

URBAN STORMWATER WORKING GROUP

May 11, 2021 2 pm

Join URL: <https://illinois.zoom.us/j/98795822044?pwd=cVluU1BZRno2d25tNWNMQ0NNVU8zdz09>

Meeting ID: 987 9582 2044 Password: 003952

Or Dial: +1 312 626 6799



Photo by Layne Knoche



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Extension
COLLEGE OF AGRICULTURAL, CONSUMER
& ENVIRONMENTAL SCIENCES



ILLINOIS
NUTRIENT LOSS
REDUCTION STRATEGY

Agenda

WELCOME AND MEMBER UPDATES

Opportunity for members to provide updates on their projects.

NLRS Biennial Report Stormwater Sector Chapter

NEXT STEPS



Introductions

Type your name and affiliation in the chat box.



Member Updates

Type “Update” in the chat box.
I will call on people.



Biennial Report

Chapter 6: Stormwater Sector



Report Structure

Chapter has 2 parts:

Implementation

Current Programs and Projects supporting NLRS



Biennial Report Implementation




Biennial Reports are structured to report data on tracking measures by each of the three sectors using this logic model.



NLRS Logic Model



Chapter 6: Stormwater Sector

	Implementation Report
RESOURCES 	Resource Measures Staff Resources Funding Resources
OUTREACH 	Outreach Measures Outreach Activities
LAND AND FACILITIES 	Land and Facilities Measures Illinois Environmental Protection Agency Section 319 Grant Program GIGO MS4 Report Analysis <i>Findings</i> <i>Data Collection Challenges</i> Metropolitan Wastewater Reclamation District of Greater Chicago Green Infrastructure Program

Data sources: Partner spreadsheets, MS4 reports, MWRD Annual Stormwater Reports, Illinois EPA 319 information



Chapter 6: Stormwater Sector (con't)

Current Programs and Projects Supporting Nutrient Loss Reduction Goals

Calumet Stormwater Collaborative

Conservation@Home

IDOT

DuPage County Green Infrastructure Inventory

DuPage County Water Quality Improvement Program

East Branch DuPage River Watershed Plan

Equitable Green Infrastructure

National Green Infrastructure Certification Program

Lawn to Lake

Red Oak Rain Garden

Future Strategic Actions

Urban Stormwater Working Group



Resources

Nutrient Reduction-Related Activity	2019	2020
Grants or Loans Received	\$852,474	\$943,496
Grants Given	\$306,506	\$395,500
Funded Programs	\$64,637,490	\$2,328
Staff Dollars	\$9,731,101	-
Total	\$75,529,721	\$1,341,324

Data sources: Partner spreadsheets, MS4 reports, MWRD Annual Stormwater Reports



Resources

Nutrient Reduction-Related Activity	Number of MS4 Communities
Received Grants and Loans	75
Gave Grants and Loans	32

Data source: MS4 reports



Outreach

Reporting more Outreach!

Types of Outreach

- Green infrastructure
- General public
- Watershed planning



Outreach

Type of Activity	Number of Events	Attendance
Field Days	26	2,535
Presentations	90	7,329
Conferences	14	2,489
Workshops	19	1,987
TOTALS	149	14,340

Data source: Partner spreadsheets



Outreach

Past 2 reporting periods

Type of Activity	2017-2018		2019-2020	
	Number of Events	Attendance	Number of Events	Attendance
Field Days	9	555	26	2535
Presentations	31	3815	90	7329
Conferences	3	650	14	2489
Workshops	17	1150	19	1987
TOTALS	60	6170	149	14,340

Data source: Partner spreadsheets



Outreach

AUDIENCES

- State, County, Local Government Officials
- Industry Professionals
- General Public



Outreach - Types

GREEN INFRASTRUCTURE

- Public and Construction Industry
 - Stormwater Basins
 - Rain Gardens
 - Green Roofing

HOMEOWNERS

- General Public
 - Natural Lawn Care
 - Environmentally-friendly De-Icers
 - Pollinators

WATERSHED PLANNING

- Watershed Planning Commissions
 - Cooperative Efforts to Control Nutrient Loss



Land & Facilities: 319

2019					
Bioswale	-	1.2	-	1,361.5	203.5
Rain Garden	3	-	-	68	11
Urban Stormwater Wetlands	5	-	-	357	93
Wetland Restoration	-	1.2	-	536	160
2020					
Urban Filter Strip	-	13.3	-	2,685	336
Wetland Restoration	-	0.65	-	18	10

