

Policy Working Group

March 29, 2021



I ILLINOIS
Extension
COLLEGE OF AGRICULTURAL, CONSUMER
& ENVIRONMENTAL SCIENCES



ILLINOIS
NUTRIENT LOSS
REDUCTION STRATEGY

Agenda

10:30 – 10:40 am	Welcome and Introductions – Eliana Brown
10:40 – 10:55 am	Science Team Practice Approval Results – Jonathan Coppess
10:55 – 11:10 am	Biennial Report Status – Eliana Brown
11:10 – 11:25 am	Nutrient Explorer Update – Kate Gardiner
11:25 – 11:40 am	Update on NLR Practices for Illinois – Dan Schaefer
11:40 – 11:55 am	Fall Covers for Spring Savings – Brian Rennecker
11:55 am – Noon	Next Steps – Trevor Sample



Introductions

Type your name and affiliation in the chat box.



Introductions

Michael Woods, Illinois Dept of Agriculture
Division Manager
Division of Natural Resources



Science Team Practice Approval Results

Jonathan Coppess, University of Illinois



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NLRS Science Team



Laura Christianson
Crop Sciences



Jonathan Coppess
Agriculture and Consumer
Economics



Paul Davidson
Agricultural and Biological
Engineering



Dennis Bowman
Agriculture and Natural
Resources



Maria Villamil
Crop Sciences



Andrew Margenot
Crop Sciences



Reid Christianson
Crop Sciences



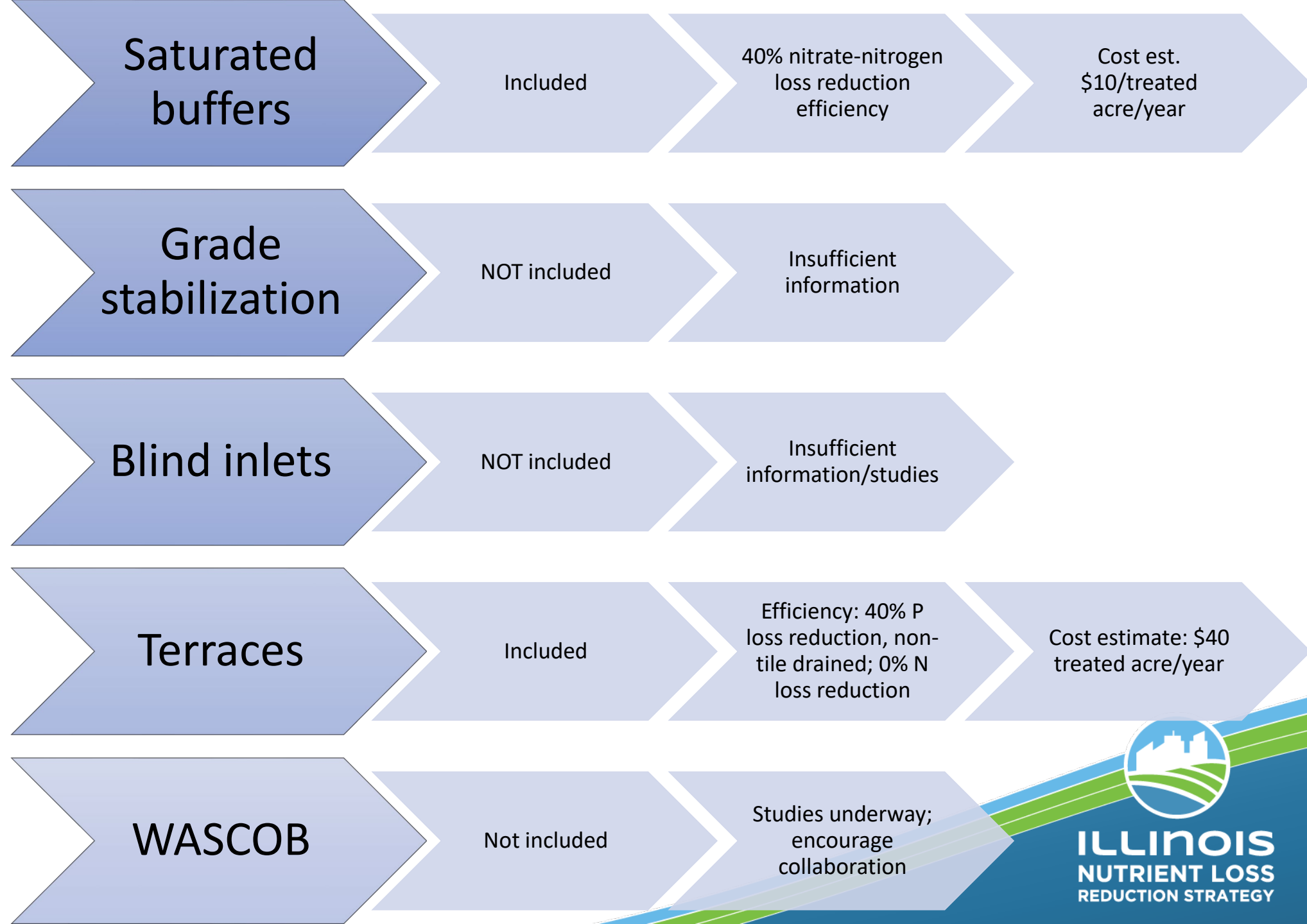
George Czapar
Crop Sciences



NLRS Science Team

Proposed Practice Decisions

2020 Submissions



Biennial Report Status

Eliana Brown



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Chapter 3: Science Assessment Update

