AGRICULTURE WATER QUALITY PARTNERSHIP FORUM

MEETING 2
SEPTEMBER 22, 2015

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

Photo by Eliana Brown

Introductions

Illinois EPA
Lisa Bonnett

IDA
Philip Nelson

USDA-NRCS
Ivan Dozier

IDNR
James Herkert

AISWCD
Kelly Thompson

The Nature Conservancy
Maria Lemke

Illinois Pork Producers Association
Jennifer Tirey

Illinois Soybean Association
Amy Roady

IFCA
Jean Payne

FSA
Scherrie Giamanco

University of Illinois Extension
George Czapar

Illinois Certified Crop Advisor Board of Directors
Tom Kelley

American Farmland Trust
Mike Baise

Illinois Stewardship Alliance
Wes King

Illinois Soc of Prof. Farm Man. & Rural Appr.
Randy Fransen

Current Status

ILLINOIS
NUTRIENT LOSS
REDUCTION STRATEGY

Illinois Department of Agriculture

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Committee Charge

Agriculture Water Quality Partnership Forum

- Steer and coordinate outreach and education efforts to help farmers address nutrient loss and select the most appropriate BMPs:
  - Identify needed education initiatives or training requirements for farmer and technical advisors.
  - Strengthen connections between industry initiatives, certified crop advisor continuing education requirements, state initiatives, and other technical services.
- Track BMP implementation
- Coordinate cost sharing and targeting
- Develop other tools as needed
  - Consider an agriculture water quality certification program.

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Outreach and Education SUMMARY (May 2015)

- Agriculture partners have a coordinated and robust outreach and communication effort ongoing. This effort will remain independent of the Forum, but updates will be provided at each AWQPF meeting where gaps and potential collaborations and partnerships to address these gaps will be discussed.

OUTREACH & EDUCATION UPDATE
JENNIFER TIREY

Outreach and Education (remaining gaps)

How do we reach out to absentee landowners through farm managers?

- Written material?
- Face to face meetings?

Women's Circles (parking lot)

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TECH SUBGROUP UPDATE
WARREN GOETSCH

Tech Subgroup Charge

- 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 [NLRS]*),
- 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.
- Assess existing BMP implementation data availability over time to advise the policy work group as they select a BMP implementation baseline year

TECH SUBGROUP
MEETING 1
AUGUST 26, 2015
Measures of success committee
Measurable indicators of desirable change
Specific indicators in attached list
Land
Water
Land use changes
Practice adoption
Point source implementation
Calculated load reduction
Measured loads in priority watersheds
Organized watersheds reported load changes
Measured loads at existing monitoring stations
IOWA STATE UNIVERSITY
Extension and Outreach
Summary/Conclusions

Tech Subgroup
Conclusions and Next Steps

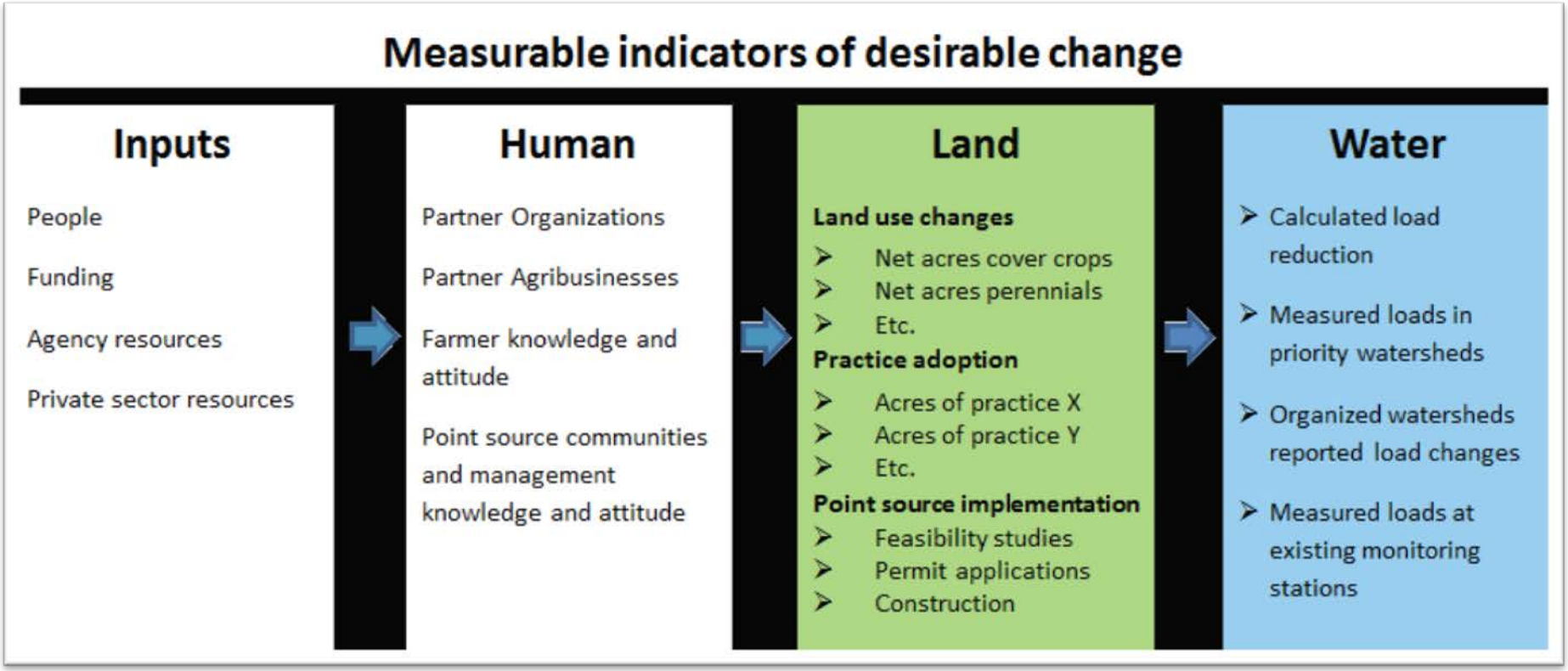
Conclusions: Decided to adapt Iowa's Measures Logic model (next slide) to Illinois

