



NLRS Partnership Conference 2019

Welcome

Eliana Brown

University of Illinois Extension/Illinois-Indiana Sea Grant



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Watershed Outreach Associates Update

Haley Haverback-Gruber & Jennifer Woodyard
University of Illinois Extension



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Working Group Updates



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Nutrient Monitoring Council

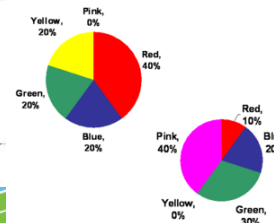
Trevor Sample, Illinois EPA



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NMC Charges (Revised 10/26/15)

1. Coordinate the development and implementation of monitoring activities (e.g., collection, analysis, assessment) that provide the information necessary to:
 - a. Generate estimations of 5-year running average loads of Nitrate-Nitrogen and Total Phosphorus leaving the state of Illinois compared to 1980-1996 baseline conditions; and
 - b. Generate estimations of Nitrate-Nitrogen and Total Phosphorus loads leaving selected NLRS identified priority watersheds compared to 1997-2011 baseline conditions; and
 - c. Identify Statewide and NLRS priority watershed trends in loading over time using NMC developed evaluation criteria.
2. Document local water quality outcomes in selected NLRS identified priority watersheds, or smaller watersheds nested within, where future nutrient reduction efforts are being implemented (e.g., increase in fish or aquatic invertebrate population counts or diversity, fewer documented water quality standards violations, fewer algal blooms or offensive conditions, decline in nutrient concentrations in groundwater).
3. Develop a prioritized list of nutrient monitoring activities and associated funding needed to accomplish the charges/goals in (1) and (2) above.



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Nutrient Monitoring Council Members

Illinois EPA

Gregg Good, Rick Cobb

Illinois State Water Survey

Laura Keefer

Illinois Natural History Survey

Open

Illinois Dept. of Natural Resources

Open

Univ. of IL – Dept. of Agriculture and Biological Engineering

Paul Davidson

Sierra Club

Cindy Skrukrud

MWRDGC

Justin Vick

Illinois Corn Growers Association

Laura Gentry

U.S. Army Corp of Engineers-Rock Island

Open

U.S. Geological Survey

Kelly Warner

National Center for Supercomputing Apps

Jong Lee

Univ. of IL – Dept. of Natural Resources and Environmental Sciences (Emeritus)

Greg McIsaac

NLRS Coordinator – Illinois EPA

Trevor Sample



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2019 Meetings

- March 19, Springfield
- September 9, Champaign
- October 22, Champaign



MARCH 19 2019

- Dr. Greg McIsaac—Nitrate-N and Phosphorus Load and Yield Estimates in Illinois Rivers.
- Jong Lee—Updates to Great Lakes to Gulf Virtual Observatory
- Momcilo Markus, ISWS—Assessment of NPS Nutrient Load Reduction Goals under Changing Climate
- Kelly Warner and Paul Terrio—USGS Happenings and Updates
- Trevor Sample—NLRS Biennial Report update
- Gregg Good—Nutrient Science Advisory Committee Report (NSAC) update
- Member Updates



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SEPTEMBER 9, 2019

- Gregg Good—NMC Membership, NSAC Report update
- Kelly Warner—Havana Lowlands Groundwater Monitoring Project Update
- Jong Lee—Great Lakes to Gulf Virtual Observatory
- Dr. Greg McIsaac—Nitrogen Related Presentations
 - Critique of March 2018 Science Article-N Reduction Lag Times to Gulf of Mexico
 - Possible Cause of Nitrate Load Increase in the Rock River from 1980-1996 to 2013-2017
 - Preliminary Nitrate Budget for the Illinois River



SEPTEMBER 9, 2019 (cont.)

- Paul Terrio—Estimating Statewide Nutrient Loads from USGS Super Gages: Adding Non-Monitored Areas and Subtracting WI and IN contributions
- Kelly Warner and Gregg Good—Super Gages Update and 2021-2025 Operation and Funding Discussion
- Member Updates



October 22, 2019

- Discuss Method for Calculating Statewide Annual Nutrient Loads
 - ISWS will work with Dr. McIsaac to develop a proposal for including non-monitored areas while subtracting Wisconsin and Indiana nutrient contributions.
 - These loads will then be incorporated into the USGS Super Gages Annual Report to Illinois EPA.



