URBAN STORMWATER WORKING GROUP

MEETING 3: APR 19, 2016

ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY | Improving our water resources with collaboration and innovation

Photo by Eliana Brown

Introductions

Nora Beck, Chicago Metropolitan Agency for Planning
Steve Brendel, Madison County
Tyler Carpenter, Greater Egypt Regional Planning and Development Commission
Alec Davis, Illinois Environmental Regulatory Group
Josh Ellis, Metropolitan Planning Council
Mary Beth Falsey, DuPage County
Matt Hanauer, Association of Soil and Water Conservation Districts
Carol Hays, Prairie Rivers Network
Andrea Klopfenstein, City of Peoria
Kim Knowles, Prairie Rivers Network
Lauren Lurkins, Illinois Farm Bureau
Scott Marlow, Illinois Dept. of Transportation
Sally McConkey, Illinois State Water Survey
Stephen McCracken, The Conservation Foundation
Mary Mitros, DuPage County
Jason Navota, Chicago Metropolitan Agency for Planning
(Continued on next slide)

Introductions (con't)

Cristina Negri, Agronne National Laboratory
Bob Newport, U.S. EPA
Mike Novotney, Lake County Stormwater Management Commission
Andrew Rehn, Prairie Rivers Network
Trevor Sample, Illinois EPA
Margaret Schneeman, Chicago Metropolitan Agency for Planning
Eric Schoeny, City of Aurora
Cindy Skrukrud, Sierra Club
John Sloan, National Great Rivers Research and Education Center
Kelly Thompson, Association of Soil and Water Conservation Districts
Justin Vick, Metropolitan Water Reclamation District of Greater Chicago
Amy Walkenbach, Illinois EPA
Mike Warner, Lake County Stormwater Management Commission
Patty Werner, Lake County Stormwater Management Commission
Nancy Williamson, Illinois Dept. of Natural Resources
Rick Winkel, Prairie Research Institute

Urban Stormwater Working Group Committee Charge

- Explore funding, identify legislative initiatives, and develop plans.
- Coordinate outreach.
- Orchestrate statewide efforts related to green infrastructure expansion, MS4 program training, and urban stream, lake, and stormwater monitoring.

Today's goals

- Implementation tracking
- Subgroups
- Updates
- Determine next steps for future meetings

