



Nebraska Practice Variance Request Cover Crop 340

REQUEST

The Nebraska Corn Board requests a variance from the Conservation Practice Standard (CPS) Cover Crop 340 to allow the reduction of cover crop planting rates and termination timing as part of practice implementation under the NFWF Farmers for Soil Health Partnerships for Climate- Smart Commodities grant in Nebraska.

JUSTIFICATION

- In general, NRCS practice standards are how climate impact projections were developed for this overall grant opportunity and modifications to standards may alter projected outcomes.
- Our hypothesis: any reduction in GHG benefits that would come from lower seeding rates will be overcome by the number of producer participants gained and overall impact will be greater over time.
- These introductory cover crop seeding rates are meant to provide an “on-ramp” for farmers new to cover crops providing lower risk and simplified options.

First Time Cover Crop Acres

Fields receiving cover crops for the first time would have an introductory option to grow cereal rye, wheat, barley, triticale, an oats/brassica mix, or cereal rye/ vetch/ oats mix cover crop at lower seeding rates. This allows less experienced farmers to try a lower risk option for entry into the system.

SUPPORTING DOCUMENTATION

Cereal Rye

- 1) Cereal Rye Cover Crop Ahead of Soybean
 - a) Option to plant cereal rye at a minimum seeding rate of 20 lbs PLS/acre seeding rate if drilled, planted or overseeded. Broadcast and aerial seeding must be consistent with NRCS Practice Standard 340 recommended seeding rate.
 - b) Cover crop termination activities must take place at or before cash crop emergence.
- 2) Cereal Rye Cover Crop Ahead of Corn



- a) Option to plant cereal rye at a minimum seeding rate of 15 lbs PLS/acre seeding rate if drilled, planted or overseeded. Broadcast and aerial seeding must be consistent with NRCS Practice Standard 340 recommended seeding rate.
- b) Cover crop termination activities must take place at or before cash crop emergence.

Winter Wheat

- a) Option to plant wheat at a minimum seeding rate of 20lbs PLS/acre seeding rate if drilled, planted or overseeded. Broadcast and aerial seeding must be consistent with NRCS Practice Standard 340 recommended seeding rate.
- b) Cover crop termination activities must take place at or before cash crop emergence.

Winter Barley

- a) Option to plant barley at a minimum seeding rate of 20lbs PLS/acre seeding rate if drilled, planted or overseeded. Broadcast and aerial seeding must be consistent with NRCS Practice Standard 340 recommended seeding rate.
- b) Cover crop termination activities must take place at or before cash crop emergence.

Triticale

- c) Option to plant triticale at a minimum seeding rate of 20lbs PLS/acre seeding rate if drilled, planted or overseeded. Broadcast and aerial seeding must be consistent with NRCS Practice Standard 340 recommended seeding rate.
- d) Cover crop termination activities must take place at or before cash crop emergence.

Oats/Brassica Mix

- a) Option to plant oats/brassica mix at minimum seeding rate of 25lbs PLS/acre for oats and a minimum rate of 1.5 lbs. PLS/acre of brassica of choosing (radish, turnip, forage collard, rape) if drilled, planted or overseeded. Broadcast and aerial seeding must be consistent with NRCS Practice Standard 340 recommended seeding rate.
- b) Cover crop will winter terminate.

Cereal Rye/ Vetch/ Oats Mix

- a) Option to plant at minimum seeding rate of 30lbs PLS/acre total for a mix of cereal rye, vetch, and oats if drilled, planted or overseeded. Variation in rate of individual species allows for achievement of various on-farm goals including, but not limited to, building soil nitrogen, fall grazing, spring grazing, and spring weed control. Broadcast and aerial seeding



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must be consistent with NRCS Practice Standard 340 recommended seeding rate.

- b) Cover crop termination activities must take place at or before cash crop emergence.