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Agriculture Water Quality Partnership Forum (AWQPF)

Warren D. Goetsch, Illinois Department of Agriculture



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AWQPF Membership

- American Farmland Trust
- Association of Illinois SWCDs
- USDA-Farm Service Agency
- IL Certified Crop Adviser Board
- IL Corn Growers Association
- IL Department of Agriculture
- IL Department of Natural Resources
- IL Environmental Protection Agency
- IL Farm Bureau
- IL Fertilizer & Chemical Association
- IL Land Improvement Contractors Association
- IL Pork Producers Association
- IL Society of Professional Farm Managers & Rural Appraisers
- IL Soybean Association
- IL Stewardship Alliance
- Metropolitan Water Reclamation District of Greater Chicago
- Nutrient Research & Education Council
- Prairie Rivers Network
- The Nature Conservancy
- University of Illinois
- USDA-Natural Resources Conservation Service



AWQPF Objectives

- Steer and coordinate outreach and educational efforts to help farmers address nutrient loss and select BMPs
- Identify needed educational initiatives or training for farmers and technical advisors
- Strengthen connections between industry initiatives, certified crop advisor continuing education requirements, state initiatives, and other technical services
- Track BMPs
- Coordinate cost-share and targeting
- Develop other tools as needed



AWQPF Meetings

- April 4, 2017
 - April 30, 2018
 - November 13, 2018
 - April 30, 2019
- Recommended to include tillage data in future biennial reports
 - Explored various sources for cover crop data
 - Recommended the phrase “*Go Date*” for fall NH₃ application
 - Expressed interest in future work with Extension watershed coordinators
 - Recognized Champaign County SWCD’s ***S.T.A.R.*** program as an appropriate tool for operator and landowner evaluations
 - Continues to track progress regarding strategy implementation by the agriculture sector



AWQPF Technical Subgroup Membership

- American Farmland Trust
- Association of Illinois SWCDs
- USDA-Farm Service Agency
- IL Department of Agriculture
- IL Department of Natural Resources
- IL Environmental Protection Agency
- IL Farm Bureau
- IL Fertilizer & Chemical Association
- IL Land Improvement Contractors Association
- The Nature Conservancy
- University of Illinois
- USDA-National Agriculture Statistics Service
- USDA-Natural Resources Conservation Service



AWQPF Technical Subgroup Objectives

- Determine appropriate methods to share and aggregate BMP implementation data across agencies for progress tracking
- Determine what BMP implementation parameters to be tracked and how data is aggregated for reporting



AWQPF Technical Subgroup Meeting

- July 17, 2018
 - Agreed to continue submitting information for land measures, resources, and outreach on programs and efforts for biennial reporting purposes.
 - Agreed to follow the Hypoxia Task Force Nonpoint Source Measures 2018 Workgroup recommendations for BMP implementation tracking:
 - Location
 - Conservation practice type
 - Applied amount or practice units
 - Practice implementation date



AWQPF & Technical Subgroup Report

Questions?



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Urban Stormwater Working Group

Eliana Brown

University of Illinois Extension/Illinois-Indiana Sea Grant



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Membership

Chicago Metropolitan Agency for Planning

City of Champaign

City of Peoria

DuPage County

Greater Egypt Regional Planning and Development

Illinois Dept. of Natural Resources

Illinois EPA

Illinois Environmental Regulatory Group

Illinois-Indiana Sea Grant

Illinois Sierra Club

Illinois State Water Survey

Madison County

The Conservation Foundation

Parkland College

University of Illinois

University of Illinois Extension



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Urban Stormwater Working Group

Charge:

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



Urban Stormwater Working Group

Meetings:

July 23, 2019 (Education Subgroup)

November 12, 2019 (Full work group)



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Urban Stormwater Working Group

Education subgroup initiatives:

Resource Repository

Stormwater 101 template

Housed at IASFM website

Keep adding to the Repository with new materials.