IMPLEMENTATION TRACKING

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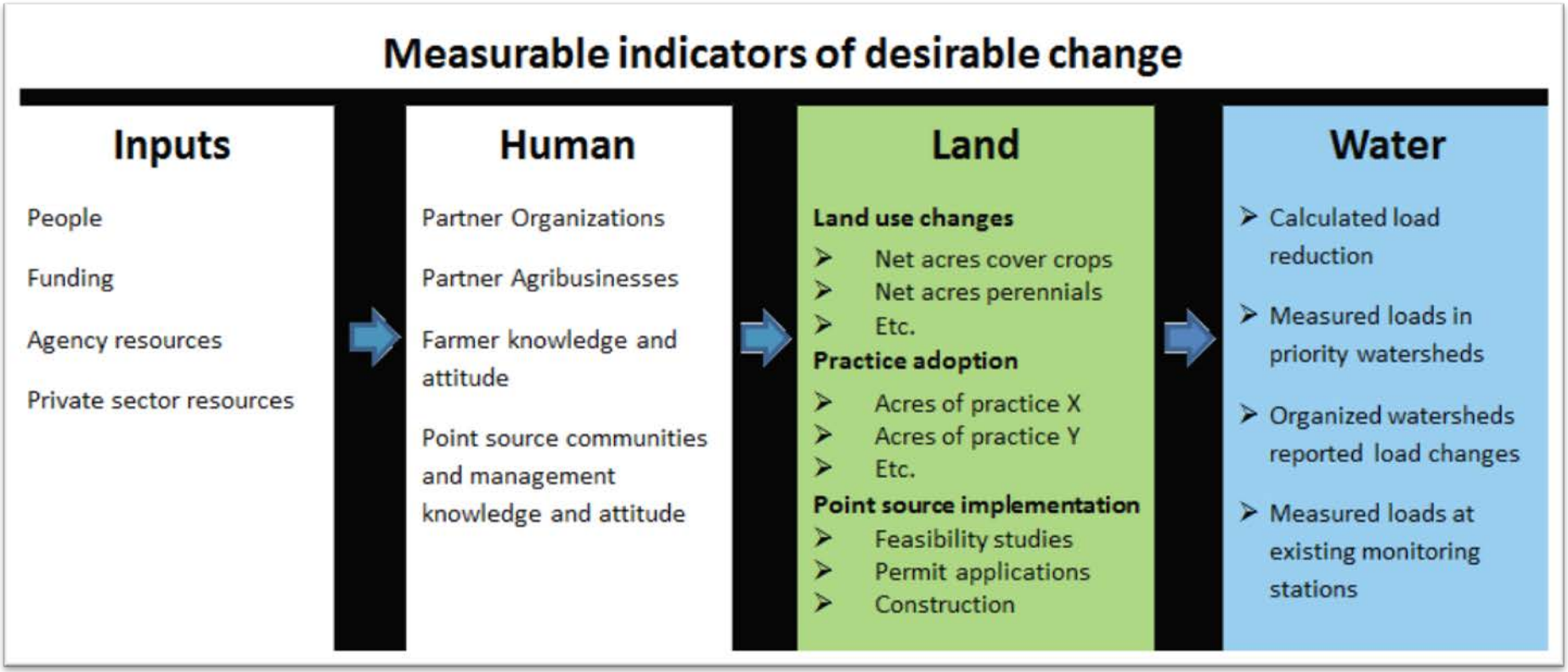
Photo by Oliver Burrus, Youth "Water Is..." Photo Contest

Implementation tracking Logic Model



Source: Iowa State University, Extension and Outreach, Measures of Success Committee

Implementation tracking Logic Model

Inputs and Human measures

- Single person from each organization sends Input and Human indicators to IWRC twice a year—July and January.
- IWRC compiles the individual updates for a stakeholder-wide update and formal report.

Inputs measures

Reporting Element 1 – Inputs

Please describe the following items related to resources available and/or invested in both point and non-point related efforts during the reporting period for the Nutrient Loss Reduction Strategy.

Staff:

Programs:	Category:	Funding:	Description:

Other Agency or Private Sector Resources: Please provide a summary of other agency and private sector resources to support NLRS activities

Example Inputs measures

- MS4 Permit holders
- 319 Grants
- Illinois Green Infrastructure Grant and Clean Water Initiative and State Revolving Fund projects
- Stormwater Utilities

Human measures

Reporting Element 2 – Human

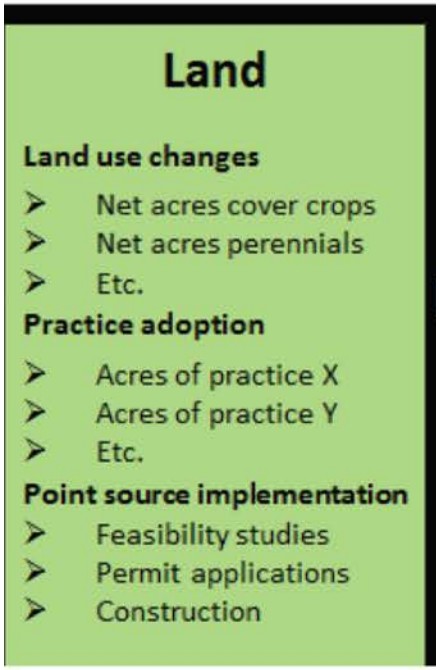
Please describe the following items related to resources available and/or invested in Organization/Agency-Supported Outreach Activities during the reporting period for the Nutrient Loss Reduction Strategy and/or practices detailed in the science assessment.