Nitrogen-N and Phosphorus River Loads *by Gregory F. McIsaac*

Introduction

Methods

Results

U.S. Geological Survey Continuous Loadings Network *by Paul Terrio*

Summary of 2020 Illinois NLRs Scenarios *by Reid Christianson*

Background

Scenario Summary

Methods

Results

Conclusion

Background Literature

Science Team Proposed Practice Decisions *by NLRs Science Team*

Decision process

Saturated buffers

Grade stabilization

Blind inlets

Terraces

WASCOBs



Chapter 4: Agricultural Sector

Implementation Report

Resource Measures

Staff Resources

Funding Resources

Outreach Measures

Outreach Activities

Topics

Land and Facilities Measures

US Department of Agriculture

Farm Service Agency

Conservation Reserve Program (CRP)

Cover Crops

Natural Resources Conservation Service

Environmental Quality Incentive Program (EQIP)

Conservation Stewardship Program (CSP)

Agriculture Conservation Easement Program (includes WREP)

Mississippi River Basin Healthy Watersheds Initiative

National Water Quality Initiative

Regional Conservation Partnership Program

Upper Macoupin Creek Watershed Partnership

Illinois Headwaters Conservation Partnership

Otter Lake Source Water Protection

Precision Conservation Management (NRCS)

RB-Big Bend Enhancing Water-Soil-Habitat Quality

Driftless Area Habitat for the Wild & Rare Phase 2



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Chapter 4: Agricultural Sector (con't)

<p>US Department of Agriculture (con't) National Agricultural Statistics Service <i>Illinois NLRs Survey</i> <i>Nitrogen Management</i> <i>Nitrification Inhibitors</i> <i>Fertilizer Application Strategies</i> <i>Phosphorus Management</i> <i>Cover Crops</i> <i>Edge-of-Field Questions</i></p>
<p>Illinois Department of Natural Resources Conservation Reserve Enhancement Program (CREP)</p>
<p>Illinois Department of Agriculture Partners for Conservation Program <i>Illinois Soil Conservation Transect Survey</i> <i>Streambank Stabilization and Restoration Program</i> Fall Covers for Spring Savings</p>
<p>Illinois Environmental Protection Agency Section 319 Non-Point Source Program</p>
<p>University of Illinois Woodchip Bioreactors Illinois Extension Watershed Outreach Associates</p>



Chapter 4: Agricultural Sector (con't)

Current Programs and Projects Supporting Nutrient Loss Reduction Goals

Non-Governmental Organization Programs and Projects

Edge-of-Field Partnerships for Saturated Buffers

Edge-of-Field Partnerships for Woodchip Bioreactors

Field Laboratories

The Franklin Demonstration and Research Farm

Illinois Buffer Partnership

Illinois Cover Crop Programs

Illinois Sustainable Agriculture Partnership

5-Year Soil Health Transition

Advanced Conservation Drainage Training

Advanced Soil Health Training

Crop Grower Satellite Imagery Analysis

Illinois Alphabet Soup Group

Local Farmer-Led Networks

Risk Management Conference

Keep it 4R Crop Program

4R Metrics

Nitrogen Rate Trials

Water Supply & Industry Partnerships



Chapter 4: Agricultural Sector (con't)

Current Programs and Projects Supporting Nutrient Loss Reduction Goals (con't)

Leadership for Midwestern Watersheds

Nutrient Research & Education Council

Nutrient Stewardship Grant Program

Precision Conservation Management (IL Corn)

The S.T.A.R. Farmer Recognition Program

Upper Macoupin Watershed Regional Conservation Partnership Program

Women for the Land

Metric Collection

Future Strategic Actions

Agricultural Water Quality Partnership Forum



Chapter 5: Point Source Sector

Implementation Report

Resource Measures

Staff Resources

Funding Resources

Outreach Measures

Outreach Activities

Topics

Land and Facilities Measures

Progress Across Illinois

Statewide Total Phosphorus Reductions for 2019-2020

Total Phosphorus Reductions from Individual Dischargers

Nutrient Reduction Special Conditions

Nutrient Assessment Reduction Plans

Statewide Total Nitrogen Reductions for 2019-2020

Method for Calculating Point Source Nutrient Loads

NPDES Permits Issued with Nutrient Criteria

Watershed Approach

Fox River Study Group

DuPage River Salt Creek Workgroup

Lower Des Plaines Watershed Group

Lower DuPage River Watershed Coalition

North Branch Chicago River Watershed Workgroup

The Des Plaines River Watershed Workgroup



Chapter 5: Point Source Sector (con't)