Due with spreadsheet: January 31, 2020



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Partner Initiatives



Guide to Flood Susceptibility and Stormwater Planning

July 2018



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Partner Initiatives



[Home](#) / Sustainable Communities

Sustainable Communities



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<https://iiseagrant.org/work/healthy-waters/programs-initiatives/natural-lawn-care/>



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Urban Stormwater Working Group



go.Illinois.edu/stormwaterhome



www.redoakraingarden.org
@RainGardenUIUC



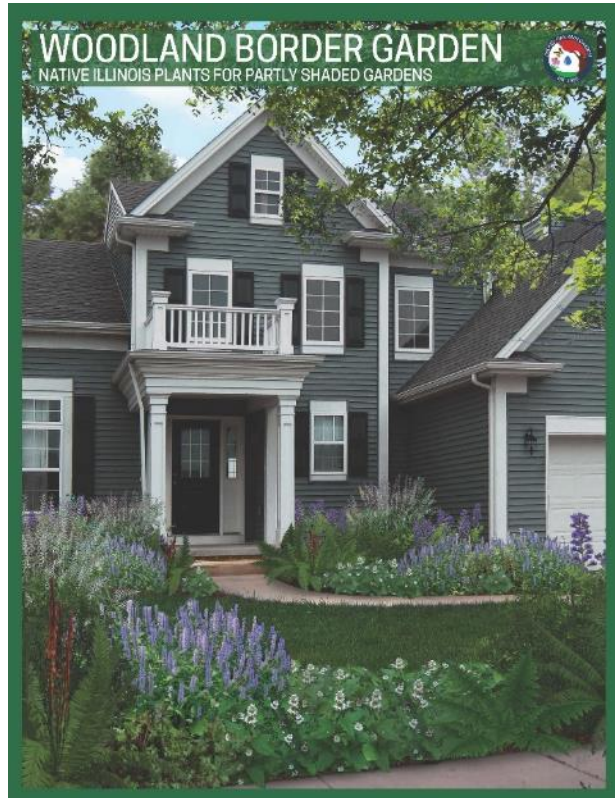
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Urban Stormwater Working Group

Tracking subgroup:

Share the DuPage County's method with other local governments.

Develop Green Infrastructure inventory

Presented the NRLS at the IAFSM conference in March 2019.

Attended Calumet Stormwater Collaborative meeting as a stakeholder.



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Urban Stormwater Working Group

Initiatives for 2020

Encourage more participation in partner spreadsheet.

Utilize Extension MS4 analysis results.

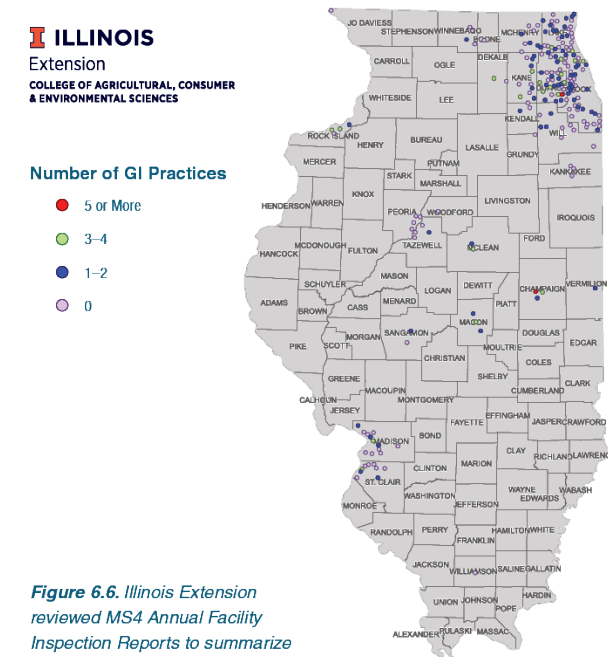


Figure 6.6. Illinois Extension reviewed MS4 Annual Facility Inspection Reports to summarize urban stormwater implementation



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Urban Stormwater Working Group

Determine an incentive for tracking. Asset management?

Consider a basic MS4 template that would streamline data collection.

Look at IWEA Watershed committee list for potential additional partners/projects.



Urban Stormwater Working Group

Future topics

Tracking: Calumet Stormwater Collaborative's BMP inventory

Golf courses: Oak Meadows and/or Harborside Golf Course



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Urban Stormwater Working Group

Potential meeting locations

CMAP (Chicago)

Springfield Crowne (as part of the IWEA Watershed track)

IDNR is compiling a venue list.