Description:	Number:	Attendance:	Topics Covered:	Partnerships:	Response/Feedback:
Field Days					
Presentations					
Conferences					
Workshops/Meetings					
Print or Media					
Radio and Television					
Newsletters					
Awards/Recognition Activities					
Surveys					
Additional Activities and Partnership Organizations:					

Example Human measures

- Green infrastructure tours
- Presentations
- Survey results
- Workshops and meetings
- Print and digital media

Implementation tracking Logic Model



AWQPF Tech Subgroup Committee Charge

1. Determine the best way to share and aggregate bmp implementation data across agencies (so we can track our progress in accomplishing the Illinois Nutrient Loss Reduction Strategy).
2. Determine what BMP implementation parameters will be tracked (e.g. cover crops, wetlands, buffer strips, etc.) and how it will be aggregated (e.g. per watershed, statewide, lump practices into categories like edge of field, etc.). This includes identifying future data parameters required from producer surveys or transect surveys to track progress in accomplishing the NLRS.
3. Assess existing BMP implementation data availability over time to advise the policy work group as they select a BMP implementation baseline year.

Metrics and what are we using to measure them

Land	FSA	USDA-NRCS	Illinois EPA	IDA	IDNR	NASS	Ag Partners
Red. N rate from backgrnd to MRTN 10%							
Nitrification inhibitor w/ all fall-applied fert on tile-drained corn							
Split appl. 50% fall + 50% sp on tiled corn							
Spring-only appl. on tile-drained corn							
Split appl. of 40% fall, 10% pre-plant, and 50% side dress							
Cover crops on all corn/soybean tile ac							
Cover crops corn/soybean non-tile ac							
Bioreactors on 50% of tile-drained land							
Wetlands on 25% of tile-drained land							
Buffers on all applicable crop land							
Perennial/energy = to pasture/hay ac							
Perennial/energy crops 10% tile-drained							
Water table management							

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nnovation

Metrics and what are we using to measure them

Land	*Units*	USDA-NRCS	Illinois EPA	FSA	IDNR	NASS
Red. N rate from backgrnd to MRTN 10%	*Cropland acres*					NASS Survey
Nitrification inhibitor w/ all fall-applied fert on tile-drained corn	*Cropland acres*					NASS Survey
Split appl. 50% fall + 50% sp on tiled corn	*Cropland acres*					NASS Survey
Spring-only appl. on tile-drained corn	*Cropland acres*					NASS Survey
Split appl. of 40% fall, 10% pre-plant, and 50% side dress	*Cropland acres*					NASS Survey
Cover crops on all corn/soybean tile ac	*Cropland acres*			To HUC8 level		NASS Survey
Cover crops corn/soybean non-tile ac	*Cropland acres*			To HUC8 level		NASS Survey
Bioreactors on 50% of tile-drained land	*# Acres treated*	EQIP	319 Grant			NASS Survey
Wetlands on 25% of tile-drained land	*Acres wetland/ # Acres treated*		319 Grant	To HUC8 level	To HUC8 level	NASS Survey
Buffers on all applicable crop land	*Acres buffers*		319 Grant	To HUC8 level	To HUC8 level	
Perennial/energy = to pasture/hay ac	*Cropland acres*			To HUC8 level		NASS Survey
Perennial/energy crops 10% tile-drained	*Cropland acres*			To HUC8 level		NASS Survey
Water table management	*# Acres effected*	EQIP	319 Grant			

resources with innovation

Discussion

- How should we determine what we measure?

