 60077

Project Period: 12/05/13 through 10/15/15 **Status:** Completed.

Total Project Cost: $619,833.55
Illinois EPA: $464,875.16
Subgrantee: $154,958.39

Project Reports and Other Informational Materials:

"Green Alley Program." August 19, 2015. Baxter & Woodman Consulting Engineers.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
890	Porous Pavement	0.29 ac.	27	3	3,999	-


Permeable pavement alley during construction.


Permeable pavement alley post-construction.

Title: Oak Park Green Alleys Program

Purpose: The project replaced 77,991 square feet of existing asphalt with 34,562 square feet of interlocking permeable pavement over nine separate alleys in order to reduce stormwater volume and nonpoint source pollution to the DesPlaines River (ILG30) from the Village of Oak Park in Cook County, Illinois. The alleys are located in an area bounded by Chicago Avenue on the north, I-290 on the south, Harlem Avenue on the west, and Ridgeland Street on the east.

Project Location: Cook County

Waterbody Name (ID): Chicago Ship Canal (ILGI-03) & DesPlaines River (ILG30)

Subgrantee: Village of Oak Park
201 South Boulevard
Oak Park, Illinois 60302

Project Period: 11/21/13 through 10/31/15 **Status:** Completed.

Total Project Cost: $1,357,875.82
Illinois EPA: $763,327.00
Subgrantee: $594,548.82

Project Reports and Other Informational Materials:

"Oak Park Green Alleys Program - Final Report." December 9, 2015. Terra Engineering LTD.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
890	Porous Pavement	0.795 ac.	24	2	3,538	-


Permeable pavement alley pre-construction.


Permeable pavement alley during construction.

Stormwater Retention & Infiltration Category

Title: Green Infrastructure Riverfront Revitalization

Purpose: This project implemented stormwater BMPs to reduce stormwater volume and nonpoint source pollution to the Rock River (ILP-06) from a portion of the former Northwestern Steel and Wire property in Sterling, Illinois. BMPs included required land reconstruction and capping of the site that had not been previously performed; a constructed stormwater wet pond (0.4 acres); native plantings (11 acres); permeable pavers (2,205 square feet); and bio-infiltration runnel (490 feet).

Project Location: Whiteside County

Waterbody Name (ID): Rock River (ILP-06)

Subgrantee: City of Sterling
212 Third Avenue
Sterling, Illinois 61081

Project Period: 01/14/14 through 12/31/16 **Status:** Completed.

Total Project Cost: $2,261,536.19
Illinois EPA: $1,555,173.74
Subgrantee: $706,362.45

Project Reports and Other Informational Materials:

"Riverfront Revitalization Project – Final Report." December 2016. Cardno & Jensen Ecology.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
342	Critical Area Planting	11 ac.	20	2	912	1
800	Urban Stormwater Wetlands	1 no.	5	1	443	0
814	Bioswale	0.08 ac.	-	-	-	-
890	Porous Pavement	0.05 ac.	-	-	-	-

Stormwater wet pond post-construction.

13-06(IGIG) JC

Title: Highland Park High School Wolters Field Permeable Parking Improvements

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to the Skokie River from the Wolters Field Athletic Complex in Lake County, Illinois. BMPs included the construction of 1) an interlocking permeable pavement parking lot (72,140 square feet) over a layer of open-graded stone at least twelve inches thick, 2) a permeable geo-block grass pavement system (11,600 square feet), and the 3) retrofit of a an existing ditch into a vegetated bioswale (3,500 square feet).

Project Location: Lake County

Waterbody Name (ID): Skokie River (IL HCCD-01)

Subgrantee: Township High School District 113
1040 Park Avenue West
Highland Park, Illinois 60035

Project Period: 11/19/13 through 05/01/16 **Status:** Completed.

Total Project Cost: $551,178.39
Illinois EPA: $368,869.00
Subgrantee: $182,309.39

Project Reports and Other Informational Materials:

"Highland Park High School Wolters Field Permeable Parking Improvements." August 1, 2015. Daniel Creaney Company.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
890	Porous Pavement	1.93 ac.	13	1	2,453	-
814	Bioswale	0.08 ac.	1	-	778	-

Permeable pavement parking lot during construction.

13-07(IGIG) CD

Title: Westchester Public Library Permeable Parking Lot

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to Addison Creek from the Westchester Public Library in Cook County, Illinois. BMPs included the construction of 1) an interlocking permeable pavement parking lot (14,573 square feet) over a layer of open-graded stone at least twelve inches thick and 2) the retrofit of three areas into bioretention beds (totaling 750 square feet) with a minimum of twelve inches of amended topsoil.

Project Location: Cook County

Waterbody Name (ID): Addison Creek (ILGLA-02)

Subgrantee: Westchester Public Library
10700 Canterbury Street
Westchester, Illinois 60154

Project Period: 10/30/13 through 05/01/16 **Status:** Completed.

