Excess nutrients moving from agricultural fields due to rain, snowmelt, and drainage are a significant contributor to surface and groundwater pollution. Many of the rivers, streams, and lakes in Wisconsin and throughout the Upper Mississippi River Basin have been designated as “impaired water bodies” under the federal Clean Water Act due to high levels of phosphorus, nitrogen, and sediment. Nutrient pollution contributes to declines in local water quality by creating toxic blue-green algae blooms, and harming fish and wildlife habitat in local waters, as well as adding to the hypoxia (low oxygen) problem in the Gulf of Mexico. To protect water quality across scales – from neighborhood to nation – agricultural producers must be engaged to help craft and implement effective solutions.

In 2013, University of Wisconsin–Extension launched the Farmer-Led Watershed Council (FLWC) pilot project in four northwest Wisconsin counties. The goal was to develop councils of farmer leaders on a sub-watershed scale to increase use of water-quality promoting farm practices. The project was inspired by similar work undertaken in northeast Iowa by Iowa State University Extension. There, they found that the best approach was collaborative – engaging farmers to investigate the source of the problem and come up with a plan to fix it. This was more successful than a prescriptive approach handed down by state or local government advisors.

Many groups are now recognizing the limits of top-down approaches for improving water quality outcomes for agriculture, and are looking at farmer-led councils as a promising new approach. This document describes our experience in Wisconsin helping four farmer-led watershed councils get off the ground, and details what has worked well and what hasn’t worked so well. Community dynamics, local culture, geography, and local economies are just a few of the many influences on farming systems and farmers’ willingness to adopt new practices. What works well in one area may not be suited for another. However, we hope that our trials and experiences can help inform other similar processes.
Laying the Groundwork

Catalyst:
While the Wisconsin FLWC officially launched in spring of 2013, the planning phase of the project began two years before as part of the St. Croix and Red Cedar Total Maximum Daily Load (TMDL) processes. A coalition of local and state agencies and organizations including the DNR, UW–Extension, county governments, Wisconsin Farmers Union, and the Tainter-Menomin Lake Improvement Association were interested in emphasizing the importance of a civic-engagement approach for phosphorus reductions. The group worked to select a pilot project area (the four sub-watersheds), solicit project funding, and hire a project coordinator. It was decided that the coordinator would be best housed in UW–Extension because of ongoing working relationships and also because Extension educators tend to be perceived positively or at least neutrally by most farmers.

Coordinator:
The project coordinator position is funded full-time by a grant from DNR. The coordinator works in all four counties, and has duties that include project development and planning; facilitating meetings (both of the councils and the broader project team); grant writing; and certain aspects of project administration including outreach and communications. This position requires competencies in project management, community organizing and engagement, agriculture and water quality knowledge, and an ability to engage with farmers to build trusting relationships.

County staff support:
Each county has either a conservation planner or conservation technician dedicating 20 hours per week to the project. This person works closely with the coordinator to recruit farmers, plan and facilitate meetings, and provide the majority of technical advice and implementation. The role of the county in the project has been critical – many of the councils developed out of pre-existing county relationships...”
Council Development

The four watersheds that make up our project range from 10,000 to 20,000 acres of farmed land. Three of the watersheds are in the St. Croix River basin and one falls in the Red Cedar River basin. Both basins are impaired by phosphorus. When considering which watersheds to pilot, the project team put more weight on feasibility and potential for farmer-participation than on phosphorus loading hot spots. Essentially, the team determined that creating the best possible conditions for success was more important in developing a long-term model than choosing a watershed based solely on nutrient loading. They picked watersheds with existing farmer-leaders – a key ingredient for success – and with a history of farmer-engagement with county conservation activities.

Recruitment of initial council members happened in two ways. In two of the councils, the coordinator and county staff reached out individually to farmers they already knew and that they believed could be interested. During those conversations, we presented a sketch of the idea, using the example of the Hewitt

**TAKEAWAYS — Laying the Groundwork:**

1. **From the outset, farmer-led watershed council projects require strong and sustained commitment and funding from the institutional project partners.**
   
   Coordination, fundraising, technical work and other efforts require substantial staff time, funding, and a commitment of multiple years at minimum. Ideally, support will come from a diverse set of partners including government and non-government entities.

2. **Watershed Council Coordinators must be able to play a multi-faceted role as organizers, facilitators, and administrators.**
   
   Affiliation with UW–Extension can help build greater trust and access with farmers. Especially at the beginning, council development requires considerable amounts of time and resources which need to be in place before a council is launched.

3. **Multiple funding sources are ideal.**
   
   In Wisconsin, funding opportunities through the DNR include the Lake and River Planning/Management grant programs. Projects sited in TMDL areas that have approved “Nine Key Element Plans” (a required part of the TMDL process) have an advantage for getting funded. Additionally, the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) will offer a competitive grant program beginning in 2016 specifically for farmer-led councils, with grants of up to $20,000 per council per year. Numerous private grant-making organizations are interested in agriculture-related water quality projects and are good targets for funding. We recently received a two-year grant from the Sustainable Agriculture Research and Education (SARE) program, part of USDA, for on-farm cover-crop and tillage trials and outreach work.
In the other two watersheds, we took a different approach and sent a letter to every landowner in the watershed (see an example at blogs.ces.uwex.edu/wflcp/files/2015/11/Rocky-Branch-letter.pdf), inviting them to an introductory meeting at which we described the idea for the project and solicited feedback, comments, and opinions. In one watershed where we took that approach, we had nearly 70 people come to the meeting, which was fortunately held at a local park so space wasn’t a problem. In the other watershed, we had a smaller group of around 15 people attend the introductory meeting. In both cases, meeting attendees were not limited to farmers; many non-farming landowners also showed up. This presented a challenge because the councils are intended to be exclusively for farmers to create a stronger sense of farmer leadership and direction, and to remove farmer/non-farmer tensions. We had to politely inform non-farmers that the councils were for farmers only. Most were very understanding after we explained the rationale.

