

Leadership for Midwestern Watersheds #6: Meeting Proceedings

Getting Creative with Funding and Messaging to Implement State Nutrient Reduction Strategies: RCPP, Soil Health and Conservation Cropping Systems

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Milan, Illinois

Executive Summary

Leadership for Midwestern Watersheds (LMW) is a forum for watershed project directors and key stakeholders from five Upper Midwestern states to compare notes and share lessons learned about project goals, design and implementation. Begun in 2011 as a partnership among Sand County Foundation, American Farmland Trust, Iowa Soybean Association and the North Central Region Water Network, LMW seeks to develop a “community of practice”—a core group of conservation professionals skilled and experienced at the practical means of improving water quality through improvements in agricultural land management at the watershed scale. McKnight Foundation and Walton Family Foundation provide financial support for LMW.

LMW meetings use a facilitated discussion format, with presentations followed by small group discussions. In recognition of the close relationship between water quality and soil health as environmental outcomes of watershed projects, the focus of this year’s meeting was *“Getting Creative with Funding and Messaging to Implement State Nutrient Reduction Strategies: RCPP, Soil Health and Conservation Cropping Systems.”*

The key ideas emerging from this LMW meeting were that soil health can be a valuable component of watershed-scale projects directed at improving surface water quality, and that watershed projects’ contribution to state nutrient reduction strategies varies widely among Midwestern states.

Nutrient Reduction Strategies: The participants were updated on several State Nutrient Reduction Strategies (NRS).

- **Iowa** released its strategy in May 2013 with designated priority watersheds, some state-directed resources, a water quality council and a statewide program primarily focused on expanding the use of cover crops. Three Regional Conservation Partnership Program (RCPP) projects, including one just approved for funding in early 2016, bring additional NRCS conservation funding to the state.
- **Minnesota** started developing its strategy in 2008 and finished it in 2014. It identifies high and medium priority watersheds, proposing to reduce nitrogen runoff with fertilizer management, tile water treatment and vegetative cover. Minnesota uses its tax for clean water to implement watershed planning, and has committed to long term monitoring of water quality at the HUC8 level. They have several MRBI projects in medium or high priority areas.

- The **Wisconsin** NRS has no state resources assigned to it. Phosphorus, not nitrogen is the pollutant of greatest local concern. A statewide phosphorus rule, adopted in 2010, allows regulated point sources of phosphorus to pursue pollution reductions from agriculture as part of their permit compliance programs under the Clean Water Act (the so-called Adaptive Management Option, or AMO). RCPP and Mississippi River Basin Initiative (MRBI) projects in Wisconsin have tended to be related to actual or planned AMO projects. The thinly resourced NRS was developed later. Wisconsin believes it can only achieve a 20-25 percent reduction in nitrates (N) from agriculture with existing technologies.
- **Illinois** released its Nutrient Loss Reduction Strategy in 2015. Illinois Council on Best Management Practices (CBMP), a coalition of farm and agribusiness groups, takes a leadership role in messaging. Staff from various nonprofit organizations and agencies meet quarterly to coordinate small outreach efforts around the state. Several RCPP and MRBI projects provide some federal resources for conservation practices in priority watersheds; there is minimal state support. The Illinois Corn Growers and IL CBMP also make portable N sensor monitors available to farmers so they can test their water anonymously.

Soil Health: Presentations addressed components of soil health; indicators and metrics; and resources available to help project managers incorporate soil health in watershed projects, particularly those available through the new Soil Health Partnership.

Group discussions: The small group discussions that followed focused on what soil health means in the context of watershed projects and how soil health indicators can be integrated into outcomes. Key points from the discussions:

- Improving soil health is linked more directly to P reduction than to N reduction. *“If P, synergy; if N, controversy.”*
- Landowners, not farm operators, hold ultimate power. Engaging them is crucial, and will remain so as ownership transitions over next 10-15 years.
- Soil health metrics are a difficult subject, with no current consensus as to which methodology to use, how to account for changes over time, or how to relate soil health changes to surface water quality.
- Ag retailers in general are reluctant to engage with soil health, fearing they lack adequate information, particularly on economic implications for farmers.
- Discussions on soil health can help engage farmers.

