Working Lands Watershed Restoration Program – Stakeholders' Meeting Summary

Thursday, November 16, 2017, 1:30 – 4:00 pm MPCA, Rooms 2-A/2-B, St. Paul

Attendees:

Amanda Bilek, George Boody, Tanner Bruse, Whitney Clark, Bill Fitzgerald, Greg Hoch, Meleah Houseknecht, Brendan Jordan, Nick Jordan, Bill Lazarus, Lucy Levers, Steve Morse, Erin Niehoff, Bob Patton, Jeff Peterson, Suzanne Rhees, Trevor Russell, Kent Solberg, Dave Weirens

Updates:

Bob: MDA will soon be releasing an RFP for a study of Vegetative Cover and Soil Health. The study will examine opportunities and barriers for farmers to plant alfalfa and small grains, and other perennials and cover crops, in areas with vulnerable groundwater.

Survey Update

- At this point we've received 352 responses, for a 14% response rate. Third wave of mailings will yield more responses.
- High percentage of non-farmers or non-farming landowners (about 200 so far) due to the way county property tax records are organized.
- Almost 20% of respondents have converted to cover crops and 24% have converted to perennials in past 10 years likely to be alfalfa or possibly CRP or an easement program.
- Greatest familiarity with and use of alfalfa, annual cover crops, mixed grazing and forage crops.
- About 30% are likely to adopt cover crops; 40% to adopt alfalfa.
- Key factors influencing adoption are financial and market-related; complexity of conservation programs is a barrier.

Discussion:

- Note that farmer acceptance of forage crops is high –this should be factored into the economic analysis.
- Differences between watersheds should be explored.

Spreadsheet Discussion

- Why does alfalfa appear so broadly profitable when the conditions for its use are limited to certain areas? Can we adjust the market assumptions?
- Kent: Obstacles are lack of experience, lack of equipment, lifestyle choices alfalfa is almost nonexistent on rented land.
- Hay market was very soft this year.
- Multi-year leases are hard to get.
- FINBIN data set is makes it hard to assess alfalfa sale prices, since most that is reported is for onfarm use. FINBIN 2016 price was \$120/ton.

- [from spreadsheet documentation]: However, it is believed that most of the farms with alfalfa enterprises in FINBIN fed the alfalfa to their own livestock located on that farm. USDA-NASS reports prices actually received by producers for alfalfa that is sold. The average price reported for the 2016-17 marketing year (June 1,2016-May 31, 2017) was \$81 per ton, or considerably less than the FINBIN price (USDA National Agricultural Statistics Service).
- General agreement that current commodity prices should be used in spreadsheet.
- Dairy heifer enterprise: can be grazed partially on pasture.
- Wisconsin data shows more positive numbers for grazing than FINBIN.

Soils spreadsheet:

• Tanner: Revenue-negative acres are closely correlated with more erosive acres

Most likely crops for each watershed:

- Kent: the Kernza market is mostly organic and farmers are seeing a lot of competition from weeds, with yields below 20 bushels/ac. still struggling with agronomy.
- Brendan: Kernza is still in development, so expect growing pains ready for piloting, not "prime time"
- George: cover crops don't require a "market" so are already viable.
- Trevor: consider variable rate payments based on the environmental return
- George: why are the least plausible crops identified for the Chippewa?

Modeling Results

- These show the same acreage in cover crops as in grassland should include a 50% cover crops scenario.
- Goal of a 45% reduction in P and N would be consistent with the Nutrient Reduction Strategy
- Sediment Reduction Strategy goals of 50 65% reductions in TSS apply to Minnesota River 55 60% for Lake Pepin. Le Sueur River has a TMDL for turbidity.
- Use survey data showing likelihood of landowners planting perennials or cover crops- 30% 40% -- to guide modeling. Or consider the reverse how many acres would need to be converted to achieve a measurable water quality improvement?
- Important to consider the results "at scale" compared to results of a small pilot
- Don't assume that perennials/cover crops are the only strategies they work in conjunction with other BMPs
- Recognize the values of adding plant diversity and soil health.
- Look at modeling a combined strategy cover crops and perennials

Initial Ideas for a Working Lands Pilot Program

- Anticipate a 5 10 year pilot phase benefits of land conversion will take time
- Can't achieve goals only with perennials on marginal lands
- Need a full suite of soil health practices, but those are beyond the scope of this project.