Data source: Illinois EPA



319

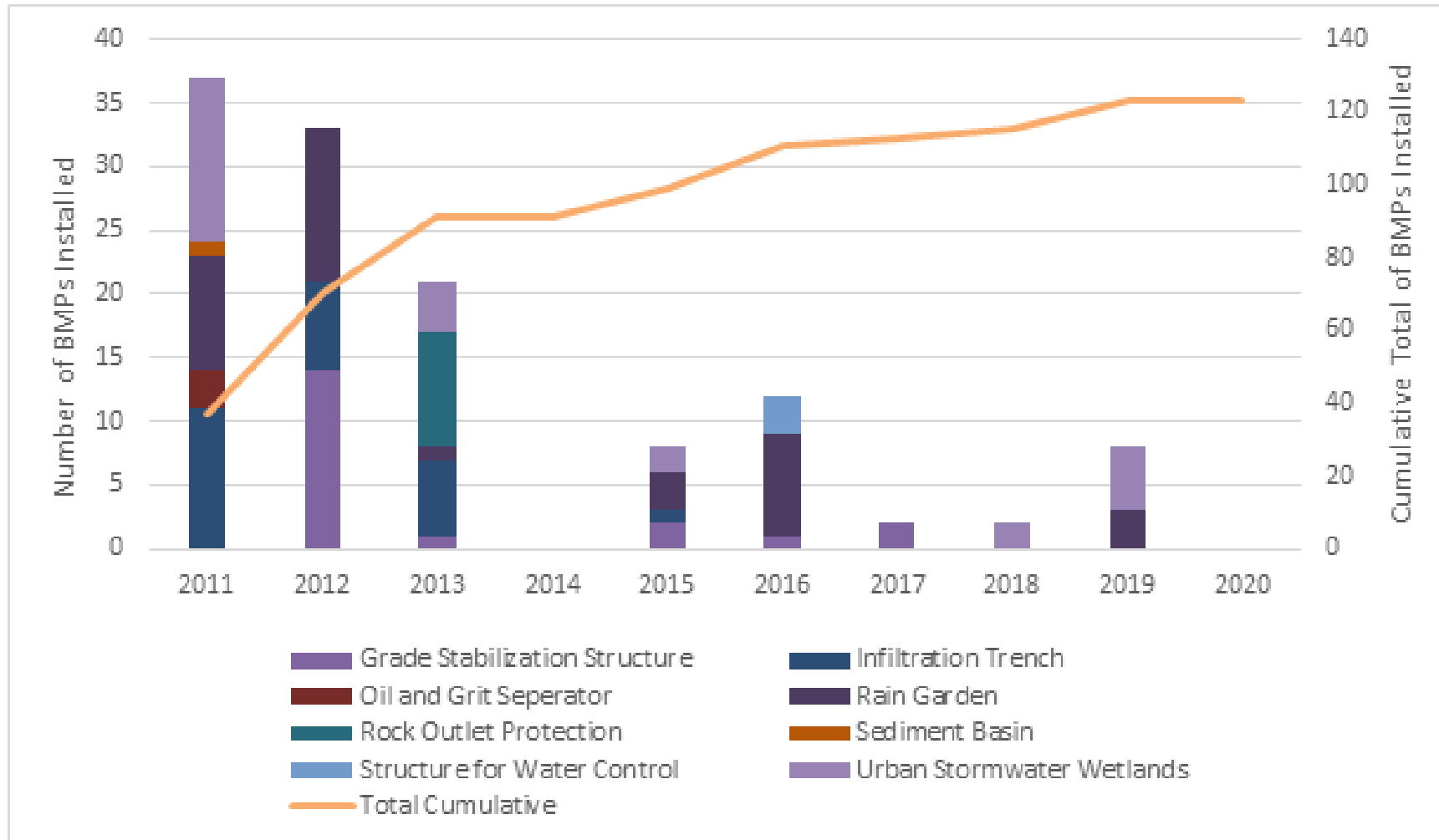


Figure 6.1. Number of urban practices installed under Section 319 Grant Program 2011–20



