

## NONSTRUCTURAL LAND MANAGEMENT PRACTICES (NLMP) IMPLENTATION PLAN REQUEST FORM FY 2018 CONSERVATION COST-SHARE BASE GRANT

(Period of January 24, 2019-December 31, 2019) For The Erosion Control and Water Management Program

January 24, 2019

**SWCD:** Wabasha SWCD **Contact:** Terri Peters

Briefly describe the District's proposed local policy and implementation plan for incorporating nonstructural land management practices into your conservation cost-share program by answering the following questions. A maximum of three pages, not including the signature page is allowed for your answers.

1. What prioritized, targeted and measurable actions have been taken to insure that there is a direct erosion control and water quality connection to an identified large scale plan?

Targeted watersheds will include the Lower Zumbro River and Whitewater River. Practices identified within the nonstructural land management plan for Wabasha County address the following items in the County's Local Water Plan: 1. Soil Erosion and 2. SSTS/Wells/Groundwater. The Wabasha County Water Plan, received feedback in these priority concerns that are also addressed in the Whitewater Watershed Project, Whitewater Landscape Plan and the Zumbro WRAPS. The use of cover crops will assist addressing Priority Item 1 in the Water Plan. The use of cover crops is recognized as one of many strategies in the Zumbro WRAPS to aid the goal of reducing sedimentation and phosphorous. Feedback on this priority also came from Whitewater Watershed Project to work through soil health to increase infiltration to reduce runoff and erosion through the implementation of cover crops. Wabasha's nonstructural plan recognizes the benefits of using cover crops as a BMP within their strategies, goals, and implementation schedules as a means to address runoff from agricultural lands.

Item 2 in the Water Plan will benefit from the use of cover crops and utilizing contour stripping (slow water, trap sediment and nutrients). The Karst geology of Wabasha County makes it unreasonable to separate surface water from groundwater as the two can be closely tied via sinkholes.

A majority of the land in Wabasha County plan area is farmland. This predominant land use emphasizes the need for good soil health, as healthy soils drive the sustainability of agricultural production. Healthy soils perform several essential functions, including cycling nutrients and regulating water flow. As such, managing to improve soil heath may increase its nutrient cycling capacity, providing financial benefits to the producer by reducing the need for extra, synthetic inputs. Additionally, managing for healthy soil may improve organic content of soils, thereby improving phosphorous and soil retention.

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Most of the agricultural land in the county is left without cover once crops are harvested. To encourage maintaining cover, and for the overall soil benefits they provide, cover crops will be prioritized as a BMP that we can facilitate. Priority will be given to fields planted to soybeans, sweet corn, peas and corn silage or any crop where harvesting the field crop will leave the soil in a condition where it is vulnerable to sheet and rill erosion.

- 2. How and what technical assistance will be provided to land occupier to insure a whole farm or field scale conservation plan is developed and implemented?
  - Some purposes of implementing cover crops on agricultural lands is to address sheet and rill erosion, increase soil health and to capture and recycle excess nutrients. A visit to the field and/or fields will be made by qualified SWCD staff to ensure that other resource concerns may be addressed. For example, staff will note any gully formations along field edges and suggest BMP's to address said gully. In addition, staff will discuss crop rotation, contour farming, manure management, etc. with the land occupier as a means to understand the land occupier's farming goals and methods. Staff will work with the land occupier to develop a conservation plan for the field(s) of interest with the use of IET being used to help quantify inadequacies. Recommendations for BMP's will be made for deficiencies noted during the planning process. The upland drainage areas will also be monitored for land use, slope and erodibility to ensure that the practices being installed are suitable for the planned location.
- 3. List the types of nonstructural land management practices that will be eligible for financial assistance. What specific FOTG standards will be used for these practices? What will be the effective life of these practices?
  - Cover Crop (340), under the MN Index to Practice Standards will be eligible for financial assistance. FOTG standards will be met for all standards. Goal of the practice is for ongoing adoption after the 3 years. Producers will be expected to establish a cover crop after removal of a field crop each year for a minimum of 3 years with payment after establishment of a cover crop after the first year. Spot checks of contracted acres will be made after each year's establishment.
- 4. What will be proposed flat rates OR the maximum percentage based on invoices and receipts for the listed practices and, if flat rates are being proposed, how did you determine the feasibility of these rates? Will there be any other program funding being paid on these practices?
  - Upon completion and signature of a flat rate "Wabasha SWCD Cover Crop Incentive Program CONSERVATION PRACTICE ASSISTANCE CONTRACT" and successful seeding of the initial cover crop in year 1, a rate of \$30 per acre will be allocated to a land occupier with a MINIMUM of 10 acres per land occupier for 3 years (i.e.  $$30 \times 10$ acres \times 3$ years = $900$ ). This rate was established by calculating current, typical seed cost of drilling a single species winter annual such as Cereal Rye at recommended rates along with the per acre cost to rent a no-till drill. The land occupier may incur additional expenses for fertilizer, labor, and equipment.

5. How will the District implement contracts with land occupiers for technical assessments, conservation planning, practice implementation and technical certification, payment schedule within the timelines of the grant agreement and practice noncompliance issues?

District technicians will utilize the "MN Cover Crop Design Worksheet" along with recommendation for seeding dates and rates as set forth by the University of Minnesota or the Midwest Cover Crop Council. A one-time payment will be made after successful seeding of the 1<sup>st</sup> year cover crop with the requirement to establish a cover crop on the given field for 2 consecutive years with the 3<sup>rd</sup> year being on the same field or different field to accommodate crop rotations. For all practices Wabasha SWCD will be entering into a 3 year contract with the land occupier and land owner and will be subject to yearly inspections. Inspections will note compliance with the individual's operation and maintenance plan and address noncompliance with the practice. Non-compliance with the program will follow BWSR's Grants Administration Manual" {GAM} guidelines with the goal of bringing the land occupier into compliance. If there is a failure to maintain compliance, the land occupier is liable to the SWCD for up to 150% of the flat-rate payment received.

6. What are your proposed O&M procedures and policy to ensure these practices are incorporated into the farming operation? Will this result in a modified operation, maintenance and site inspection program for nonstructural land management practices as per BWSR GAM policy? And, if yes, what are those modifications.

We plan to use the standard BWSR Practice Site Inspection Form from the BWSR website on follow-up inspections. Operation and Maintenance procedures will follow the NRCS standards for the applicable practice. For Cover Crop (340) an operator: 1.) should control growth of the cover crop to reduce competition from volunteer plants and shading, 2.) control weeds in the cover crop by mowing or herbicide application, 3.) control soil moisture depletion by selecting water efficient plant species and terminating the cover crop before excessive growth, 4.) evaluate the cover crop to determine if the cover crop is meeting the planned purposes(s), 5.) if the cover crop is not meeting the purpose(s) adjust the management, change the species of cover crop, or choose a different technology.

O&M procedures will require establishment of cover crop each year for 3 years based on NRCS standard. At this time there are no expected changes planned for a modified operation, maintenance, and site inspection program for non-structural land management practices based on the plan to include cover crops as a practice.

7. Is there any other information you would like to provide at this time?

Some flexibility will be granted to land occupiers allowing them to rotate the cover crop fields to fit the crop rotation on a given farm. Total acres of cover crop planted per year will need to equal or exceed the contracted acres in order to maintain compliance.

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SIGNATURE PAGE	
Requested By:	
SWCD Chair Signature	Date
Approved By:	
Board Conservationist Signature	Date

BCs will attach a copy of the approved request form under the Attachments Tab of the grant record in ELINK.