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Performance Benchmark Committee

Cindy Skrukrud, Sierra Club



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Performance Benchmark Committee

- Established 2016
 - 2015 Strategy identified no specific scenario to reach goals
 - Scenarios NP2 and NP3 meet 45% reduction targets
- Charge: Work with sector workgroups to identify steps to meet:
 - 2025 interim milestones
 - 45% targets
 - In-state waterway cleanup goals
- Earlier years-worked with point sources on reporting
- 2019 Discussions: implementation targets, trajectories, flexibility, learn as we go, resource needs
 - Chapter 8: Adaptive Management

NEW



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2019 Chapter 8 Adaptive Management

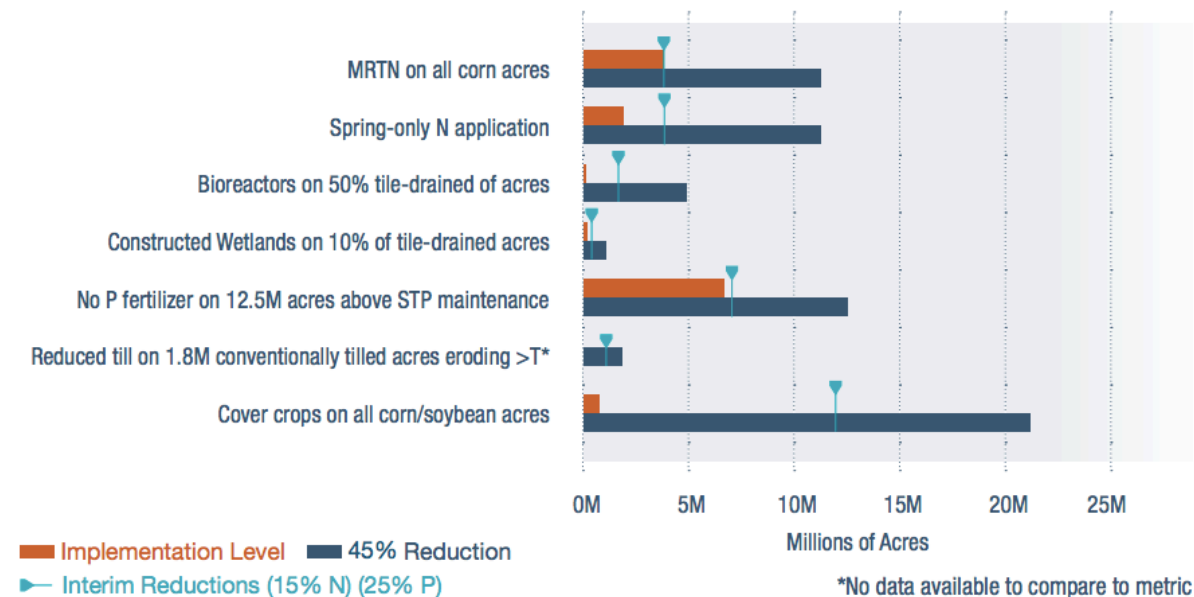


Figure 8.3. Agricultural implementation as compared to Scenario NP2

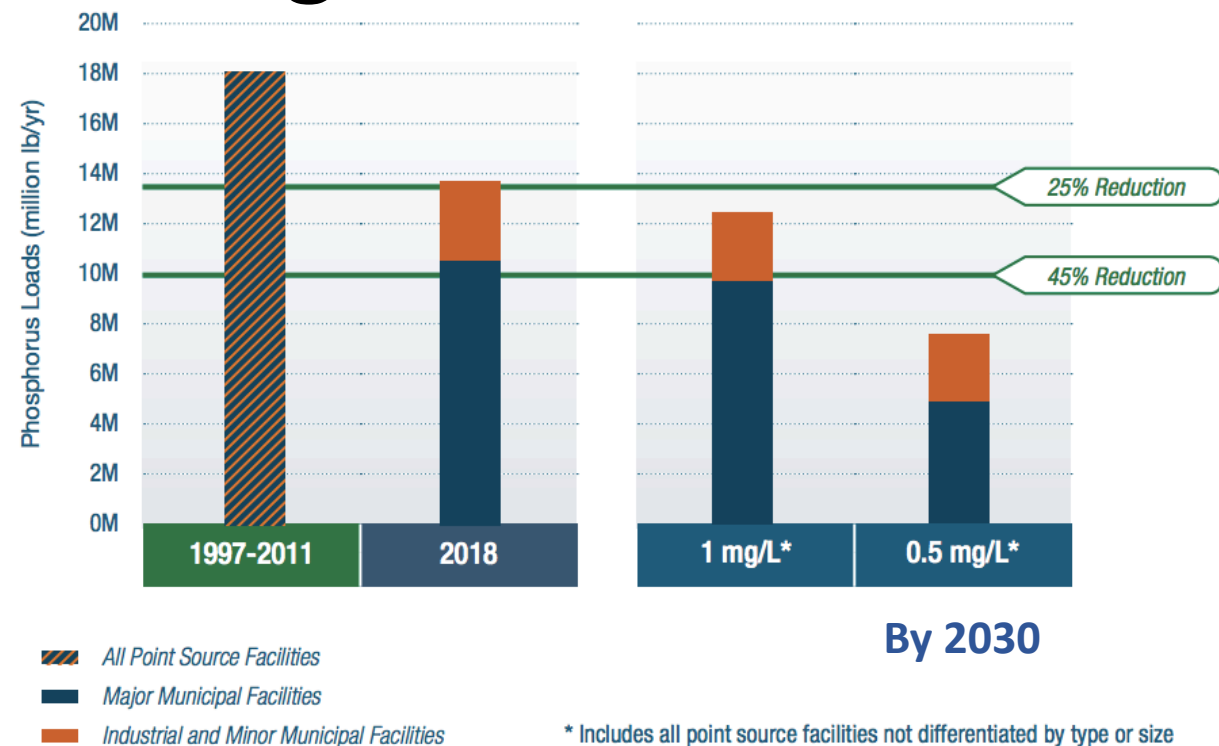


Figure 8.5. Total Phosphorus (Point Source Load), Estimated Future Total Phosphorus (Point Source Load)

Total Nitrogen 10% reduction



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2019 Chapter 8 Adaptive Management-Pt Sources