Implementation Tracking Logic Model

Water

- Calculated load reduction
- Measured loads in priority watersheds
- Organized watersheds reported load changes
- Measured loads at existing monitoring stations

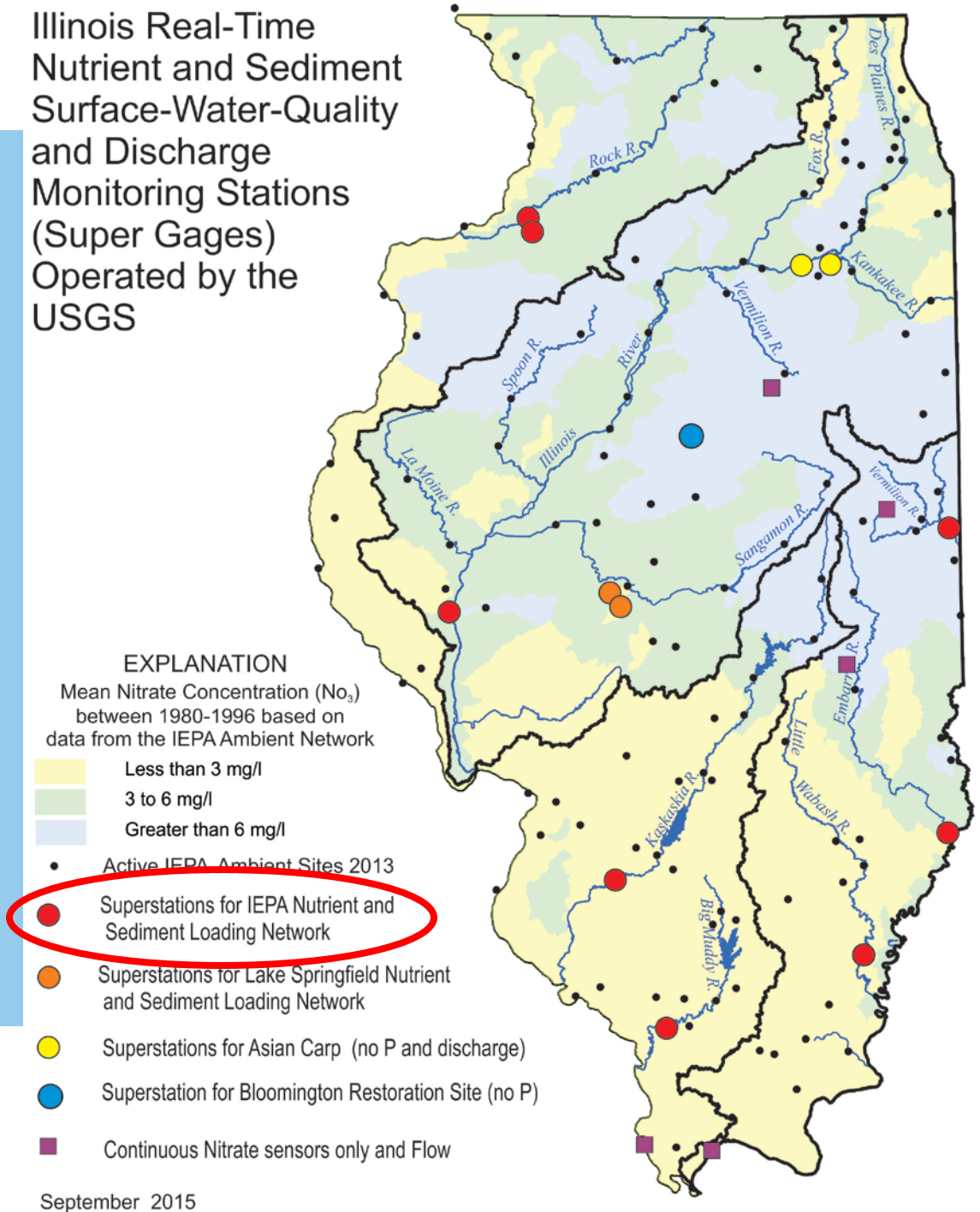
Metrics and what are we using to measure them

What are we using to measure it?