Total Project Cost: $248,467.08
Illinois EPA: $163,099.00
Subgrantee: $85,368.08

Project Reports and Other Informational Materials:

"Westchester Public Library Permeable Parking Lot - Final Report for Illinois Green Infrastructure Grant 1308." November 2015. Westchester Public Library.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
812	Bio-retention Facility	0.02 ac.	0	0	24	-
890	Porous Pavement	0.33	3	0	380	-

Permeable pavement parking lot post-construction.

13-08(IGIG) CD

Title: Green Not Gray Schoolyard Project

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to North Branch Chicago River (ILHCC-02) from the Ravenswood School property in Cook County, Illinois. BMPs included the construction of 1) 14,662 square feet of permeable pavement; 2) 4,104 square feet of permeable rubberized play area; 3) 4,108 square feet of permeable running track; 4) 8,943 square feet of permeable synthetic turf field; 5) planting areas and rain gardens covering 7,468 square feet; 6) a 300 gallon stormwater harvesting system; 7) 2,557 square foot decomposed granite path; and 8) six downspout disconnections.

Project Location: Cook County

Waterbody Name (ID): North Branch Chicago River (ILHCC-02)

Subgrantee: Chicago Public Schools
125 S. Clark Street, 17th Floor
Chicago, Illinois 60603

Project Period: 04/14/14 through 05/01/16 **Status:** Completed.

Total Project Cost:	$1,222,191.00	**Cumulative Expenditure:**	$0.00
Illinois EPA:	$750,000.00	**Illinois EPA:**	$0.00
Subgrantee:	$472,191.00	**Subgrantee:**	$0.00

Project Reports and Other Informational Materials:

"Ravenswood Elementary School - Green Not Gray." February 25, 2015. Chicago Public Schools.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
012	Cistern	1 no.	-	-	-	-
013	Rain Garden	11 no.	-	-	83	-
814	Bioswale	0.08 ac.	-	-	82	-
890	Porous Pavement	0.79 ac.	7	1	931	-

Permeable pavement during construction.

13-09(IGIG) CD

Green Infrastructure Small Projects Category

Title: Willow Stream Parking Lot Renovation

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to Buffalo Creek (ILGST), a tributary of the DesPlaines River, from the Willow Stream Park in Buffalo Grove, Illinois. BMPs included the construction of interlocking permeable pavement (14,400 square feet) and six rain gardens (totaling 834 square feet).

Project Location: Lake County

Waterbody Name (ID): Buffalo Creek (ILGST)

Subgrantee: Buffalo Grove Park District
530 Bernard Drive
Buffalo Grove, Illinois 60089

Project Period: 11/25/13 through 07/31/15 **Status:** Completed.

Total Project Cost: $355,617.08
Illinois EPA: $75,000.00
Subgrantee: $280,617.08

Project Reports and Other Informational Materials:

"Willow Stream Parking Lot Renovation." August 19, 2015. Gewalt Hamilton Associates, Inc.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
013	Rain Garden	6 no.	-	-	43	-
890	Porous Pavement	0.33 ac.	6	2	390	-

Permeable pavement parking lot post-construction.

13-10(IGIG) ST

Title: South Monterey Bio-retention Project

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to Salt Creek from the 600 – 700 block of South Monterey Avenue, Villa Park in DuPage County, Illinois. BMPs included the construction of fourteen (14) bio-retention systems within existing drainage ditches. Existing turf and clay soil were replaced with modified soil and native vegetation above a bottom layer of sand and river rock.

Project Location: DuPage County

Waterbody Name (ID): Salt Creek (ILGL-03)

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

Project Period: 12/09/13 through 12/31/19 **Status:** Completed.

Total Project Cost: $64,621.75
Illinois EPA: $48,466.31
Subgrantee: $16,155.44

Project Reports and Other Informational Materials:

"South Monterey Bio-retention Project." December 12, 2019. Village of Villa Park

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
814	Bioswale	0.07 ac.	16	3	995	-


Bio-retention system during construction.


Bio-retention system post-construction.

Title: Midlothian Village Greenway Project

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to Midlothian Creek from the Village of Midlothian in Cook County, Illinois. The project included the installation of a permeable parking lot (6,725 square feet), rain gardens (7,200 square feet), and native plantings (13,885 square feet).

Project Location: Cook County

Waterbody Name (ID): Midlothian Creek (ILHBA-01)

Subgrantee: Village of Midlothian
14801 South Pulaski Road
Midlothian, Illinois 60445

Project Period: 11/13/13 through 07/15/19

Total Project Cost: $139,703.54
Illinois EPA: $68,000.00
Subgrantee: $71,703.54

Project Reports and Other Informational Materials:

"Midlothian Village Greenway Project." July 15, 2019. The Antero Group.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
013	Rain Garden	1 no.	-	-	35	-
835	Urban Filter Strip	0.32 ac.	-	-	25	-
890	Porous Pavement	0.15 ac.	2	-	366	-


Rain garden post-construction.