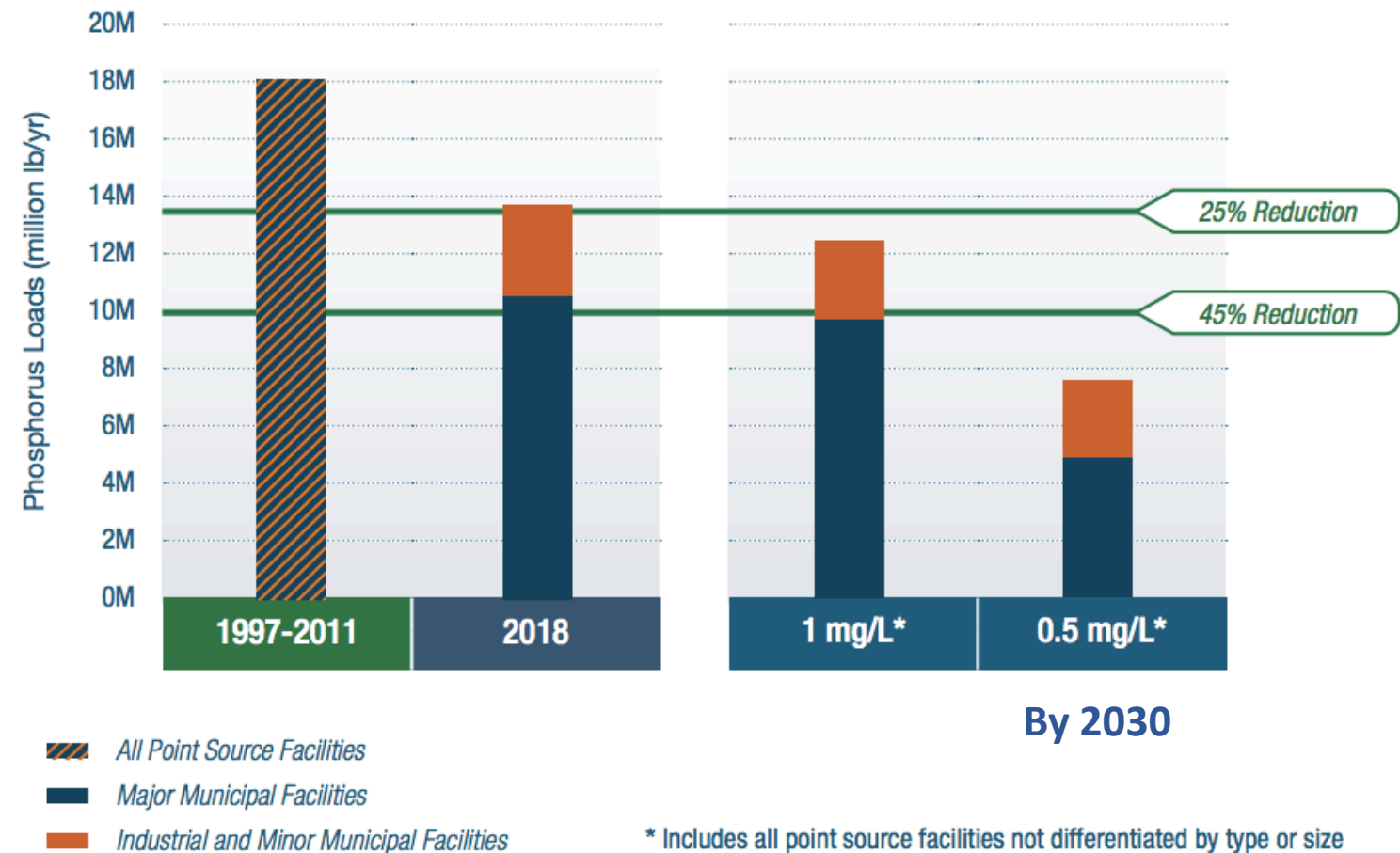


Figure 8.5. Total Phosphorus (Point Source Load), Estimated Future Total Phosphorus (Point Source Load)