Water	FSA	USDA-NRCS	Illinois EPA	IDA	IDNR	NASS	Ag Partners
➢ Calculated load reduction			Region V Load Estimation Spreadsheet, 319 Grant projects		GIS Model		
➢ Measured loads in priority watersheds							
➢ Organized watersheds reported load changes	Nutrient Monitoring Council will do these.				GIS Model		
➢ Measured loads at existing monitoring stations							
Others_____							
Others_____							

The Plan

- Basins covering almost 75% of area of the State
  - **Rock River**
  - **Green River**
  - **Illinois River**
  - **Kaskaskia River**
  - **Big Muddy**
  - **Little Wabash**
  - **Embarras River**
  - **Vermilion River**
- Current USGS gaging station (flow)
- Current IEPA Ambient site/Historical Data



SUBGROUPS

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Photo of Illinois R by Eliana Brown

Subgroups

At the last meeting, USWG discussed the importance of funding and for there to be a basis of understanding by elected officials and the general public to support this funding. We identified the need for 2 and possibly 3 subgroups that focus on outreach, legislative issues, and MS4 programs.

Our assignment was to define the subgroups.

- Legislative (Decision maker) Education Subgroup
- Public Education Subgroup

Subgroups

- **Legislative Subgroup Charge:**
  - Provide education about stormwater issues to governmental decision makers such as elected officials and stormwater managers.

Legislative Subgroup

- Series of events that engage governmental decision makers such as elected officials and technical staff.
  - **Illinois Water Conference:** Oct. 25-27, 2016

Legislative Subgroup

Preconference Workshop: Tues, Oct. 25

Illini Union | Champaign-Urbana

Legislative Subgroup

Target audience

Elected officials including:

- Municipal mayors, mangers, or council members
- County board chairpersons, members or commissioners
- Planning Commissioners
- State legislators

Technical staff including:

- Local staff responsible for development aspects of MS4 permit compliance
- Local, county, and consulting planners and engineering staff
- Public works officials, public safety staff, and bike/ped/transit coordinators
- Park, recreation, and urban forestry/arborist staff
- Stormwater, environmental planning, and watershed program staff

