CEDAR RAPIDS
City of Five Seasons®

AWWA – ACE16
June 20, 2016
"Urban & Rural Partners for Cedar River Nitrate Reduction"

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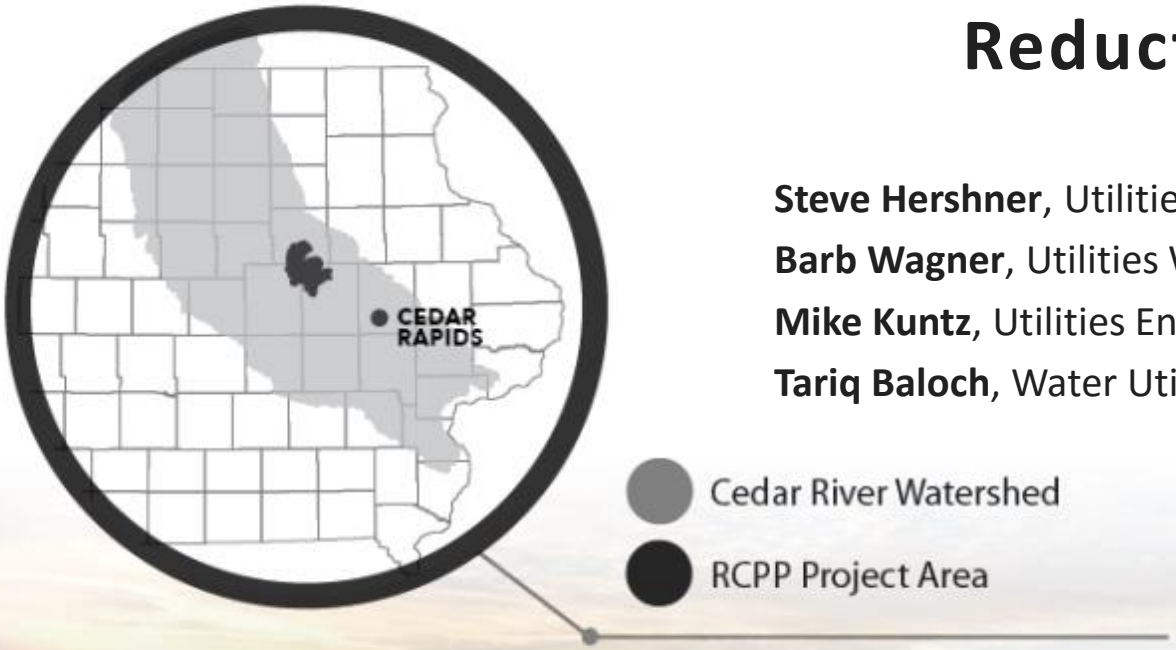

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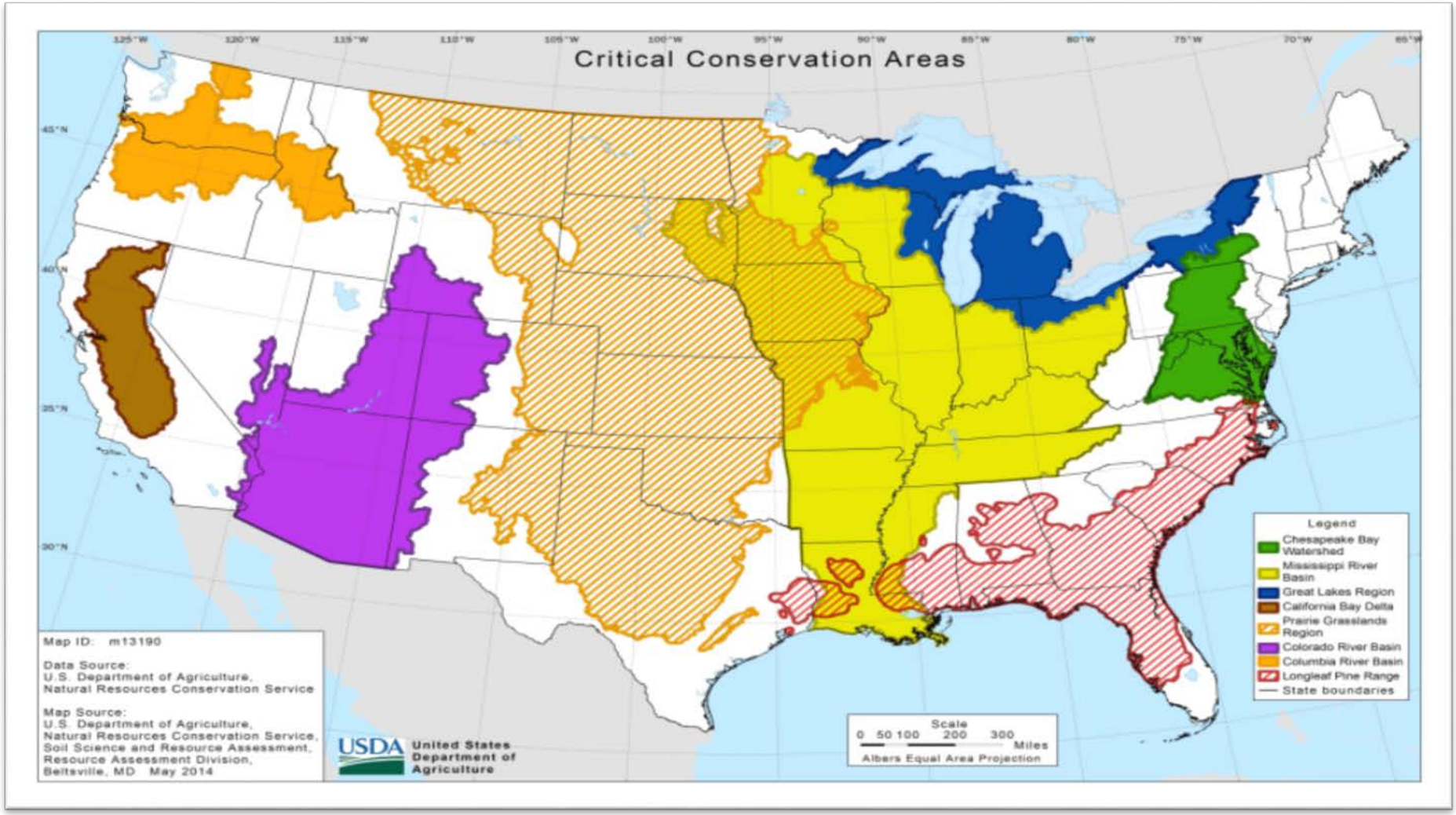
MCPP