Total Nitrogen 10% reduction



2019 Chapter 8 Adaptive Management-Ag Sector

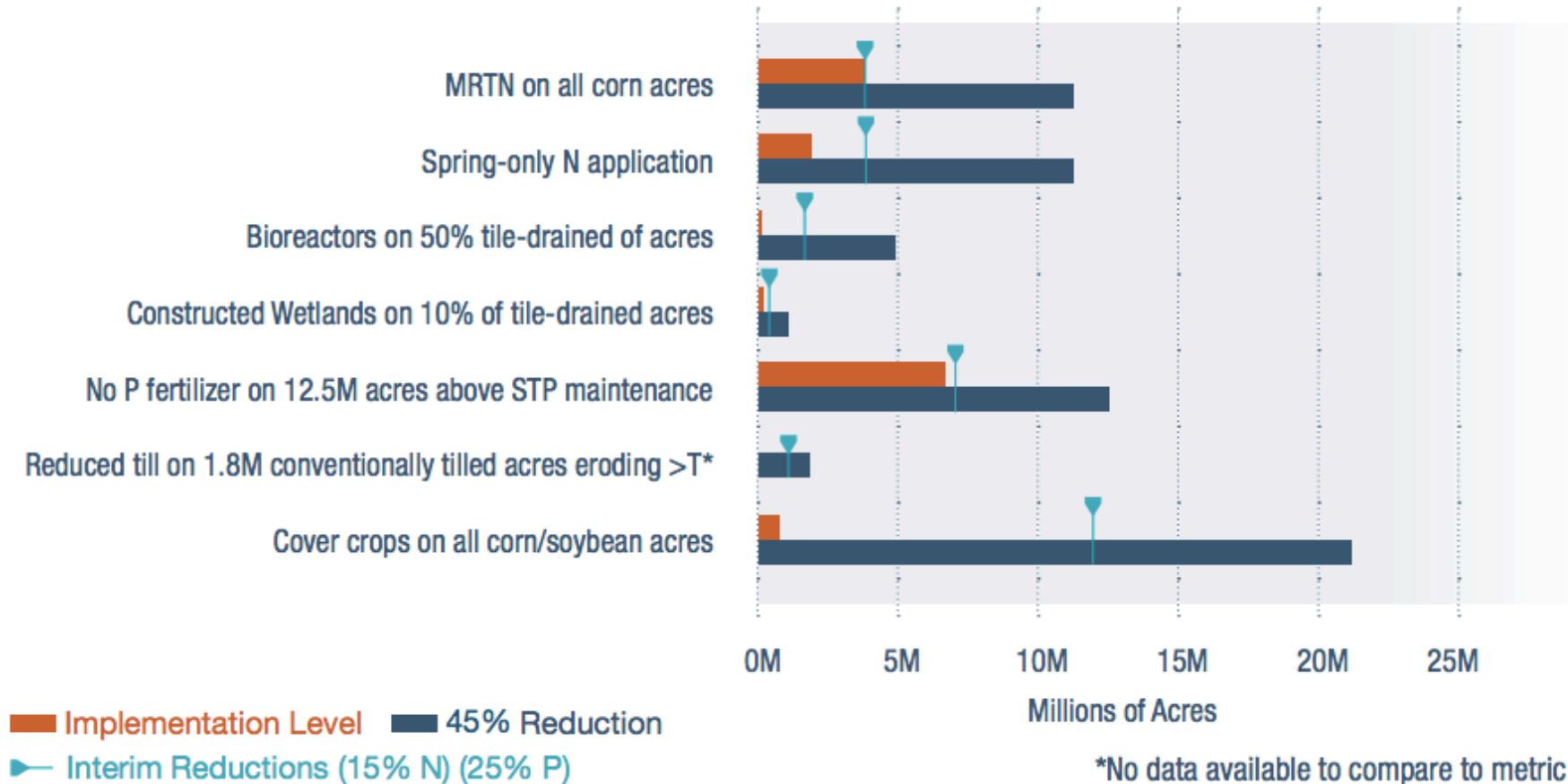


Figure 8.3. Agricultural implementation as compared to Scenario NP2

2021 Chapter 8 Adaptive Management

- What do you want to see?
 - Investigations into why nutrient loads in some watersheds are increasing greater than predicted by increased precipitation & flows
 - Where on the land are ag practices being implemented? (can this info help account for differences in performances by different watersheds?)
 - Flesh out alternative scenario?
 - Your thoughts/questions-
 - 1.
 - 2.
 - 3.
 - 4.



Communications Subgroup

Trevor Sample, Illinois EPA



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2018 Activities

- Developed NLRs “Common Message” Presentation
 - Available on NLRs Webpage
 - Provided basic information on the NLRs with highlights from the 2017 Biennial Report
- Mailed hardcopies of the NLRs Report and 2017 Biennial Report and letter to Illinois legislators.



2020 Activities

- Update NLRs “Common Message” Presentation
 - Provided basic information on the NLRs with highlights from the 2019 Biennial Report.
 - Steering Committee will develop a draft presentation.
 - Communication Subgroup members will review and provide comments
 - PDF version will be available on the NLRs page. PowerPoint versions may also be made available.
- We will once again mail hardcopies of the NLRs Report and 2017 Biennial Report to Illinois legislators.
- Other??





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Break

10:00 – 10:15 am



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NLRS Website Updates

Trevor Sample, Illinois EPA



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Biennial Report Discussion

Eliana Brown

University of Illinois Extension/Illinois-Indiana Sea Grant



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Biennial Report Discussion

2019 Biennial Report is approximately twice as long as the 2017 report.

