BOARD OF WATER AND SOIL RESOURCES

Working Lands Watershed Restoration Program

Notes from 12/8/17 Stakeholder Meeting

Attendees: Amanda Bilek, George Boody, Bill Fitzgerald, Ted Fuller, Scott Hansen, Meleah Houseknecht, Andrew Keller, Bill Lazarus, Lucy Levers, Steve Morse, Erin Niehoff, Chuck Regan, Trevor Russell, Suzanne Rhees, Dave Weirens, Karen Voz (Skype), John Voz (Skype)

Update on Environmental Initiative meetings. Q – How does EI effort link to the broader project? A – It helps clarify "the opportunity to leverage federal funds" (per legislation) and maximize their use; also looks ahead to further initiatives.

Amanda – MN Corn Growers Assn is getting reports from new round of innovation grants, and may be able to share them.

Spreadsheet discussion – now up to about 40 sheets. Discussion of whether current prices were the most meaningful or whether a five-year average should be used. Bill offered to use both sets of numbers. (Current prices are lower than the average, especially for alfalfa.)

- At current prices, the oilseeds – camelina and pennycress – look the most attractive, based on the assumptions regarding pricing.
- Most fields contain a mix of soil types, and it can be difficult to separate them out for different farming practices.
- Organic dairy – one recent example of grower losing contract for a time period. Decreasing premiums?
    - Compare to dairy heifers, which are less of a major investment
    - You wouldn't do organic dairy at the 'field' scale – it's a whole farm enterprise

How best to represent the spreadsheet results? – one scenario per watershed may be the maximum that's feasible for the report.

The report needs to express both a current and a long-range vision.

Modeling discussion:

- HSPF may under-represent the amount of sediment loss that cover crops can prevent. Modeling team is developing a new land use type for cover crops, rather than treating it as a BMP.
- Sediment from channel scouring is not the same as sediment runoff from a field. Less runoff = less scouring downstream.

Discussed CRP rates, which are determined based on soil type. If we define the program as a supply and demand equation, then the soils and crops are the supply; balanced with the public demand for a set of ecosystem services.

HSPF modeling in Shakopee Creek watershed can be compared to modeling in GSSHA, which can factor in proximity to stream; slope, etc.

Coordination with conservation programs:

- DNR 2009 Report: *Prairie Vegetation and Energy Production Harvest Plan for WMAs*
  - "management of native prairie lands and harvesting of native prairie vegetation for use for energy production in a manner that does not devalue the natural habitat, water quality benefits, or carbon sequestration functions."

- **Policies and BMPs**
  - No more than one-third of the land should be disturbed in any one growing or breeding season.
  - Manage grassland parcels as shapes that maximize the core interior area.
  - Dormant season harvest is preferred – otherwise, include a refuge component for wildlife.
  - Cutting height adjustments – stubble height of at least four inches
  - Minimize soil disturbance; avoid rutting, wet soils
  - Storage of biomass should occur off-site
  - Avoid rare plant and animal species
  - Manage invasive species risk

- **Minnesota Prairie Conservation Plan**: "Although conventional agricultural uses will continue to dominate the Prairie Region, protecting remaining native prairie and associated habitats, reconstructing additional grasslands, **expanding perennial crops**, and increasing the implementation of conservation practices will make these areas more sustainable and more wildlife "friendly." In strategic locations, large areas of prairie, grassland and associated habitats will be protected and restored to create functioning prairie systems that provide **major opportunities for sustainable grass-based agriculture such as grazing and haying.** These functioning landscapes will also contribute clean water, fish and wildlife habitat complexes, high quality recreational opportunities, and thriving rural communities where Minnesota's citizens will want to live and visit."

Discussion of pilot working lands program "contract terms"

Consider a "processing facility" scenario in addition to a watershed scenario. If a proposed processing facility tries to establish a supply chain spanning more than one watershed, we should be open to it.

Prioritize environmentally sensitive areas, which are likely to also be marginal land.

Envision a three-tier system:

- cover crops
- cash cover crops
- perennials

OR a four-tier system:

- oilseed crops – aviation fuel
- perennial crops for food and feed – alfalfa and kernza
- perennial crops for fuel – switchgrass / miscanthus
- cover crops for soil health

- The “food and feed” category could include multispecies prairie for pollinators.

Suggestion:

Cover Crops	**Cash Cover Crops**	**Perennials**
$15/ac.	“transition” payments	cap on contract prices

X Axis – Length of Contract – 5 years – 10 years – early termination penalty?

- Animal agriculture: subsidize the feed sources, not the animals
- Costs for contracts such as water and fencing could be subsidized
- Perhaps publicly owned land such as a WMA could be packaged with private land for grazing.

Payment rates:

- You could establish a schedule of prices for the watershed, then evaluate field by field.
- CREP and CRP set payments based on land value, which provide a good benchmark.
- Soil productivity (supply side) vs. ecosystem benefits (demand side that state will subsidize)
- Take the RIM-CE standards as a model.
- Different standards for “pre-market” and “post-market” conditions – need to adjust.
- Q - Do food companies want long-term contracts?

See also more detailed follow-up concept from Erin Niehoff, below:

Who can apply?

Anyone in the watershed can apply for these funds.

What criteria are used for application selection?

- What is most important?
- How much of the offered land is considered marginal
- The number of acres being offered
- The new type of cropping that would be applied:
    - (Would need to allocate different types of crops into the following categories / set categories that make sense)
    - Oil seed
    - Food and feed
    - Biomass facility
    - Environmentally beneficial

How are application ranked?

- What is most important?

How are payments determined?

Payments are determined on three different criteria:

- Type of cropping applied, setting X different categories
    - This will set the base funding allocation
- Whether the land is in a priority area
    - If it is priority, the base funding allocation is set at 100%
    - If it is non-priority, the base funding allocation is set at 70% (for example)
- Length of contract
    - If a 5-year contract is chosen, the base funding allocation is set at 100%
    - If a 10-year contract is chosen, the base funding allocation is set at 110%

[Note: if there are 4 types of cropping, 2 types of priority, and 2 contract lengths, that means there are 16 program options]

Example situations:

- Farmer A is planting a cash cover crop that fits the oil-seed category. Farmer A's land is in a priority area of the watershed, and would sign up for a 10-year contract.

  Base funding for oil-seed category is $7 per acre.
  Priority funding is set at 100% and a 10-year contract is 110%.
  This means that Farmer A would receive payments of $7 x 100% x 110% per acre = $7.70 per acre per year
- Farmer B is planting environmentally beneficial perennials that are not being used for food or feed, or going to a biomass facility. Farmer B's land is not in a priority area of the watershed, and would sign up for a 5-year contract.

  Base funding for environmentally beneficial category is $15 per acre.

  Non-priority funding is set at 70% and a 5-year contract is 100%

  This means that Farmer B would receive payments of $15 x 70% x 100% per acre = $10.50 per acre per year

- Farmer C is planting feed crops for cattle. Farmer C's land is not in a priority area of the watershed, and would sign up for a 10-year contract.

  Base funding for food and feed crops is $9 per acre.

  Non-priority funding is set at 70% and a 5-year contract is 110%

  This means that Farmer C would receive payments of $9 x 70% x 110% per acre

  = $6.93 per acre per year

What rules would need to be followed?

Applicants, once enrolled, would need to follow these rules:

- Specific BMPs?
- Early termination clauses—what would they look like?
- How would this interact with CRP, CSP, EQIP, other program rules?