

Silver Creek Pilot Project 2017 Stakeholder Meeting Notes

MEETING DATE: December 19, 2017

- 1. Review of Accomplishments in 2017
 - a. Questions and discussion on winter cover:
 - i. What percentage of the uncovered land is tilled? Jeff Smudde answered we did not have that information at the meeting, but it is very low. Some crops were not harvested until very late in the season so some of the fields are corn stubble and some are tilled land from the low percentage of growers who do not participate in the Silver Creek Project.
 - ii. Do you anticipate growers using this practice without incentive? Bill Schaumberg and Brent Peterson gave thoughts on how farmers have been embracing cover crops and have been able to envision long term benefits, but there will need to be continued efforts to encourage cover crops in the short term.
 - iii. Have we worked with a nutritionist on the forage/grass? Bill Schaumberg answered that the growers in the Silver Creek watershed have been able to meet their feed needs using alfalfa and grass/alfalfa mix, and that *direct* coordination with the nutritionists has not been needed. Coordination with nutritionists has been discussed as a future need, but so far growers have completed coordination with their nutritionists when needed and the nutritionists have not been barriers to BMP installation in the Pilot.
 - b. Question on if there was pushback from renters when taking land out of production: Nikki noted there have been some dynamics between growers and owners that she has had to remain neutral on, and that she worked alongside the landowner to make sure they are getting what they want. Anything structural, Nikki worked with the landowner first but operational practices she worked with the grower. Jeff Smudde noted that the Pilot has not focused on taking land out of production so when this happens, it's typically something the landowner and grower have had knowledge or thoughts on in the past, so it has not been an issue for implementation.
 - c. Plans to try and share the data collected in the app with other counties? Framework of consistent BMP ID numbers was set up in case databases need to be merged in the future. Jeremy added that counties have additional needs from of their databases and reporting than what is accomplished in Silver Creek's database. Brent Brown and Jeremy commented that the Pilot and the Counties will want to continue collaborating and planning alongside each other.
 - d. Have we been able to give survey data to co-ops for spraying and other planning needs? The Silver Creek Team explained we have the data to be able to give out, but the coordinate points have not been requested yet because most of the farmers spray their own fields and do not have GPS for spraying or planting. Brent Brown noted that the

web-map that will be discussed later in the meeting was a tool that came out of conversations from growers to provide this information based on the equipment the growers have. Brent Brown noted that having accurate as-built BMPs in the GIS is geared toward providing accurate data, either through maps or coordinate points, to the growers whether in Silver Creek or in Full Scale.

Jeremy and Greg noted that in other counties, survey files have been shared with co-ops in the Lower Fox such as in the Plum Kankapot watershed with Country Visions, where they have a sprayer where they can shut off certain nozzles and avoid known practices using GIS survey grade data.

2. Water Quality Monitoring

- a. Why are there spikes in certain times of the year? Mike Finney mentioned they also see the same spikes in their waters at the same times of the year. Could it be due to taking corn silage off the field? Sarah noted that further evaluation of the water quality data is needed to understand the trends.
- b. Have we heard anything about the sediment core and pebble count sampling by USGS? This is part of a regional effort and it could be very telling for Florist Drive.

Action Item: Jeff Smudde and Kevin Fermanich will follow up with USGS on this topic.

- c. It will be interesting to see what will happen to spikes in the future after BMP implementation in 5 years or so. How quickly will water quality rebound after an event in the future? Kevin Fermanich recommended that data analysis include looking event by event in the future; for example what would happen after a 2-inch event pre-BMP and what happens in a 2-inch event post-BMP.
- d. Are there any paired monitoring events? The watershed does not currently have that comparison available.
- e. Is there a way to link data about land use, cover crops, etc. to assess the water quality results? The data collected in the project GIS will allow this to be completed during the Pilot years (2014 to current). The county can also complete this using satellite data and agricultural cover layers.
- f. What is the distribution of the practice intensity in the watershed and how does that relate to the distribution of monitoring sites? The Pilot implementation approach was to complete as much implementation as possible. Completing this analysis is something the Pilot will consider given the data collected within the GIS. However the distribution of practices is fairly evenly distributed throughout the Pilot watershed so the results may not show significant differences between monitoring sites.

3. Biological Monitoring Project Update

- a. How long do you expect the re-population of the organisms to take? Jim Snitgen responded that he expects that within a couple years we should see a rebound because if the sediment is not coming into the stream and smothering the coarse bottom substrate, that should help significantly. After in-stream habitat restoration is completed (re-meandering project) Jim expects a dramatic improvement.
- b. Has this information been given to farmers? This material is specialized so Jim wouldn't expect farmers to want this information. However, it could be provided if it is of interest.