319

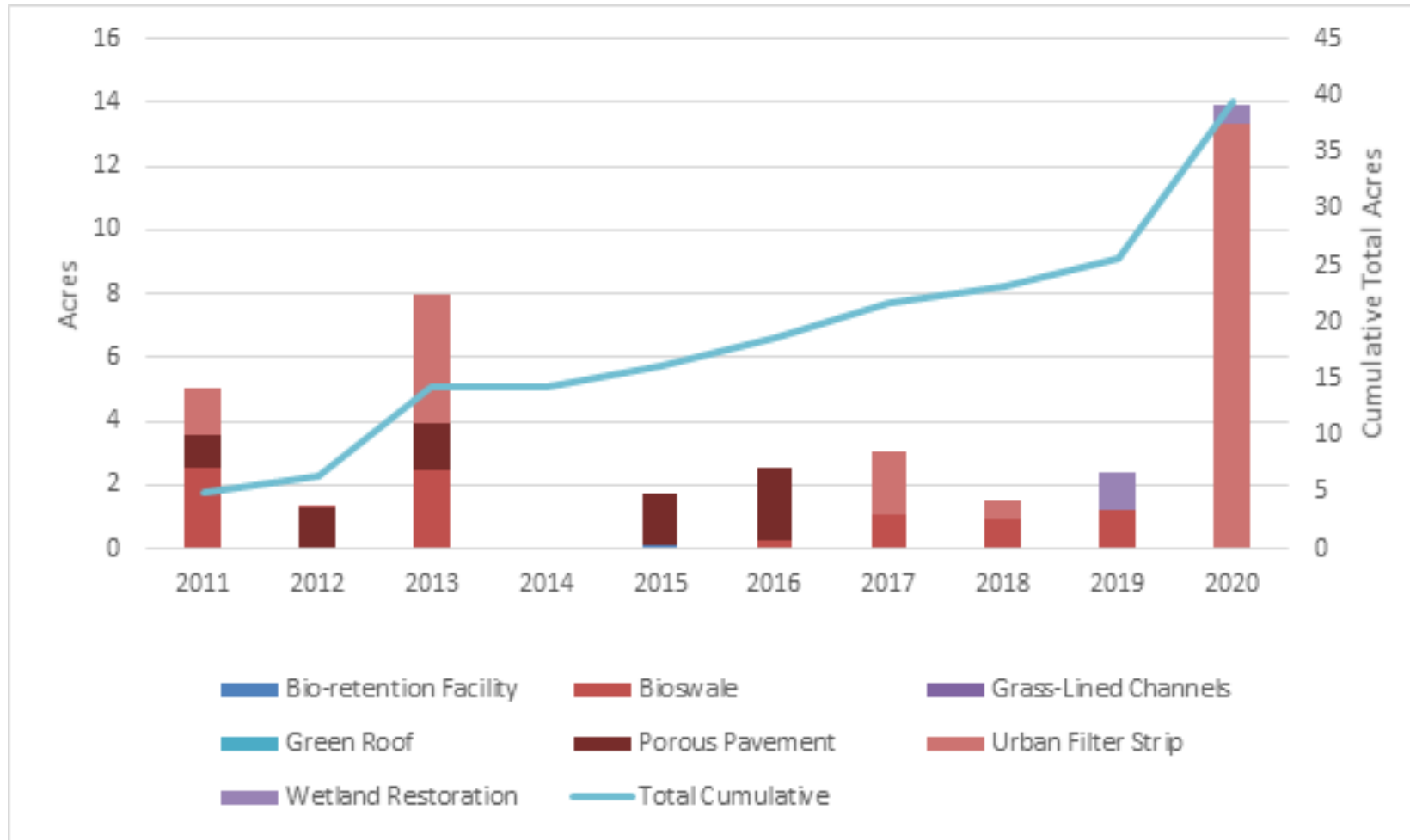


Figure 6.2. Acres treated by urban practices installed under Section 319 Grant Program 2011–20