Soil Health and Farmers: A panel on soil health from the farmers’ perspective followed, bringing together two farmers and two watershed project directors. Key ideas:

- In one Iowa watershed, farmers developed a watershed plan to increase soil organic matter rather than set an N reduction goal. They saw this as

benefiting their own operations a step toward developing a more resilient system. Improving their soils has already gotten them through one drought.

- Both farmers on the panel confirmed positive changes in soil structure and health as a result of their efforts but are still struggling with cover crops.
- Soil health improvement requires system improvement, not one change but several.
- Farmers on the panel felt cover crops paid for themselves, but not immediately. At least five years may be needed before farmers see noticeable increases in crop yields.

Group discussions: The group discussions that followed went into greater depth on the need for:

- clearer definitions and metrics for soil health,
- better information on the economics of soil health and its improvement
- a way to engage non-resident landowners, including spouses and relations of farmers and investors in land.

- One group felt that soil health should be packaged as a state-level economic strategy to make the states more competitive and create business opportunities (equipment, seeds), as well as a greener landscape and better water quality.

- Coordination with state nutrient reduction strategies will vary among states. In states like Iowa that have devoted resources to theirs, the NRS can help with prioritization and focus action at the watershed scale.

- Improving soil health is a positive message to farmers, and can be presented as an effective risk reduction strategy to increase the efficiency of nutrient use and make operations more resilient. However, there needs to be more training for technical service providers, a broader discussion on soil health and more of an emphasis on system approaches as opposed to promotion of individual practices.

Update on the USDA NRCS Resource Conservation Partnership Program and the Mississippi River Basin Initiative: Last year, \$372 million funded 115 projects and none were fully funded. This year, 265 pre-proposals were submitted and 84 projects were funded (\$220 million). The FY2017 RCPP pre-proposals are due May 10, 2016.

NRCS has changed the Announcement for Program Funding (APF) to help each applicant relate the “story” of their project to attainable goals and objectives. Climate change and energy have been added as resource concerns. Proposals submitted to the State funding pools are required to address at least one national level resource concern along with the

state concern(s). With both RCPP and MRBI, innovation and taking something to a higher level will be important.

Applicants were encouraged to discuss options with their State Conservationist early in the process, but it emerged during discussion that not all state NRCS offices view their role as the partner to applicants NRCS in Washington would like them to be. NRCS regards evaluation as RCPP projects' weakest component.

Group discussions: In the subsequent group discussions, participants talked about the opportunities offered by the RCPP and MRBI projects, what was working, what they had learned and what improvements they would like to see. These included:

- more time to develop projects
- more guidance on metrics
- reduced paperwork load for individual landowners
- better training at the local level so people know how cost-share programs work and are delivered
- clearer explanations of the technical assistance component, and
- guidance on distributing the lessons learned.

- Iowa has benefited from having a “coach” at the state level to help people get prepared to develop proposals; this seems to be close to what NRCS in Washington is looking for from state offices.

- Timing of the RCPP funding cycle is an issue. The AFP comes out in the spring, making farmer engagement with proposed projects difficult. As well, the cycle is not coordinated with other public or private funding sources' cycles, complicating the task of securing matching funds.

Coordinating RCPP and MRBI with the State Nutrient Reduction Strategies:

Conservation should really be part of the farm business plan because resource issues are interconnected. Making these connections requires multi-scale, multi-objective planning to consider the whole picture and avoid ending up with single practices that tend not to survive. RCPP and MRBI projects bring additional stakeholders, resources, networks, efficiencies, dollars and moments of opportunities, and are therefore relevant to each state's NRS. They are not, however, always coordinated with each state's NRS.

Group discussion: The participants were asked about the connections between the various funding pools and the state NRS.

- In Illinois, projects were already operating in watersheds that had run-off problems.

- Both in Illinois and Iowa, RCPP and MRBI projects are based in priority watersheds identified by the state NRS.
- Iowa nutrient management standards required in the RCPPs are more production-driven than reduction-driven. They may not be sufficient to meet the NRS reduction goals.
- The Wisconsin RCPP/MRBI projects do not have a strong connection to the NRS. It doesn't provide enough data to inform local projects.
- Indiana RCPP/MRBI projects lack a strong connection because of the lack of overall goals in the NRS.
- Regarding the incorporation of soil health into projects and into the NRS, the question of how to value soil health improvements was raised. Some of the Indiana projects use EPA Sec. 319 funds to relate soil health (organic matter) to the flashiness of streams, floodwaters and impacts on drought.