NATIONAL PERSPECTIVE

(Regional Conservation Partnership Program)



MCPP

WHY COLLABORATE WITH UPSTREAM PRODUCERS?

PUBLIC HEALTH & WELFARE/FLOODING

INDUSTRY & ECONOMY

SOURCE WATER/PUBLIC WATER SUPPLY

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WHY COLLABORATE?
PUBLIC HEALTH & WELFARE

18,600+ People Impacted

7,700+ Parcels Flooded

310 City Facilities Flooded

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WHY COLLABORATE?
INDUSTRIAL & ECONOMIC IMPACT

QUAKER

PEPSICO

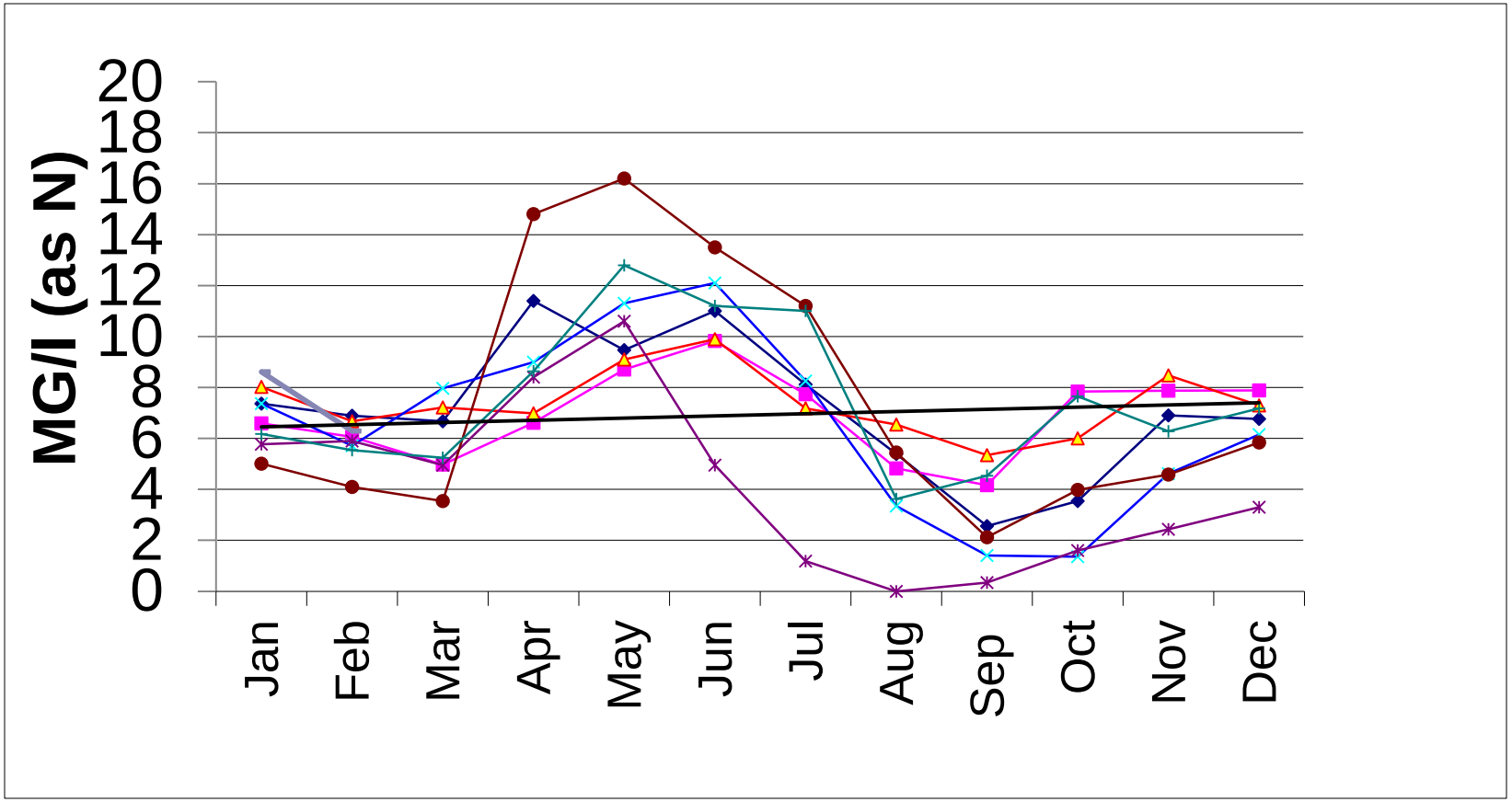
MCPP

WHY COLLABORATE?
(SOURCE WATER - PUBLIC WATER SUPPLY)

- Raw water highly influenced by river water quality
- Public notification at 10 mg/L
- Hach Nitratax

MCPP | WHY COLLABORATE?
(SOURCE WATER - PUBLIC WATER SUPPLY)

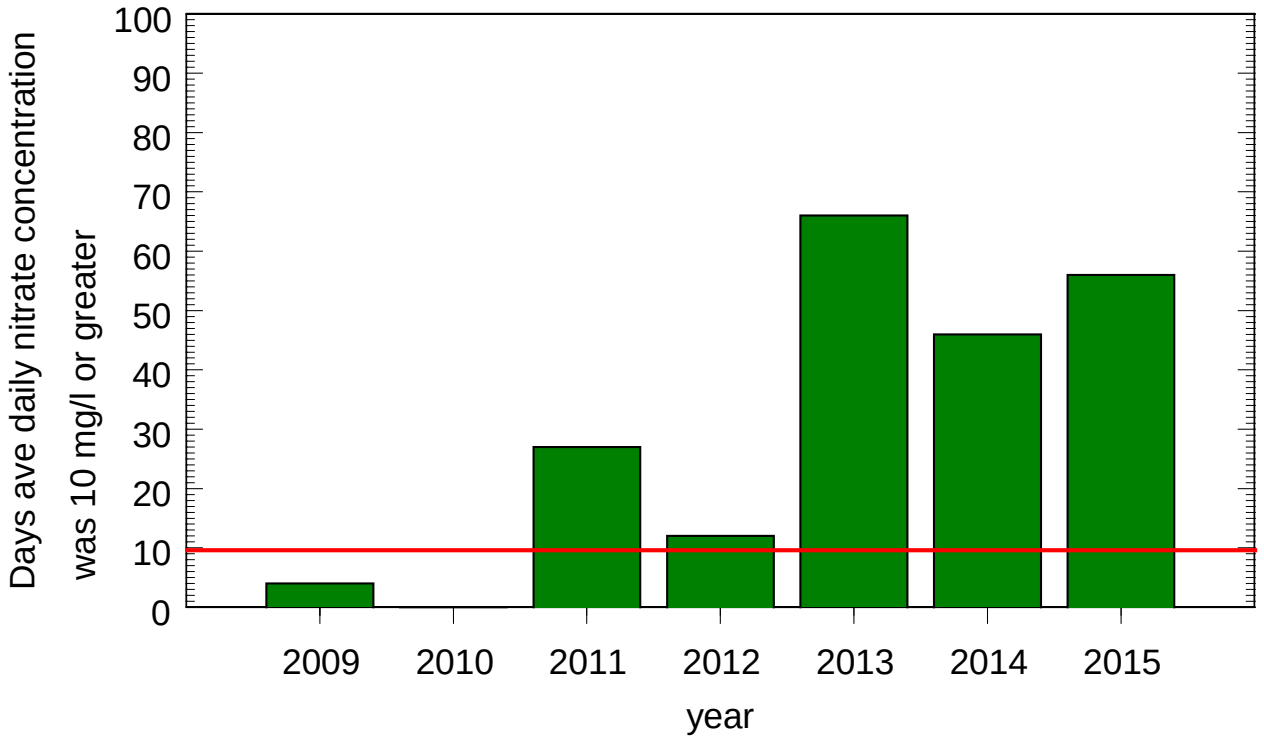
Monthly Maximum Nitrate Concentrations in the Cedar River 2008-2015