Permeable pavement parking lot post-construction.

Title: Growing Minds, Shrinking Runoff: Rain Gardens at South Suburban College

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to the Calumet Union Drainage Ditch (ILHBB) from the existing South Suburban College campus located in South Holland, Illinois. BMPs included 1) a 0.37 acre rain garden, 2) a 0.11 acre bioswale, and a 0.2 acre buffer of native vegetation around the south side of an existing stormwater detention basin.

Project Location: Cook County

Waterbody Name (ID): Calumet Union Drainage Ditch (ILHBB)

Subgrantee: South Suburban College
16333 South Kilbourn
Oak Forest, Illinois 60452

Project Period: 12/18/13 through 07/31/15 **Status:** Completed.

Total Project Cost: $87,427.19
Illinois EPA: $61,177.00
Subgrantee: $26,250.19

Project Reports and Other Informational Materials:

"Growing Minds, Shrinking Runoff: Rain Gardens at South Suburban College - Final Report." November 12, 2015. Weaver Consultants Group.

BMP Implementation Summary:

			Estimated Load Reduction			
BMP Code	BMP Name	Amount	Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
013	Rain Garden	3 no.	4	1	783	-
035	Buffer Zone Enhancement	0.20 ac.	-	-	15	-
814	Bioswale	0.11 ac.	1	1	218	-

Rain garden post-construction.

13-14(IGIG) JC

SFY 2014 STATE FUNDED IGIG PROJECTS
Combined Sewer Overflow Rehabilitation Category

Title: The Village Schoolyard Project

Purpose: This project constructed best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to the North Branch Chicago River (IL_HCC-08) from the Audubon Elementary School in Chicago, Illinois. BMPs included a 3,920 square foot permeable pavement parking lot and a 1,548 square foot permeable paver plaza. The project also included a 9,303 square foot permeable synthetic turf field constructed over an underground stone infiltration system and the establishment of 6,182 square feet of deep-rooted native vegetation in front of the school on the south side.

Project Location: Cook County

Waterbody Name (ID): North Branch Chicago River (IL_HCC-08)

Subgrantee: Chicago Public School District #299
42 West Madison, 2nd Floor
Chicago, Illinois 60602

Project Period: 04/22/15 through 07/15/18 **Status:** Completed.

Total Project Cost: $1,052,144.18
Illinois EPA: $750,000.00
Subgrantee: $302,144.18

Project Reports and Other Informational Materials:

"The Village Schoolyard Project." April 13, 2018. Tilton, Kelly + Bell, LLC.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
812	Bio-retention Facility	0.21 ac.	2	-	277	-
835	Urban Filter Strip	0.14 ac.	-	-	40	-
890	Porous Pavement	0.13 ac.	1	-	150	-


Permeable pavement parking lot post-construction.


Filter strip of native vegetation post-construction.

Title: Blue Island, Blue Water

Purpose: This project constructed best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution associated with urban runoff from Blue Island, Illinois prior to discharge to the Calumet Sag Channel (IL_H-02). Approximately 20,730 square feet of existing impervious alleys were replaced with porous asphalt constructed over a layer of open-graded stone. Twelve (12) stormwater bump-out bio-retention basins with a combined total area of 14,320 square feet were constructed at three street intersections. Approximately 19,910 square feet of permanent deep-rooted native vegetation were also planted.

Project Location: Cook County

Waterbody Name (ID): Calumet Sag Channel (IL_H-02)

Subgrantee: City of Blue Island
13051 Greenwood Avenue
Blue Island, Illinois 60406

Project Period: 03/17/15 through 01/15/19 **Status:** Completed.

Total Project Cost: $1,373,807.64
Illinois EPA: $1,132,558.00
Subgrantee: $241,249.64

Project Reports and Other Informational Materials:

"Blue Island, Blue Water Project Evaluation Report." December 6, 2018. The Antero Group.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
812	Bio-retention Facility	0.33 ac.	38	6	6,455	-
835	Urban Filter Strip	0.46 ac.	6	1	1,625	-
890	Porous Pavement	0.48 ac.	24	3	3,468	-


Bump-out bio-retention basins post-construction.


Filter of native vegetation post-construction.