Legislative Subgroup

Topics

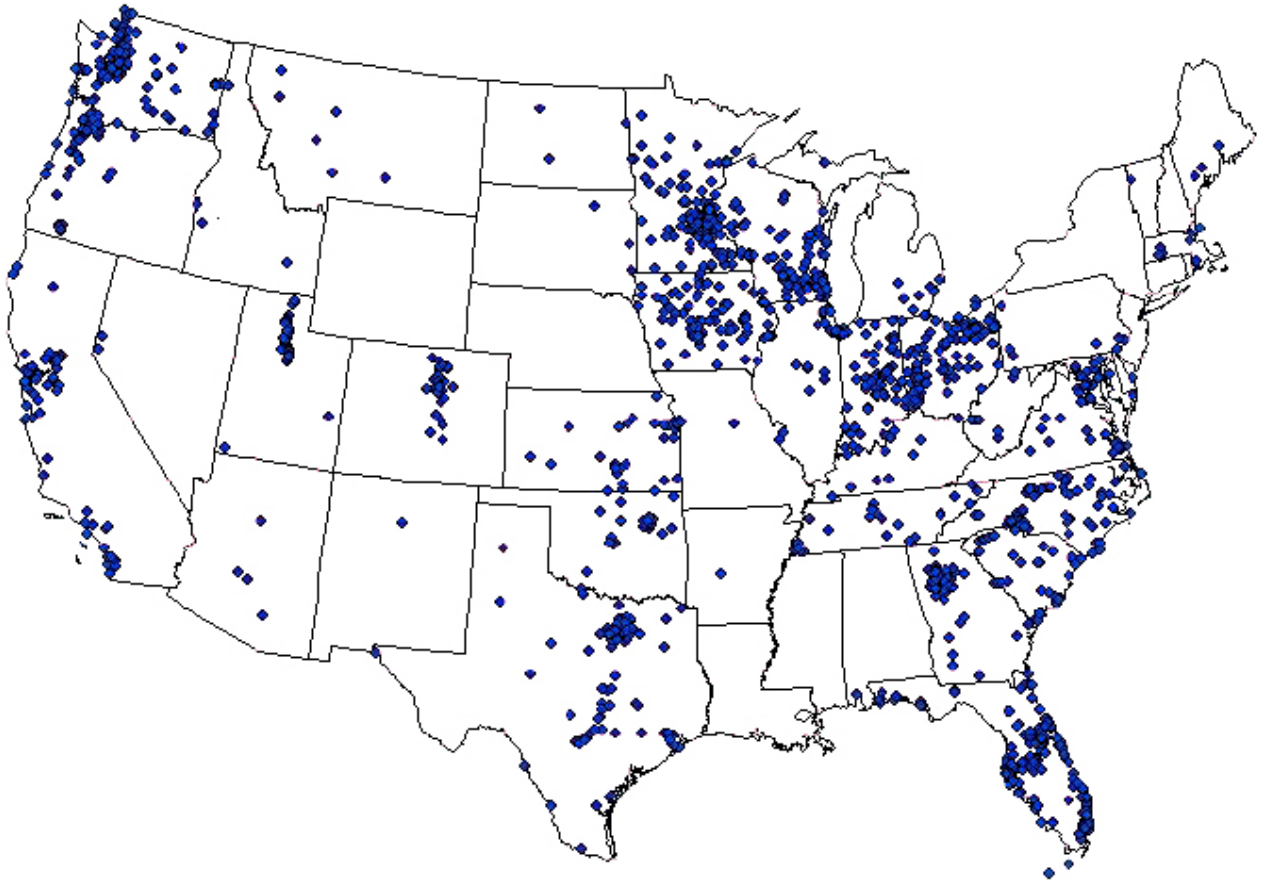
- **General info session** for elected officials;
- Followed by more detailed info sessions:
  - **Green Infrastructure Asset Management/O&M**
  - **MS4 Permit and Program Updates**
  - **Funding and Finance**