“Navigating this Report”

It reorganizes the working groups into their own chapter.

The Agriculture Chapter (Chapter 4) is the longest. It includes Transect Survey information and additional NRCS project information.

The report has a new chapter: Adaptive Management (Chapter 8).



Future Initiatives



UMR Water Quality Improvement Act

Lauren Salvato, UMBRA



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US EPA Nutrient Strategy Grant

Trevor Sample, Illinois EPA



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Future Meetings

Eliana Brown, University of Illinois Extension



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Send meeting conflict dates to
Kate (kgardin2@Illinois.edu) by
Friday, Dec 13th



Next year's Partnership Conference
will be in Urbana

Early November 2020....



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Spreadsheets are due January 31, 2020

We are working on an online version.

https://illinoisaces.co1.qualtrics.com/jfe/form/SV_6h5KhDJQUb01HeJ



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Any speakers you'd like to suggest?



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Future Resource Needs

Trevor Sample, Illinois EPA



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Future Resource Needs

- USGS Super Gage Network
 - Current agreement between Illinois EPA and USGS expires in March 2021.
 - Monitoring is currently scheduled to end September 2020
 - Illinois EPA is looking for assistance to continue funding the gages for another five years.
- University of Illinois Extension—Meeting Facilitation and Biennial Report
 - Current agreement between Illinois EPA and Extension expires March 2021.
 - Illinois EPA is looking for assistance to continue the meeting and reporting structure into the future.
- Extension Watershed Coordinators
 - Current agreement between Illinois EPA and Extension expires June 2023
- Other??



Thank You!



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