319

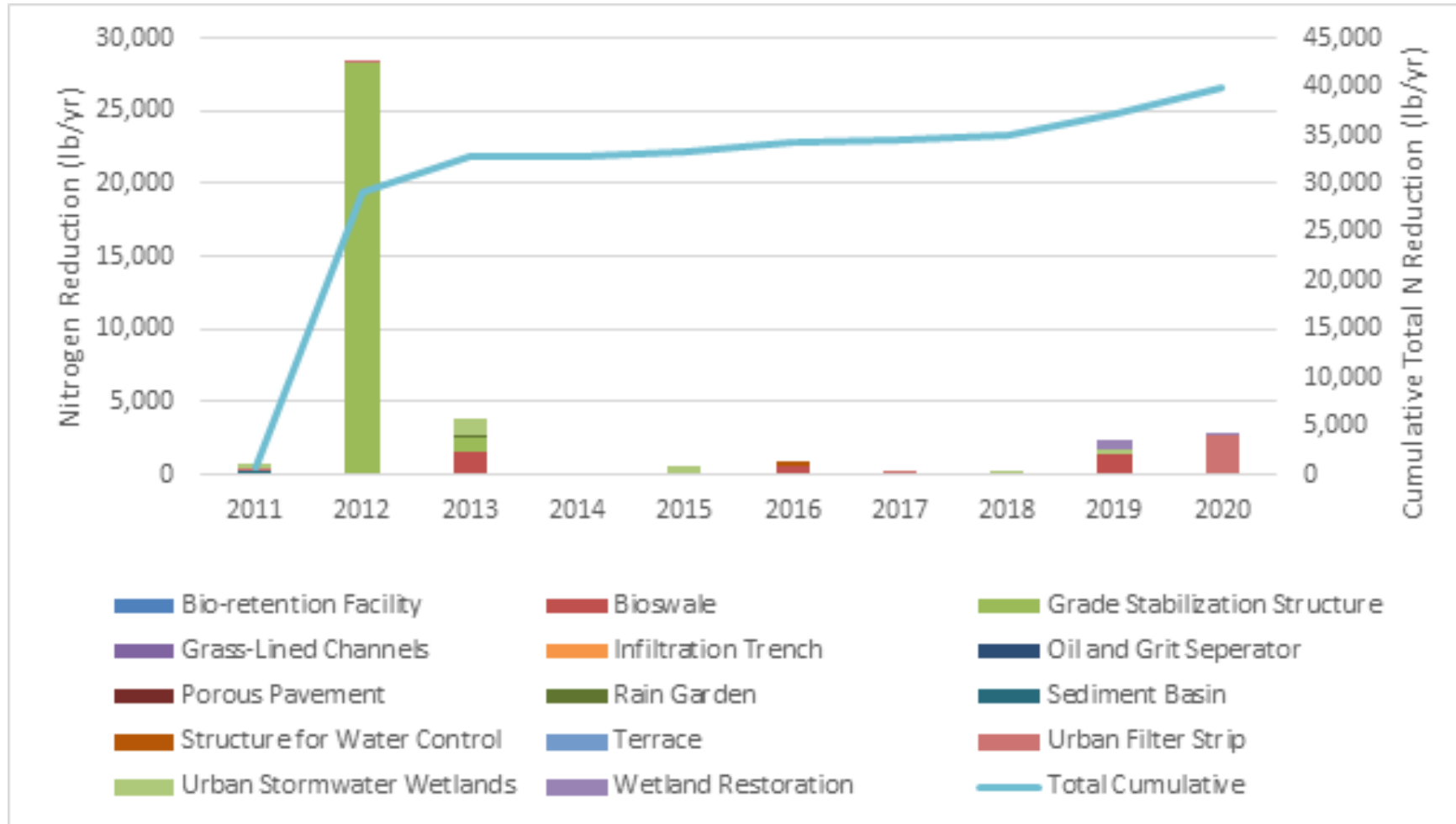


Figure 6.3. Calculated nitrogen load reduction (lb/yr) from Section 319 Grant Program urban practices 2011–20