4. Vegetated Water Treatment Systems Update

- a. Is this better than a wetland treatment system? Mike Troge suggested that it's lower cost and easier to manage. Comparison of the performance of the system is not known but Oneida and UWGB are planning to complete monitoring to inform this in the future.
- b. Drain tile was considered for seasonal drainage but was not installed due to lack of depth available. Drain tile may be installed in 2018.

5. Wetlands Team Update

- a. The acres were taken out of production because farmers agreed that the land was not productive. In areas away from the airport, there could me more opportunities to restore wetlands.
- b. Jim Snitgen noted that biological impact of the wetlands are not known because fish sampling is not completed, benthic macro invertebrates are not typically transient and sampling is completed only at the downstream reach at Florist Drive.

6. Adams Drive Wetland Update

a. Nicole provide an update to demonstrate progress and planting. Additional plantings and invasive species control is planned for 2018.

7. Grazing Updates

- a. Success of grazing will in part be contingent on long term commitment from the growers. This is one reason why hiring a grazing specialist to work directly with Robertson farm has been critical for Silver Creek. Some counties have grazing specialists (Marathon Co) and there are peer-to-peer networks which exists for information sharing between operations.
- b. Growers' positive opinion on grazing is continuing to develop, where large dairy operations are also interested in grazing.

8. Demonstration Farms Update

- a. Interseeding has more success when planted early in the season, especially with high plant populations such as 32,000/acre.
- b. Cover crop diversity will attract predatory insects and help keep pests at bay. Diversity will be important moving forward.
- c. Counties has been able to inform farmers through text message blasts when certain equipment or operations are happening on demo farms for people to stop by and see a practice outside of formal field days.
- d. Discussion on how to get information out to not only other farmers but other community members and ultimately to the consumer. Land o' Lakes is tying sustainability into their products nationally which could help move agricultural conservation projects forward through consumer spending.

Action Item: Jeff Smudde will follow up with Brent Petersen on ideas about how to capture lessons learned at Demonstration Farms. Facebook, presentations, and the website are all currently used and are helpful tools, but an interactive tool that could archive the many experiences could be very helpful.

9. Next Steps in Silver Creek

- a. Comparing cover crop efforts in the past versus now: the educational piece in the past was lacking, especially explaining the benefits to soil health. Barry suggested the rainfall simulator is a good educational tool and could be used in Silver Creek with growers. Adam and Barry recommended communicating the economic calculations, similar to how Brent Petersen showed the calculations in the Demonstration Farms Update, for the benefits of cover crops will also be helpful.
- b. Brent Brown asked how can we encourage a peer-to-peer network among growers so they can share their successes and learning opportunities? There was much discussion that focused around continued outreach and on-farm demonstrations. Organized "conferences" or "meetings" have not historically been as effective as in-the-field demonstrations.
- c. Scott Laeser asked if there were needs from a policy perspective? The group discussed that long term, enforcement "sticks" will not be successful and the best approach will be to leave dedicated staff behind in watershed projects to keep things going. Staff capacity is more important to fund than cost share funds, especially once the growers see the economics and soil benefits to conservation efforts.
- d. Brent Brown asked if further "certification" is needed or beneficial for the agronomists, since one of the major benefits of Silver Creek was the merging of agronomists with County conservationists? Bill Schaumberg commented that on the agronomy side, their basic certification does not include conservation. Some agronomists have done additional training through the NRCS for conservation planning (e.g. Jeff Polenske), but it is time intensive and should be pushed further if we want more broad conservation implementation.
- e. Kevin Fermanich commented that the "Reflection" factsheets are good communication tools and that beyond operational/structural BMPs, three additional ideas could be:
 - Communicate how a growers' actions on the field is observed in the stream or the downstream end of the watershed. This will help the grower make the connection from his field to the waterway.
 - ii. Water quality changes/improvements.
 - iii. Tell the story about how the percent cover increase to 85% over the 3 years of the Pilot project.

10. Full Scale Evaluation and Next Steps

- a. DNR Fisheries group should be involved with biological monitoring. In Dutchman-Ashwaubenon, Jim Snitgen suggested completing macroinvertebrate monitoring in June. DNR method in the fall may not work well in streams which are flashy/seasonably variable.
- b. For watershed inventory, it was suggested that DNR upper level permitting management should get involved to avoid long delays in permitting, including anyone who permits waterways such as the USACoE.