**TAKEAWAYS – Council Development:**

1. While all four councils have committed members, the watersheds in which we made a broad invitation have a larger number of participants and greater diversity of farm types represented.

2. Strong, existing farmer leaders are critical for getting other farmers involved.

3. County Land Conservation Departments often have strong relationships with local farmers. These relationships were key to our council development.

4. Don’t be shy about excluding non-farmers – you want to create a space where farmers feel un-judged and empowered.

5. One-on-one conversations and invitations go a long way. Encourage farmers to participate by highlighting this as an opportunity to set a standard for how conservation can best get done.

Creek Watershed work in Iowa. Rather than structuring the conversation in one direction, we asked farmers about their perceptions of water quality problems in the area, and about the proper role for agriculture. The idea of working proactively and as a farmer-directed group was appealing to many of the farmers, particularly as a possible alternative to increased regulation by DNR or others. Once we had a group of at least three or four interested farmers, we planned an initial meeting, encouraging those farmers to invite one or more other farmers that may be interested.
Activities

Farmer priorities:
Our primary activities in the first year of council development were monitoring, soil testing, and creating conservation incentives programs within each watershed. In each council, farmers expressed a strong interest in better understanding the dynamics of their watershed, specifically they wanted to know how much phosphorus is leaving the system and where the primary sources are. This interest fit with what we’d learned while researching our model – farmers are often skeptical of third-party data and may be more motivated to work on water quality problems if they are part of the data collection process.

Monitoring:
To attempt to answer the farmers’ questions, we installed five edge-of-field monitors throughout the watersheds at sites chosen by the farmer-councils. Two of the monitors were placed on “natural areas” (grassy fields or wooded areas) and the others were placed on cropped fields. We also began asking farmers to share field data (soil sample results and cropping and nutrient information) that would allow us to use the Wisconsin phosphorus index to calculate the potential for P loss within fields. Our goal was to create watershed maps showing (in broad strokes so as to not infringe on privacy) phosphorus hotspots. We also hoped to use the P Index values as indicators of progress in P reductions as we collected them over time.

Incentives:
Following the experiences in Iowa, the councils all established farmer-directed conservation incentives. Our $50,000/year McKnight grant is intended to primarily fund incentives. During the first year, the councils each designed a menu of incentive offerings for all farmers in the watershed. These incentive lists for 2014 can be found on our blog (blogs.ces.uwex.edu/wflcp/conservation-incentives). Every watershed offered to cost-share soil sampling for farmers who did not have recent data. Some councils also offered to pay the 30 percent share of the cost of grass waterway construction a landowner is required to contribute in a cost-share agreement with the county. Other councils offered a cash payment for farmers that signed up to have a county conservation planner visit the farm and complete a conservation walk-over.

Focus on soil:
Although we’ve given out many incentives that have resulted in thousands of feet of new grass waterways, soil samples pulled on thousands of acres, and dozens of conservation walkovers, we’ve found that our best mechanism for engagement and encouraging conservation has been the soil health and cover crop field days planned by the farmers. In fact, our second year of work was marked by an increase in field day and seminar attendance and a decrease in the number of farmers signing up for incentives. To us, this seems positive – money may not be as important as we originally thought.
TAKEAWAYS — Activities:

1. Engaging farmers in monitoring (which may mean they actually pull water samples or may just mean they help with planning) is more effective in developing a common understanding of the problems than relying solely on models or external research and test results.

2. A flexible, private funding source allows farmers to go beyond typical cost-share and BMP activities.

3. Incentive payments can help get farmers engaged, but money may be less important than we thought. Outreach and on-farm field days garner more interest than payments.

Key Points

There is no single prescription for how to go about creating a farmer-led watershed council. Much of a group’s success will hinge on local leadership and culture. But to give yourself the best possible chance at developing a change-making council, you must have at least the following in place at the outset:

1. Two or three farmers at minimum, who are conservation-minded, are strong leaders or have the capacity to become so, and are willing to commit to the project.

2. A skilled organizer/facilitator to plan and run the meetings, recruit other farmers, and develop leadership and vision within the group.

3. A clearly defined problem – not everyone needs to agree in the beginning about the causes or solutions, but you do need to agree about what you’re addressing.

With these resources at hand, you will work together to develop a vision, mission, and goals for the group – from these will flow activities and initiatives. More than anything, we’ve needed patience. Council development and conservation practice adoption take time and dedication.
Additional Resources

- Hewitt Creek Farmer-Led Watershed Council Website: hewittcreek.wordpress.com
…they found that the best approach was collaborative – engaging farmers to investigate the source of the problem and come up with a plan to fix it.”