

**Natural Resources Conservation Service  
Report To  
Papio-Missouri River NRD Board  
July 12, 2018  
Neil Jensen, District Conservationist**



**USDA Funding Available to Help Control Erosion on Cropland**

*Natural Resources Conservation Service accepting funding applications through July 20.*

Farmers know when they lose soil, they lose profits. Preventing soil erosion is good for the environment and for producers' bottom line.

The USDA Natural Resources Conservation Service (NRCS) has funding available to help Nebraska's farmers control erosion on their cropland. This funding is available through a special Ephemeral Gully Control Initiative under the Environmental Quality Incentives Program. Eligible producers have until July 20 to apply.

Controlling erosion is especially important for recipients of USDA program benefits – like federal crop insurance subsidies and conservation program payments. USDA program participants are required to control erosion on all cropland determined to be highly erodible. The funding available through this special initiative can help farmers meet that requirement.

Conservation practices such as cover crops and grassed waterways are good solutions for controlling ephemeral gullies, which is required by conservation compliance provisions. Conservation buffers are effective in controlling erosion from both water and wind and help protect the soil, improve air and water quality, enhance fish and wildlife habitat, and beautify the landscape.

According to NRCS, over the last couple of decades, there has been a continual decrease in grassed waterways due largely to the adoption of large-scale farming equipment and conservation cropping systems that rely heavily on herbicides to control weeds. On some fields, this has led to increased erosion and ephemeral gullies.

Ephemeral gullies are those rough spots where water concentrates and causes soil to wash away, creating small ditches. While the damage to cropland appears to be small, if not controlled, the negative impacts like loss of inputs, decreased soil health and yields can be significant. Plus, it can cause farmers to be out of compliance with USDA's Food Security Act requirements.

For more information, and to apply for funding through this special initiative, visit NRCS in your local USDA Service Center before July 20.



*By Fred Cummings, manager, Manhattan Plant Materials Center*

Cereal rye, an annual small grain, is a popular cover crop among experienced producers and those who are just starting to implement cover crops into their cropping system. Cereal rye has many attributes as a cover crop such as low seed cost and availability, ease of establishment, reliable performance across a diverse range of growing conditions and climatic conditions. The Midwest Cover Crops Council rates cereal rye as an excellent nitrogen scavenger, soil builder, loosens topsoil, controls soil erosion, suppresses weeds and provides forage for livestock.

Along with these positive attributes, there are also some negatives. Cereal rye may immobilize nitrogen, causing a nitrogen deficiency in the crop following cereal rye, this may be offset by applying additional nitrogen. If a cereal rye cover crop produces seed, it may become a weed in subsequent crops. In contrast to other cover crops in the Midwest, such as oilseed radish and oats, most cereal rye cover crops require termination, either chemically with a broad-spectrum herbicide, or mechanically with a roller crimper or tillage equipment.

The [Manhattan, Kansas Plant Materials Center \(PMC\)](#), is one of 20 PMCs participating in the evaluation of 15 commercially available cereal rye varieties for their adaptation to different soils and climate. The cereal rye varieties are Aroostook, Bates, Brasetto, Elbon, FL401, Guardian, Hazlet, Maton, Maton II, Merced, Oklon, Wheeler, Wintergrazer 70, Wrens Abruzzi, and Rymin. The performance of these cereal rye varieties provides conservation planners and producers with the information needed to make informed decisions on varieties to plant to best address the desired resource concern.

Concerns over the ability to successfully terminate a cereal rye cover crop is a common reservation preventing its large-scale adoption. The timing of termination (i.e. roller crimping at the soft dough stage, spraying at or before the boot stage) determines the level of control achieved. Selecting a later maturing cereal rye variety may provide an opportunity to extend the window of effectively termination cereal rye.

A cereal rye variety that lacks winter hardiness will still germinate and grow well in the fall to scavenge excess nitrogen, protect the soil by intercepting raindrop impacts, and add living root mass to the soil. While a variety not winter hardy may not fully address the resource concerns, a cereal rye cover crops that produces less biomass makes it easier to plant into and easier to terminate.

Weed suppression of cereal rye is attributable to the physical effect of mulching from the large amount of biomass produced and the allelopathic action of the compound DIBOA (2, 4-dihydroxy-1, 4 (2H)-benzoxazin-3-one). Some rye varieties (the later maturing typically) produce more DIBOA than others. If weed suppression is the primary goal of the cover crop selecting varieties with higher levels of DIBOA may help to best meet the resource concern.

# CONSERVATION

Our Purpose.  
Our Passion.

Helping People Help the Land.

## Non-Discrimination Statement

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov).

USDA is an equal opportunity provider, employer, and lender.