Nitrate concentrations in the Cedar River 2009-2015

Cedar River at Cedar Rapids, IA

(April through October)



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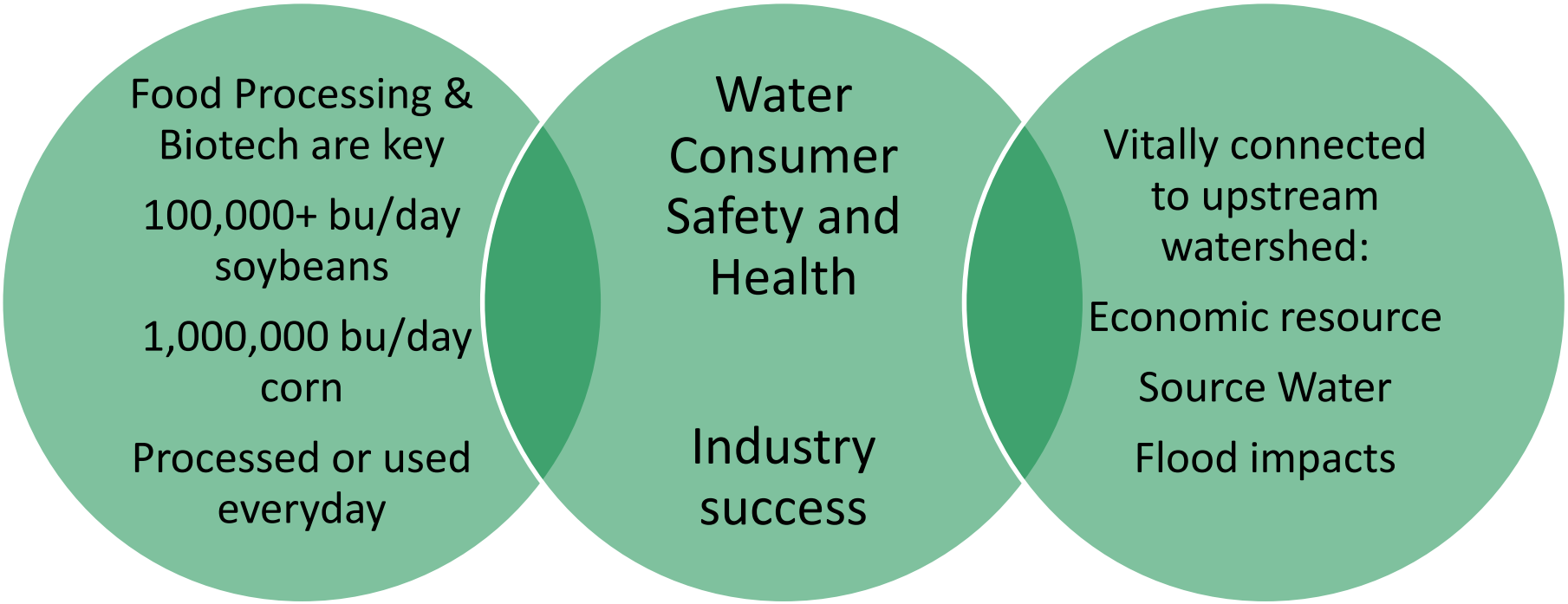
WHY PARTNERSHIP?
UTILITY/COMMUNITY VALUE



MCPP

PARTNERING FOR SUCCESS
MIDDLE CEDAR PARTNERSHIP PROJECT

NRCS through RCPP contributing $2.0M

Primarily financial, some technical assistance

16 MCPP partners contributing $2.3M

Primarily technical, some financial assistance

$4.3M available over the next five years

Clock started June 5, 2015

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PARTNERING FOR SUCCESS
MIDDLE CEDAR PARTNERSHIP PROJECT

Middle Cedar Partnership Project (MCPP)

Collaborating for Soil & Water Quality

MCPP | OUR APPROACH
MIDDLE CEDAR PARTNERSHIP PROJECT

Working Together

- Improve Soil Health
- Improve Water Quality
- Reduce Water Quantity

Expanding on a Good Thing

- Miller Creek Water Quality Initiative
- Benton/Tama Nutrient Reduction Demonstration Project