Legislative Subgroup

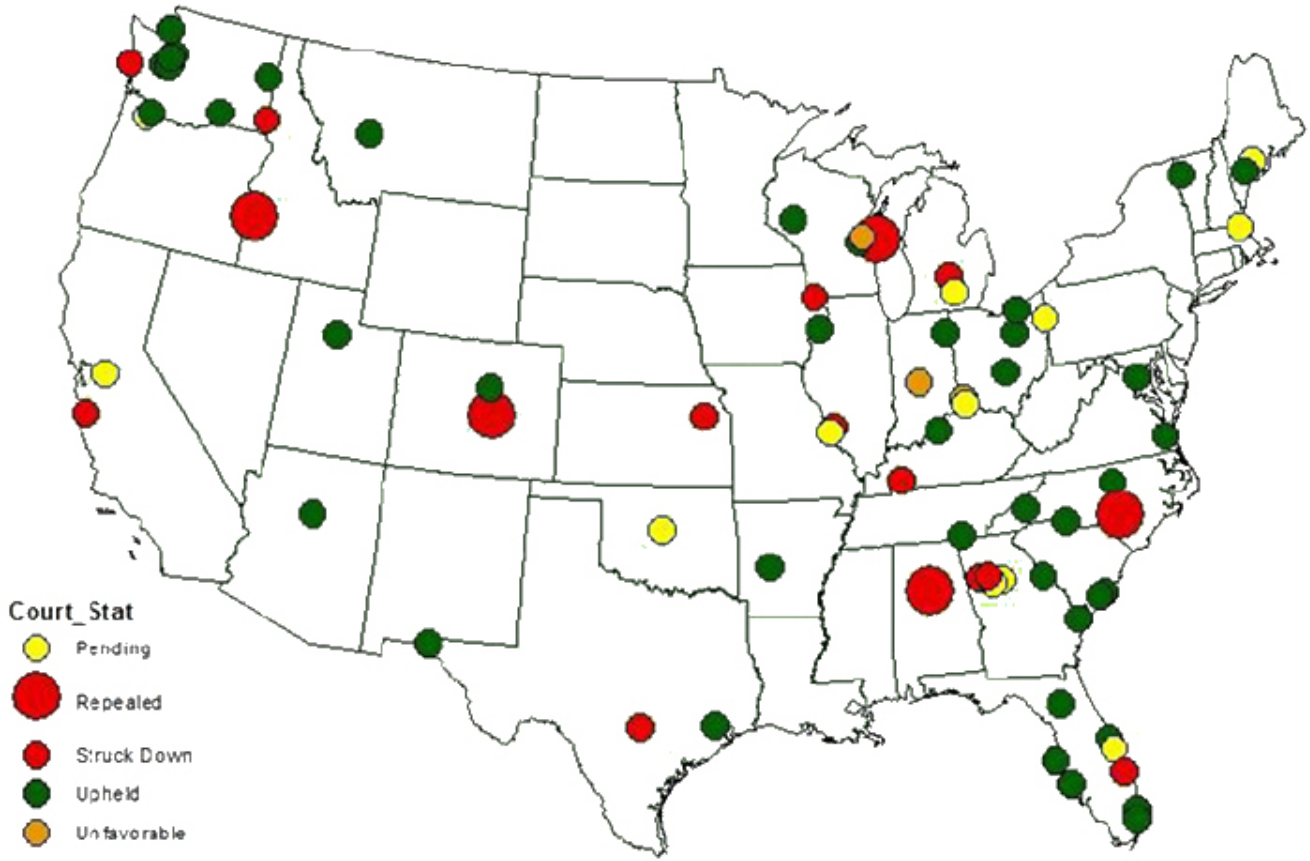
- **Who wants to help?**
  - Evaluation
  - Materials
  - Promotion

Subgroups

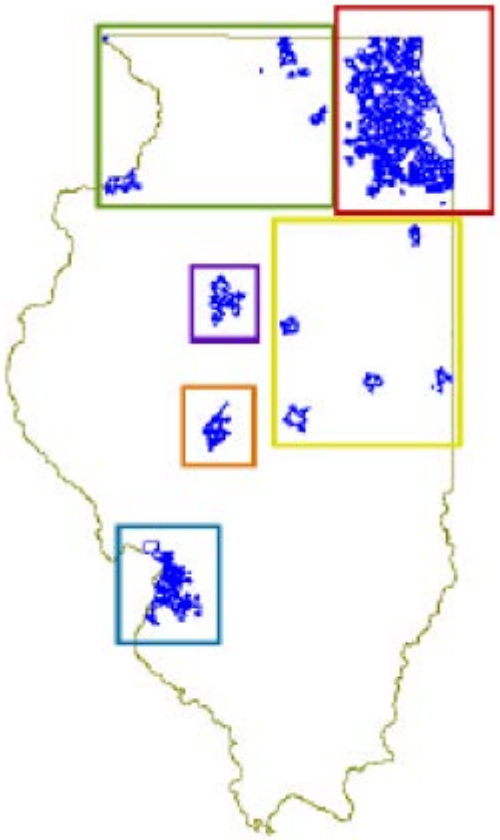
- **MS4 Public Education Subgroup Charge:**
  - Work to develop and disseminate public education material for a general audience that includes nutrient information.