Stormwater Retention & Infiltration Category

Title: LCCC Stormwater Runoff Reduction Project

Purpose: This project constructed best management practices (BMPs) to reduce nonpoint source pollution associated with urban runoff from the Lewis and Clark Community College in Godfrey, Illinois prior to discharge to China Creek, a tributary of Rocky Fork (IL_JVB). BMPs included 1) replacement of an existing asphalt parking lot with a 56,000 square foot parking lot composed of 45,990 square feet of permeable interlocking concrete pavement constructed above an 18" deep aggregate base layer of open-graded stone; 2) the planting of 33 native deciduous trees (3" – 4" caliper) around the permeable pavement parking lot; and 3) construction of a 15,000 square foot "Radiating Waves" bioswale to receive stormwater discharged from the permeable pavement parking lot. The bioswale was planted with deep-rooted native vegetation and included three (3) grade control structures (stone wall weirs with scuppers) with gravel channels (800 square feet) at the base of the stone wall weirs.

Project Location: Madison County

Waterbody Name (ID): China Creek and Rocky Fork (IL_JVB)

Subgrantee: Lewis and Clark Community College
5800 Godfrey Road
Godfrey, Illinois 62035

Project Period: 10/30/14 through 11/30/15 **Status:** Completed.

Total Project Cost: $823,590.42
Illinois EPA: $603,195.39
Subgrantee: $220,395.03

Project Reports and Other Informational Materials:

"Lewis and Clark Community College Stormwater Runoff Reduction Project (IGIG 1412) (Piasa Creek)." November 2015. Lewis and Clark Community College.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
612	Tree Planting	0.5 ac.	-	-	-	-
814	Bioswale	0.034 ac.	10	1	2,277	-
890	Porous Pavement	1.06 ac.	44	4	5,688	-

Bioswale post construction.
14-12(IGIG) SR

Permeable pavement parking lot post-construction.

Title: Berwyn Stormwater Project

Purpose: This project constructed best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution associated with urban runoff from Berwyn, Illinois prior to discharge to the Chicago Sanitary & Ship Canal (IL_GI-06) and the Des Plaines River (IL_G-32). BMPs included the replacement of fifteen (15) existing concrete alleys (156,510 square feet) with fifteen (15) alleys that are sloped to a center section composed of 28,215 square feet of permeable interlocking concrete pavement constructed between a border of normal concrete (128,295 square feet) in an area bordered by Roosevelt Road on the north, Harlem Avenue on the west, Lombard Avenue on the east, and Pershing Road on the south. The project also included the disconnection of roof drain downspouts of 32 homes from the combined sewer system.

Project Location: Cook County

Waterbody Name (ID): Chicago Sanitary & Ship Canal (IL_GI-06) and the Des Plaines River (IL_G-32)

Subgrantee: City of Berwyn
6700 West 30th Street
Berwyn, Illinois 60402

Project Period: 03/13/15 through 01/15/18

Total Project Cost: $3,020,790.00
Illinois EPA: $2,237,765.00
Subgrantee: $783,025.00

Status: Completed.

Project Reports and Other Informational Materials:

"Green Alley Program - Project Evaluation and Report." January 15, 2018. City of Berwyn.

"Downspout Disconnection Program - Project Evaluation and Report." January 15, 2018. City of Berwyn.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
037	Downspout/Footing Tile Disconnection	32 no.	-	-	-	-
890	Porous Pavement	0.65 ac.	48	5	2,642	-

Permeable pavement alley pre-construction.
14-19(IGIG) SR

Permeable pavement alley post-construction.

Title: Alcott Field of Dreams

Purpose: This project constructed stormwater best management practices (BMPs) to reduce stormwater volume and nonpoint source pollution to the North Branch Chicago River (IL_HCC-08) from the Alcott College Prep's East campus in Chicago, Illinois. BMPs included 1) a 5,300 square foot permeable rubberized playground; 2) a 28,000 square foot permeable synthetic turf field; 3) an 18,000 square foot porous asphalt play area; and 4) the planting of three (3) shade trees (3" caliper) and three (3) ornamental trees (6 feet height). The permeable surfaces will be constructed over stone aggregate underground retention systems that are at least twelve (12) inches thick and that will serve as the structural base as well as provide temporary storage of runoff before it infiltrates into the sub-grade.

Project Location: Cook County

Waterbody Name (ID): North Branch Chicago River (IL_HCC-08)

Subgrantee: Chicago Public Schools
125 South Clark Street, 5th Floor
Chicago, Illinois 60603

Project Period: 04/22/15 through 01/15/16 **Status:** Completed.

Total Project Cost: $1,200,000.00
Illinois EPA: $750,000.00
Subgrantee: $450,000.00

Project Reports and Other Informational Materials:

"Alcott Field of Dreams - Final Report for Alcott Elementary." December 11, 2015. Chicago Public Schools.

BMP Implementation Summary:

BMP Code	BMP Name	Amount	Estimated Load Reduction Nitrogen (lbs/year)	Phosphorus (lbs/year)	TSS (lbs/year)	Sediment (tons/year)
612	Tree Planting	0.5 ac.	-	-	40	-
890	Porous Pavement	1.17 ac.	6	-	1,298	-

Permeable playground post-construction.