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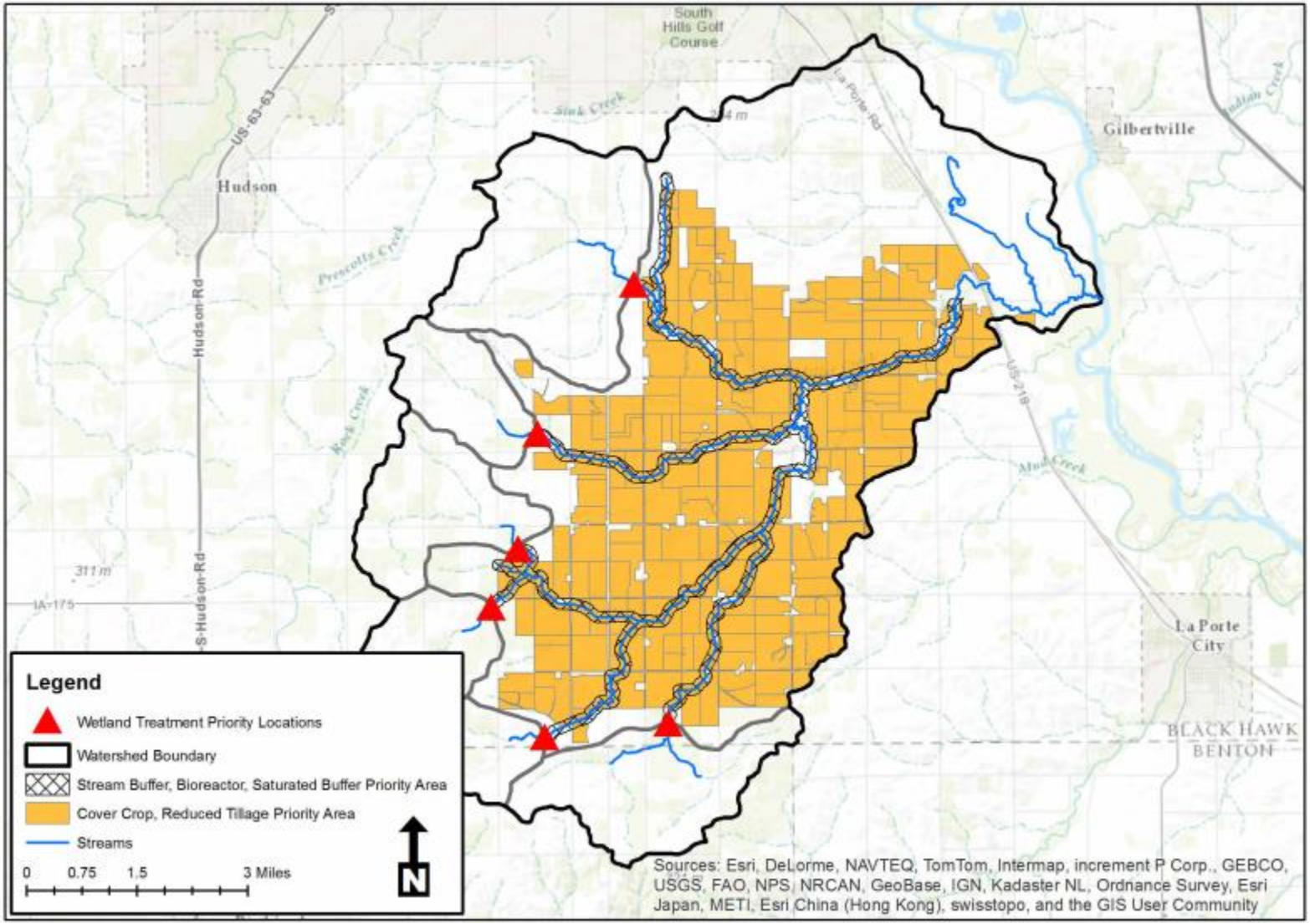
PARTNERING FOR SUCCESS
WATERSHED CONCEPT PLAN



MCPP | KEY OBJECTIVES FOR MCPP

Objective 1

Develop watershed plans to include monitoring and evaluation that will optimize placement of Best Management Practices (BMP)

Objective 2

Implement BMPs through financial and technical assistance to reduce nutrient loads and peak flow runoff to the Cedar River

Objective 3

Conduct outreach activities with landowners and producers in the five subwatersheds

MCPP

IMPLEMENT BMPs
DENITRIFYING BIOREACTOR

- Constructed Sept. 2015
- Drainage area of 55 acres
- Monitored in ISA program

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IMPLEMENT BMPs
DENITRIFYING BIOREACTOR