319

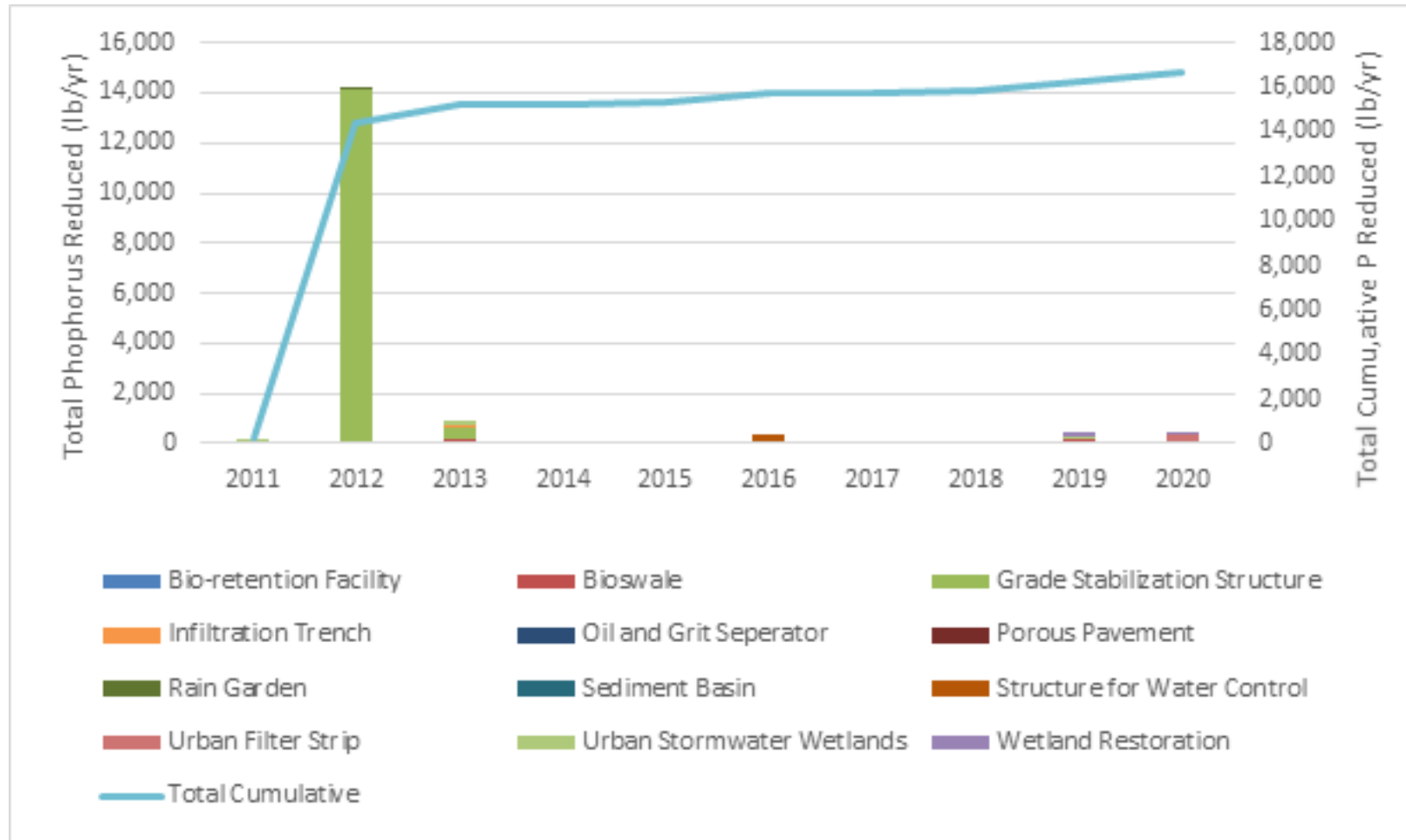


Figure 6.4. Calculated total phosphorus load reduction (lb/yr) from Section 319 Grant Program urban practices 2011–20



Land & Facilities: GIGO

Eleven GIGO projects have submitted the following annual pollutant load reduction estimates:

4,973 pounds of nitrogen

1,423 pounds of phosphorus

1,063 tons of sediment

31,414,497 gallons of stormwater retained

Data source: Illinois EPA



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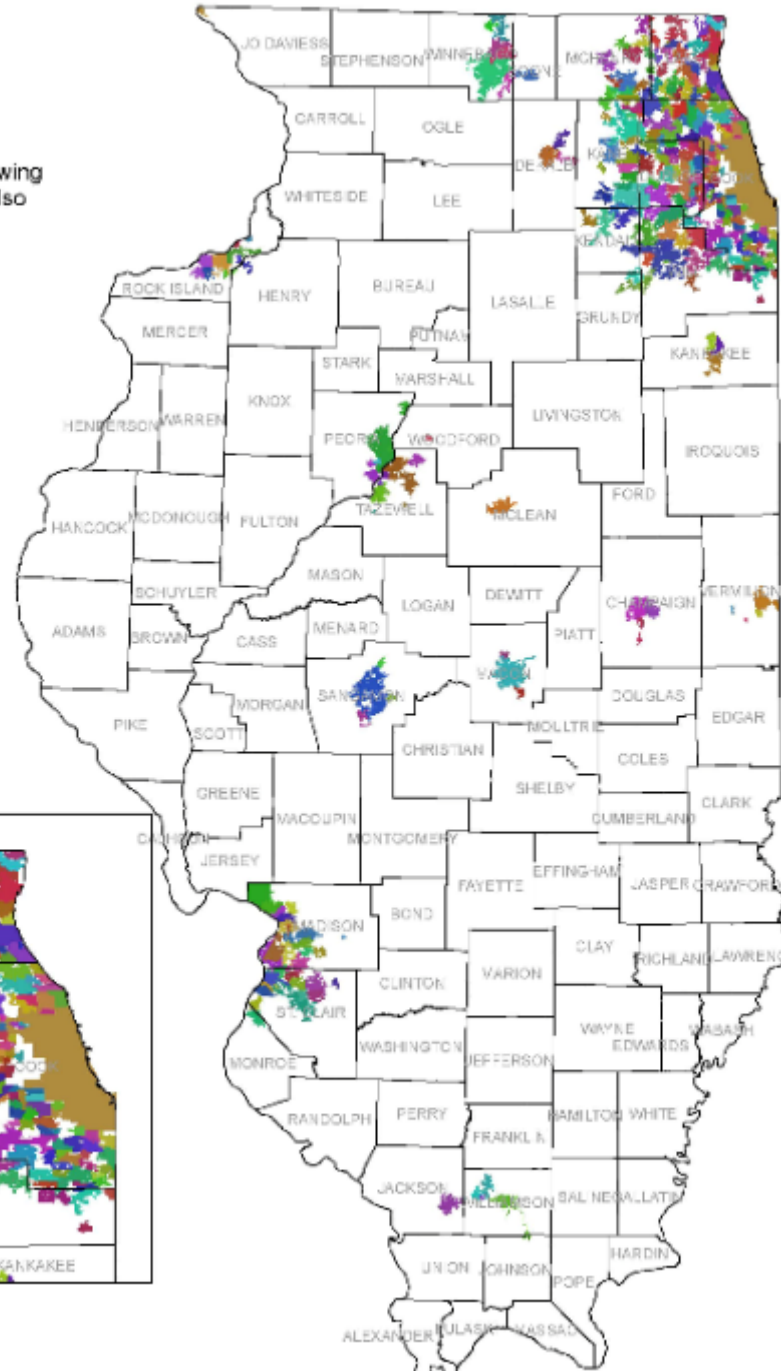
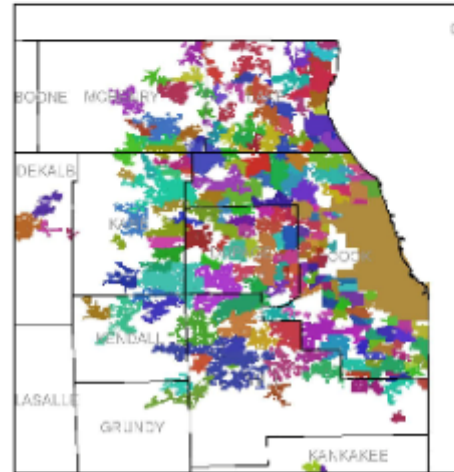
Land & Facilities MS4 Analysis

Illinois Communities with Active MS4 Status

In addition to the communities depicted on the map, the following unincorporated communities also have active MS4 status:

Bristol
Ingleside
Kickapoo
Moro
Mossville
Plato Center
Scott Airforce Base

Chicago Metro Region



Data source: MS4 reports



MS4 Annual Facilities Inspection Reports

Includes

- Public education and outreach on stormwater impacts
- Public involvement and participation
- Illicit discharge detection and elimination
- Construction site stormwater runoff control
- Post construction storm water management in new developments and redevelopments
- Pollution prevention/good housekeeping for municipal operations