- Go back to strategy and pick the practices and track these. Add BMPs when scientific literature indicates they are effective.
- For 2 year report, might be more practical to select certain priority watersheds (HUC 8).
- Could compare cover crop data to ensure FSA covers USDA and IDA data.
- Could use USDA layers to find grasslands/land use changes.
- Need to query FSA, etc before NASS survey to farmers. NASS Survey could be most valuable for measuring attitude. The survey could ask questions about attitude, which could be resurveyed later. Examples could include: "How much impact does your farm contribute to Hypoxia? How much impact does your farm contribute to local water quality? Are you concerned about losing nutrients?"
- How to get to a win-win on putting low yield acreage in wetland or CRP? Farmers have yield maps. Analyst (such as David Muth) could determine where this is. This takes advantage of precision farming for nutrient loss reduction.

Next Steps:

- Contribute information to 3 tables: Land Measures, Water Measures, and Baseline Year. IWRC to send electronically. Due Sept 11.
- IWRC to schedule call to discuss information on 3 tables as they pertain to the upcoming NASS survey. Call scheduled for Sept 21 (yesterday).

Tracking BMP Implementation – Iowa Example



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

Metrics and what are we using to measure them (FSA, NRCS, IEPA, IDA, IDNR, NASS, Ag partners)

Land	Consensus	
Red. N rate from backgrnd to MRTN 10%	NASS data can provide this information.	Check with IFCA about similar ?'s on industry survey.
Nitrification inhibitor w/ all fall-applied fert on tile-drained corn	Add 2 ?'s to NASS survey: inhibitor & drain.	
Split appl. 50% fall + 50% sp on tiled corn	NASS survey can provide this information.	
Spring-only appl. on tile-drained corn	NASS survey can provide this information.	
Split appl. of 40% fall, 10% pre-plant, and 50% side dress	NASS survey can provide this information.	
Cover crops on all corn/soybean tile ac	Two sources: FSA (need to link soil data and/or HUC8) and NASS (will add this question and tile drain ac to survey).	
Cover crops corn/soybean non-tile ac		
Bioreactors on 50% of tile-drained land	EQUIP & 319 have usable data. Add NASS survey ?. * (see below)	
Wetlands on 25% of tile-drained land	FSA and IDNR will coordinate data. 319 also has usable data.	
Buffers on all applicable crop land	FSA and IDNR will coordinate data. 319 also has usable data.	
Perennial/energy = to pasture/hay ac	FSA and 5 yr Census of Ag have usable data.	
Perennial/energy crops 10% tile-drained	FSA and 5 yr Census of Ag have usable data.	
Water table management	EQUIP & 319 have usable data. Add NASS survey ?. *Check with LICA about ?'s on industry survey.	

Metrics and what are we using to measure them (FSA, NRCS, IEPA, IDA, IDNR, NASS, Ag partners)

What are we using to measure it?