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IMPLEMENT BMPs
COVER CROPS

MCPP | IMPLEMENT BMPs
MILLER CREEK

Conservation Practice	2015 Signups
Cover Crops	2,703.07 acres
Strip-Till/No-Till	594.90 acres
Denitrifying Bioreactor	2 systems (1 installed)
Saturated Buffer	1 system installed
Prairie Strips	4.00 acres
Grass Waterway (CP-8A)	4.68 acres
Filter Strips (CP-21)	76.19 acres
Riparian Buffer (CP-22)	11.01 acres
Pheasant Recovery (CP-38)	120.32 acres
Pollinator Habitat (CP-42)	580.98 acres

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OUTREACH ACTIVITIES
FIELD DAYS

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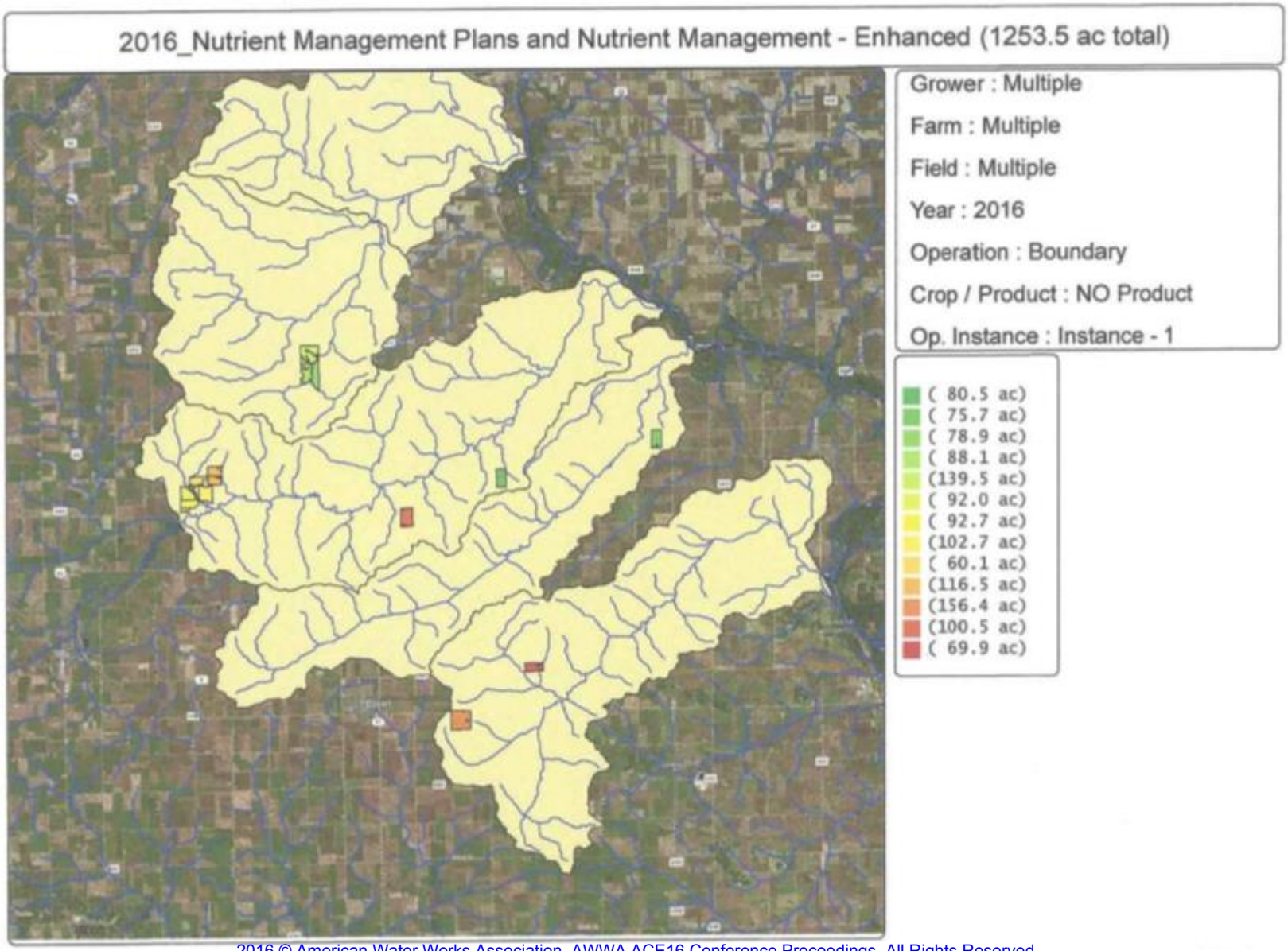
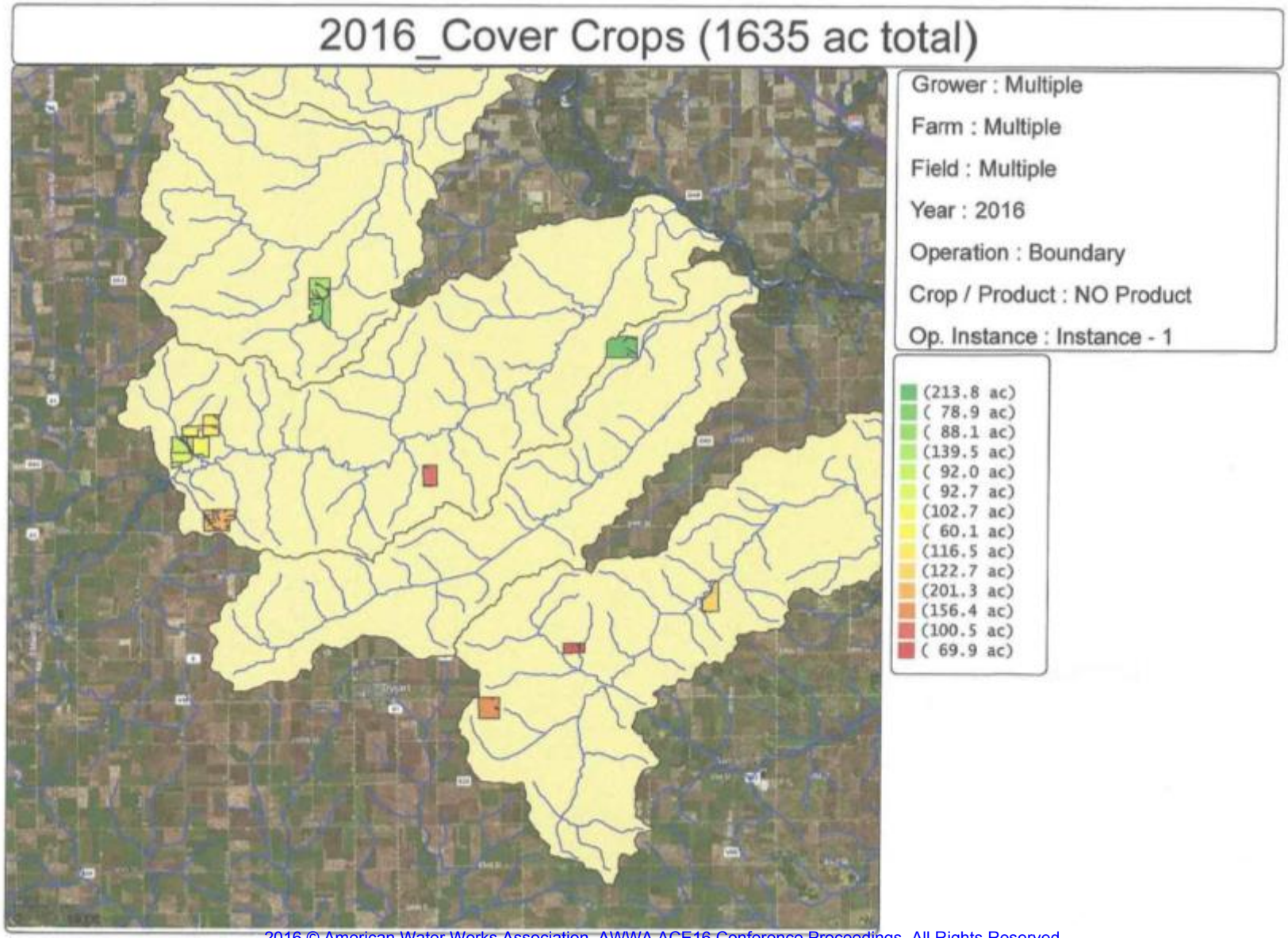
MCPP 2016 ACTIVITIES