Data Considerations

- Inconsistent report availability
 - 2018: 287
 - 2019: 214
 - 2020: 314
- Variable quality and quantity of information included
- Inconsistent format and terms used



Number of MS4s Implementing a Practice

	2018		2019		2020	
Number of MS4s Reporting	287		214		314	
Practice	#	%	#	%	#	%
Community Outreach	278	97%	212	100%	308	99%
Erosion Control Programs	-		204	96%	299	96%
Electronics Recycling	40	14%	185	87%	259	83%
Street Sweeping	114	39%	166	78%	239	77%
Household Hazardous Waste Collections	92	32%	166	78%	227	73%
Litter Clean Up Events	51	18%	148	70%	213	68%
De-icer Management	101	35%	132	62%	202	65%
Leaf Collection Programs	-		134	63%	203	65%
Detention Basin Management/Inspection	89	31%	113	53%	154	49%
Green Infrastructure Grants	32	12%	97	46%	119	38%
Detention Pond Inventory	-		77	36%	102	33%
GI Requirements in New Development and Redevelopment	-		65	31%	79	25%
Stormwater Master Plans	27	9%	65	31%	71	23%
GI Inventory	-		49	23%	48	15%
Rain Barrel Programs	80	27%	25	12%	41	13%
Homeowner Rain Garden Incentives	23	8%	3	1%	41	13%
Stormwater Utility Fees	24	8%	10	5%	22	7%
Community Rain Gardens	30	10%	12	7%	12	4%

A Few Outstanding MS4 Communities

Chosen by the number of practices employed of the 19 we tracked

- Elmhurst, DuPage County, 18
- DuPage County, 15
- Hanover Park, DuPage County, 15
- Urbana & Champaign, Champaign County, 14
- Rock Island, Rock Island County, 14
- Naperville, DuPage County, 14
- Barrington, Lake County, 14
- Decatur, Macon County, 12
- Buffalo Grove, Lake County, 12
- Peoria, Peoria County, 12



Noteworthy Programs: Port Barrington, Lake County

- Green Infrastructure requirements for new construction and redevelopment
 - Applicants are required to adopt strategies that incorporate storm water infiltration, reuse, and evapotranspiration of storm water into the project to the maximum extent practicable. Types of techniques include **green roofs, rain gardens, rain barrels, bio-swales, permeable piping, dry wells, and permeable pavement.**
 - Maintenance plans are required for all storm water management systems designed to serve major developments.



Noteworthy Programs: Franklin Park, Cook County

- Master Planning
 - 2017 Master Plan details future investments in Green Infrastructure with incentive programs for installing private and public rain gardens, future GI requirements for new construction and redevelopment, among others.



- [http://www.villageoffranklinpark.com/assets/1/7/Franklin Park Final Comprehensive Plan.pdf](http://www.villageoffranklinpark.com/assets/1/7/Franklin_Park_Final_Comprehensive_Plan.pdf)



County-Wide Programs

- Many MS4 communities around the state contribute to or have programs that run at a county-wide level to satisfy MS4 BMP requirements. Such places include:
 - Madison County in the St. Louis area,
 - Tazewell and Peoria Counties in the Peoria area,
 - Will, DuPage, Cook and Lake Counties in the Chicago area,
 - Winnebago and Boone Counties in the Rockford area



MWRD

Data source: MWRD Annual Stormwater Reports

Space to Grow:
4,480,216 gallon capacity



Source: MWRD 2019 Annual Stormwater Report



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Draft Review

Urban Stormwater Working Group:

Thank you for submitting the requested information for the Biennial Report. Below are links to the chapter drafts.

INSTRUCTIONS: We ask that you review the areas that are applicable to your sector -- especially the sections that you contributed.

You'll find two versions: word doc and pdf. You may use either one. For the word doc, please track your changes so we can see them. Otherwise, we may not be able to capture your suggestions. A lower tech alternative is to print out the pdf, make handwritten comments, and scan it. You'll have 1 week for review. RETURN IT BY _____.

Chapter 6: Urban Stormwater Sector - [Here](#).



Next Steps

Next meeting: Jul 13 2 pm



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