Current Programs and Projects Supporting Nutrient Loss Reduction Goals

Agriculture and Point Source Sector Partnership: Testing Best Management Practices

Total Maximum Daily Loads

Concentrated Animal Feeding Operations

State Livestock Management Facilities Act

State Revolving Fund

Future Strategic Actions

Unsewered Communities Grant Program



Chapter 6: Stormwater Sector

Implementation Report

Resource Measures

Staff Resources

Funding Resources

Outreach Measures

Outreach Activities

Topics

Land and Facilities Measures

Illinois Environmental Protection Agency Section 319 Grant Program

GIGO

MS4 Report Analysis

Data Considerations

Findings

Metric Establishment and Collection



Chapter 6: Stormwater Sector (con't)

Current Programs and Projects Supporting Nutrient Loss Reduction Goals

Urban Stormwater ILR10 Permit Reissued
MWRDGC Rain Barrels and Green Infrastructure Programs
Calumet Stormwater Collaborative
IDOT
IDNR Coastal Programs
CMAP
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
Conservation@Home

Future Strategic Actions

Urban Stormwater Working Group



Chapter 7: Working Group Accomplishments

Policy Working Group

Communication Subgroup

Agriculture Water Quality Partnership Forum

Agriculture Water Quality Partnership Forum Technical Subgroup

Urban Stormwater Working Group

Urban Stormwater Education Subgroup

Urban Stormwater Tracking Subgroup

Nutrient Monitoring Council

Performance Benchmark Committee



Chapter 8: Adaptive Management & Measuring Progress

Water Quality Goals

Reporting challenges

Agricultural Implementation Progress

Point Source Implementation Progress

Adopting New Conservation Practices and Updating Practice Performance

Proposal Submission Process Update

Watershed-Based Plans

Looking Ahead

Future Strategy Considerations

Potential Future Resource Needs

Partners for Conservation

Soil and Water Conservation Districts

Wastewater Treatment Facility Upgrades

Stormwater Practice Adoption

Water Quality Monitoring

U.S. Geological Survey

Illinois EPA

Illinois NLRs Meetings and Reporting



Draft Review

Policy 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 2 weeks for review. RETURN IT BY _____.

Chapters 1 and 2 (Executive Summary and Introduction) will be written post-feedback

Chapter 3: Science Assessment Update - [Here](#).

Chapter 4: Agricultural Sector - [Here](#).

Chapter 5: Point Source Sector - [Here](#).

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

Chapter 7: Working Group Accomplishments - [Here](#).

Chapter 8: Adaptive Management - [Here](#).



Timeline

Draft Review	Due Date
First draft due to PWG	15-Apr
Comments due back to Extension	30-Apr
Draft due to Steering Committee	15-May
Comments due back to Extension	30-May
Develop appendices of spreadsheets (Resource & Outreach)	7-Jun
Final changes before design	7-Jun
Design	
Text and photos (and alt-text) to graphic designer	9-Jun
Design work	9-Jul
Final Stretch	
Notify directors of incoming draft report	2-Jul
Notify print shop of incoming printing job	7-Jul
Copy editing	9-Jul
Final changes	16-Jul
Hand to Directors	16-Jul
Directors hand in review	30-Jul
Due to printer	7-Aug
Biennial Report completed	31-Aug
Online version with Appendices	31-Aug



NLRS Explorer Update

Kate Gardiner



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NLRS Explorer

- Collaboration between the Illinois NLRS Extension Team and the Illinois-Indiana Sea Grant educators
- GOAL: Increase awareness of hypoxia, the Illinois NLRS efforts, and what people can do to help
 - ...by getting a younger generation interested in this topic
- The toolkit offers educational resources in one convenient place and covers a wide range of topics related to the nutrient strategy



NLRS Explorer

Users can filter the resources by:

- Audience
- Topic
- Learning Mode
- Time required to complete
- Knowledge level

The screenshot displays the 'FILTER BY:' section of the NLRS Explorer interface. It features a 'CLEAR' button in the top right corner. The filters are organized into four columns: Audience, Topic, Learning Mode, and Time to Complete. Each filter is represented by a circular icon and a text label.

AUDIENCE	TOPIC	LEARNING MODE	TIME TO COMPLETE
Pre-K to Elementary School	Hypoxia	Agriculture	30 min or less
Middle School	Mississippi River & Tributaries	Point Sources	One hour or less
High School	Gulf of Mexico	Stormwater	1-3 hours
Public	Watershed & Water Cycle	Monitoring	3-5 hours
KNOWLEDGE LEVEL	Nutrient Inputs	Best Management Practices	5+ hours
Basic	Nutrient Losses	Careers	
Intermediate		Maps	
Advanced		Datasets & Visualizations	
		Connect with an Expert	

NLRS Explorer

- Demonstration:

<https://iiseagrant.org/education/nutrient-loss-reduction-strategy-toolkit/>



Next Steps

Trevor Sample



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Congratulations
on your retirement!

JEAN PAYNE