Stormwater Utilities 2014 (Western Kentucky University)



Stormwater Utility Challenges 2013 (Western Kentucky University)

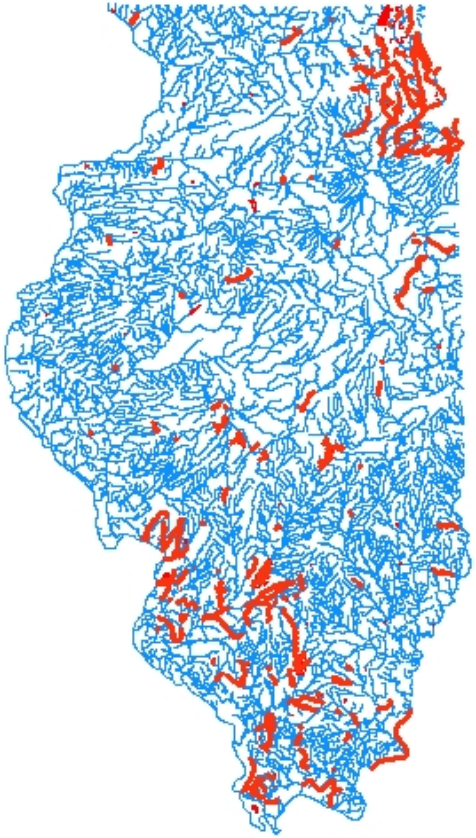


Illinois MS4s

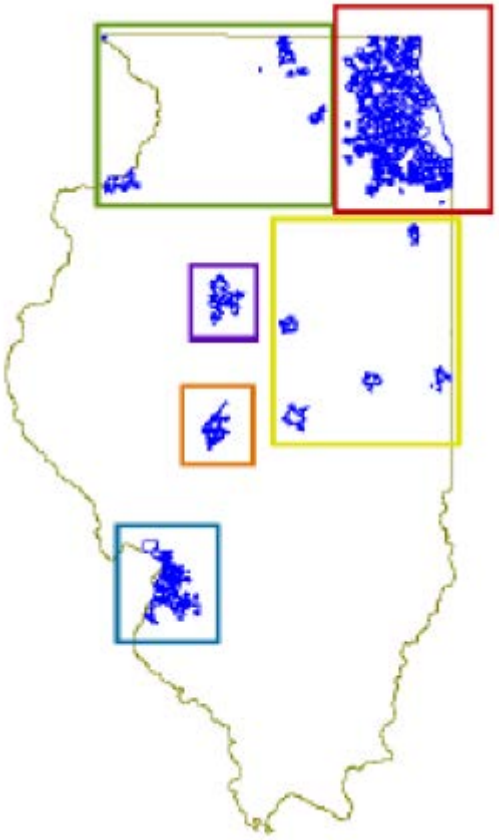
Public Education and Outreach on Storm Water Impacts

"Distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff."

- IL General MS4 Permit B.1.a



2014 stream impairment due to urban runoff



Illinois MS4s

MS4 Public Education Subgroup

- Southern
- Central
- Northern

Outreach: Discussion

- How to connect these efforts?
- What are the gaps?

UPDATES

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Updates

- Authority to establish Stormwater Utility
- Urban Flooding Awareness Act Report
- Resilient Watershed Initiative

Policy Working Group participation By Sector

Agriculture

Illinois Corn Growers Association

C-BMP Illinois Council on Best Management Practices

Illinois Fertilizer & Chemical Association
Supply • Service • Stewardship

pork Illinois Pork Producers

Illinois Farm Bureau
Farm. Family. Food.

Point Source

Downers Grove Sanitary District

American Bottoms PChem

UCSD

IERG

Stormwater

Aurora Illinois

The Village of Tinley Park

Public Water Supply

City Water, Light & Power Springfield IL

AQUA

University/ Technical Assistance

ATSWCD Association of Illinois Soil & Water Conservation Districts

Illinois State Water Survey
Prairie Research Institute

NRES Department of Natural Resources and Environmental Sciences

University of Illinois Extension

Government

Illinois Environmental Protection Agency

Illinois Department of Agriculture

USDA Natural Resources Conservation Service

Environmental

prairierivers network

Sierra Club

Next Steps

- How to manage progress on the charge?
- Next meeting
  - Topics

THANK YOU!

Photo by: Thomas Durbin