MCPP | RECENT ACTIVITIES



MCPP | IS IT WORKING?
EVALUATING RESULTS

The project will track adoption rates and the locations of best management practices to understand which practice type and installation location are best aligned with watershed plans and provide the maximum benefits to water quality, water quantity and soil health.

Downstream Water Users

Conservation Entities

Upstream Producers

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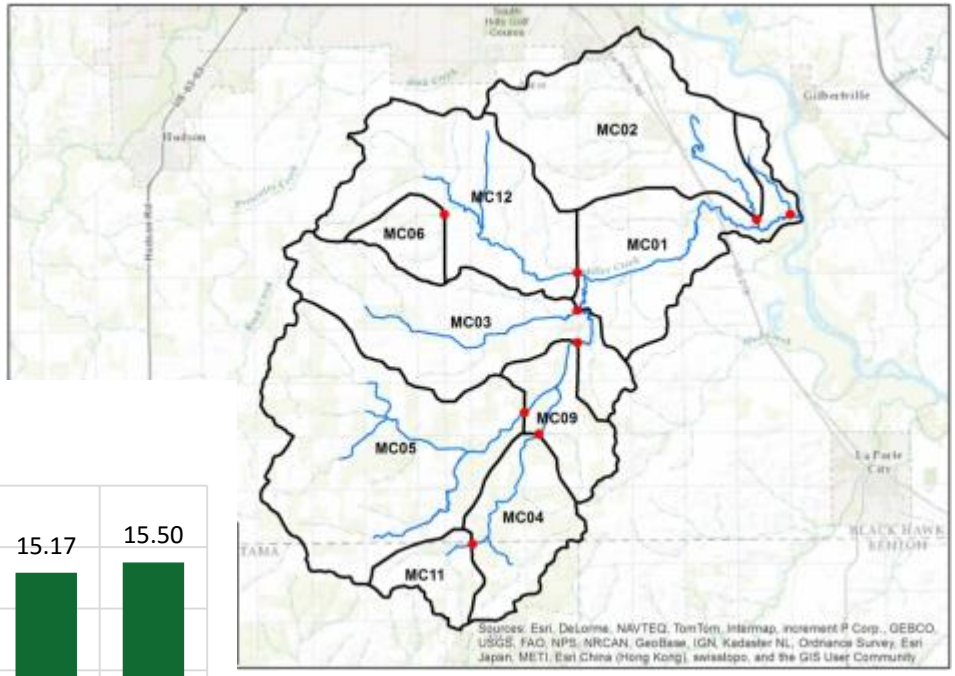
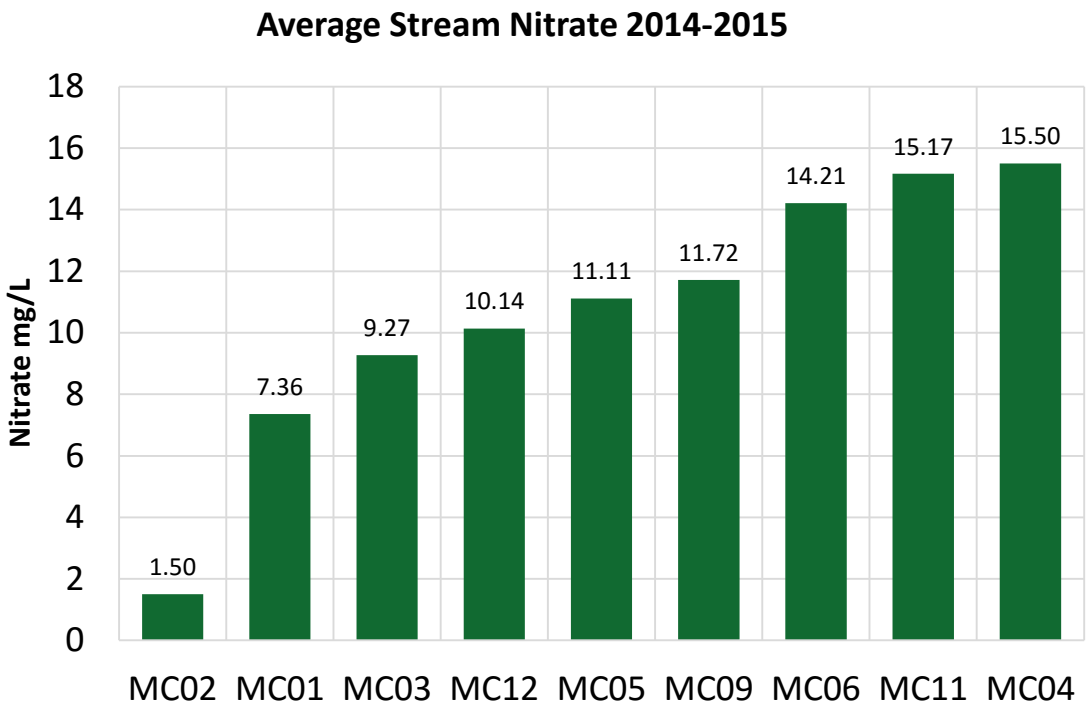
EVALUATING RESULTS
WATER QUALITY





MCPP | WHAT DOES FUTURE SUCCESS LOOK LIKE?

- **Improved soil health**, leading to a better bottom-line for upstream producers
- **Increased adoption of tested practices** because it makes financial sense and it's the right thing to do
- Demonstrated **water quality improvements**
- **Expansion of similar MCPP promoted activities** within Cedar River watershed and other watersheds across Iowa
- City of Cedar Rapids nitrate removal system scale could be reduced

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URBAN & RURAL PARTNERS FOR CEDAR RIVER NITRATE REDUCTION

MIDDLE CEDAR PARTNERSHIP PROJECT

QUESTIONS?

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