Water	Consensus
➢ Calculated load reduction	IEPA 319 and IDNR GIS Model use Region V Load Estimation Spreadsheet. AWQPF should focus on Land Measures.
➢ Measured loads in priority watersheds	
➢ Organized watersheds reported load changes	Nutrient Monitoring Council will do these.
➢ Measured loads at existing monitoring stations	
Others_____	
Others_____	

Baseline Year

Specific data sets used in science assessment and others	Year
Recent Transect Survey	2014
Census of Agriculture (5 yr intervals)	2007
NASS Crop layer data	2008-12
Soil P Survey (Fabian)	2007-8
IDA fertilizer sales	2008-12
FSA data	2009-pres
USDA-NRCS data	inc 2011
319 grant	1990-pres
IGIG	2011-14
Phase 2 Clean Lakes	1990
CPP	2001
Streambank Stabilization	2001
CREP Easements	1998-pres
Recommend 2011 for Baseline Year (some data sets may be +/- 1-2 yrs.	

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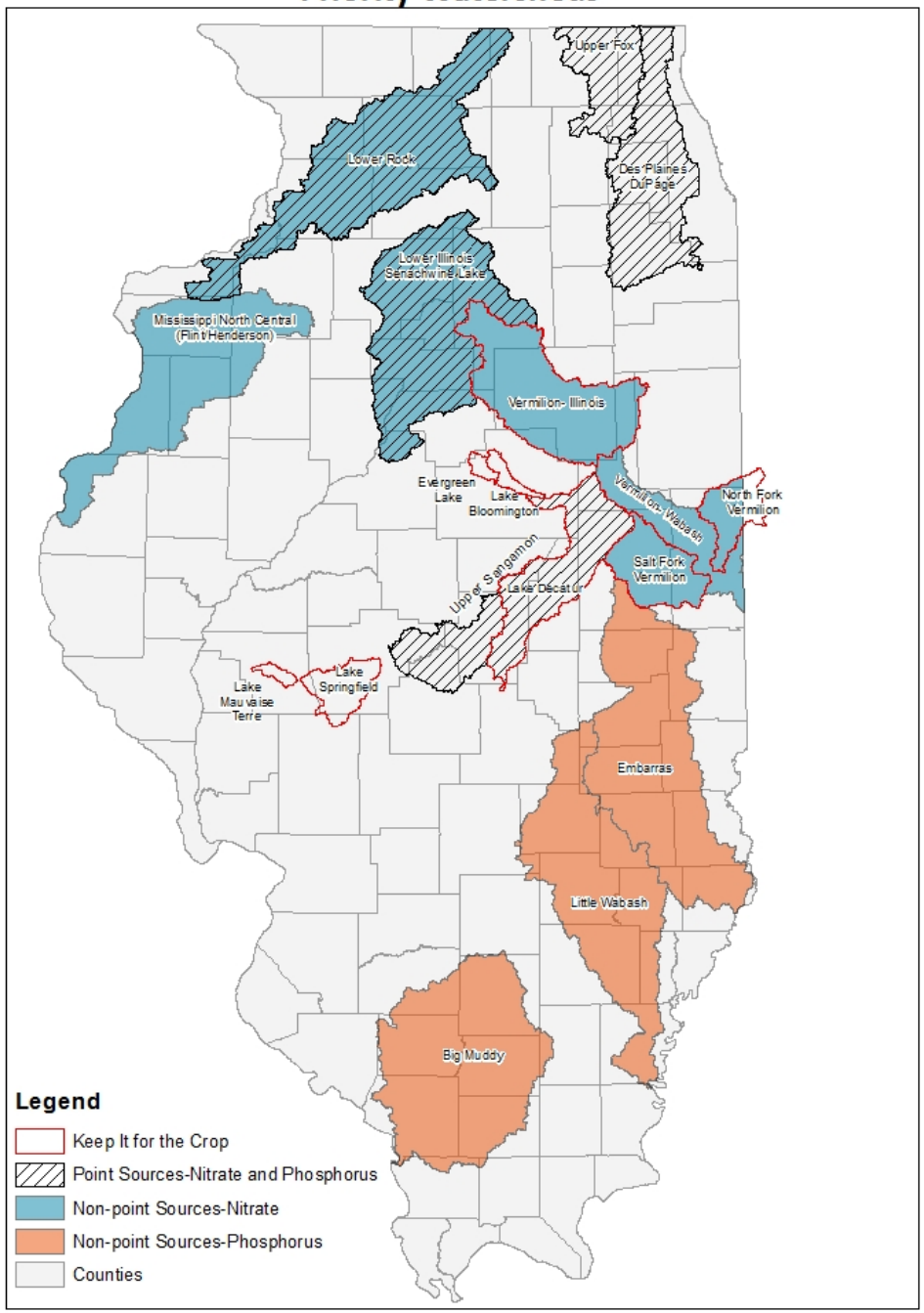
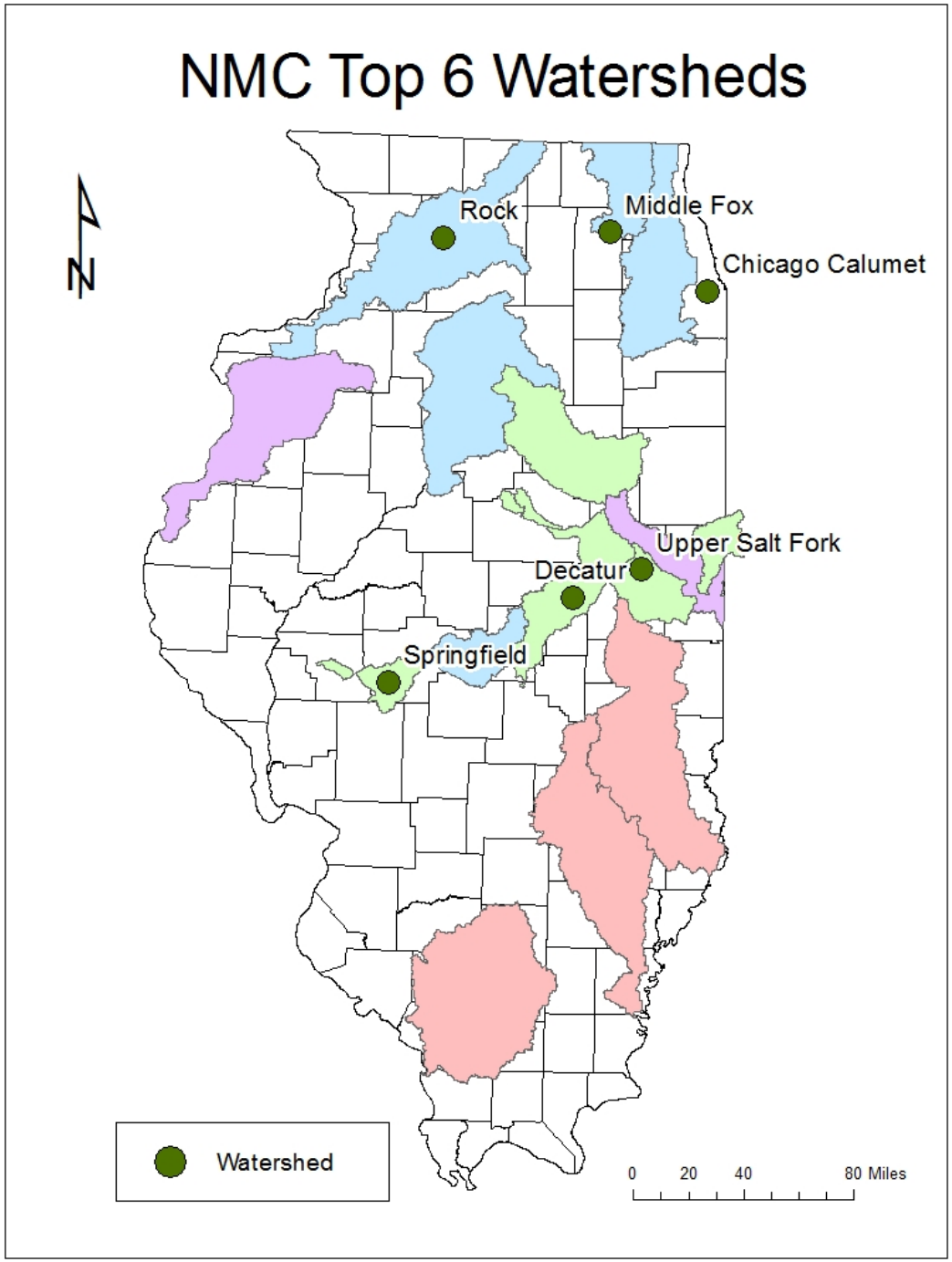
Illinois Nutrient Loss Reduction Strategy
Priority Watersheds



NMC Top 6 Watersheds



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ILLINOIS EPA QUERY PROGRESS
SHAWN WILCOCKSON

Discussion

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Next Steps

Schedule of future AWQPF meetings *(Eliana Brown)*

Comments from the Floor (time permitting)