NRCS Response:

Cover Crop 340 seeding rates follow landgrant university recommendations which have been proven through research to achieve the conservation benefit objective of the participant. NRCS refers to Midwest Cover Crop Council Decision Support tool and Nebraska Extension publications MCCC-108 and MCCC-107. NRCS has determined that the lower seeding rates requested in this variance will achieve a level of plant per square foot for soil protection, nutrient cycling, and duration of live plant roots as objectives of a cover crop.

NRCS approves:

Cereal rye seeding rate reduction as stated in items 1 and 2.

Winter barley seeding rate reduction as stated in option a.

Triticale seed rate reduction as stated in option c.

Oats/Brassica Mix seeding rate as stated in Mix option a.

Cereal Rye/Vetch/Oats as stated in Mix option a.

Cover crop termination timing found in the version 4 of the NRCS Cover Crop Termination Guidelines should be followed for the appropriate Nebraska zone. The guidelines apply to non-irrigated cropland. Risk Management Agency offers Good Farming Practice determination when Cover Crop 340 is followed along with the termination guidelines. Options for innovative termination timing based on research locally may be requested through RMA. Cover Crops in irrigated cropping systems should be terminated based on the crop system, water availability, and the conservation purpose, but before the planted crop emerges.

STATUS:approved

December 21, 2023

Betsy Dierberger, PhD, NRCS National Agronomist

A handwritten signature in blue ink that reads "Betsy Dierberger". The signature is written in a cursive, flowing style.



September 5

Katina Hanson
Acting Senior Advisor for Climate-Smart Commodities
U.S. Department of Agriculture
Washington, D.C.

Dear Mrs. Hanson,

I serve as the statewide Soil Health Extension Educator in Nebraska and this letter is an acknowledgement of my support for the NRCS 340 practice variation request submitted by Nebraska Corn in partnership with Illinois Corn Growers Association and Kentucky Corn under the Farmers for Soil Health Climate-Smart Commodities program.

This practice variation is an opportunity to make cost-share programs more practical for growers, providing an “on-ramp” for farmers new to cover crops that offers lower risk and simplified options. Any reduction in GHG benefits that would come from lower seeding rates will be overcome by the number of producer participants gained and overall impact will be greater over time.

Existing seeding rates for Nebraska’s NRCS 340 practice standard often serve as a barrier to program participation. They are frequently considered too high to the degree that adoption post contract is difficult to maintain. Current Nebraska NRCS requirements for cover crops do not accurately consider the degree of risk and up-front cost taken on by the grower. By reducing the seeding rates for commonly used species and mixes, the cost is brought in range of what a producer would typically pay without the assistance of a government program.

In closing, this practice variation allows less experienced farmers to try a lower risk option for entry into a more regenerative system. The soil health and GHG reduction benefits of greater cover crop adoption across Nebraska’s landscape far outweigh any potential for reduced efficacy when using a reduced seeding rate. For these reasons, I strongly support Nebraska Corn’s practice variation request.

Respectfully,

Katja Koehler-Cole, Ph.D.
Soil Health Management Extension Educator
University of Nebraska-Lincoln



September 18, 2023

Katina Hanson
Acting Senior Advisor for Climate-Smart Commodities
U.S. Department of Agriculture
Washington, D.C.

Dear Mrs. Hanson,

This letter is an acknowledgement of my support for the NRCS 340 practice variation request submitted by Nebraska Corn in partnership with Illinois Corn Growers Association and Kentucky Corn under the Farmers for Soil Health Climate-Smart Commodities program. My perspective is based on observations and experiences in serving growers and ag industry professionals as a Nebraska Extension Educator for over 19 years.

I've watched a cycle with the growers I serve. The cycle includes growers trying cover crops through various programs such as EQIP and local Natural Resources District grants, struggling with compliance on getting multi-species establishment, and finding the expense is too great when the money is no longer available to them. I've also watched the difficulty with the seeding rates and number of species required not being practical for growers to undertake once they are no longer eligible for Nebraska NRCS dollars. It's very difficult to get multi-species to emerge and establish after harvest of cash crops in Nebraska. Those requirements have turned some growers away from considering Nebraska NRCS program funding for cover crops. Existing seeding rates for Nebraska's NRCS 340 practice standard often serve as a barrier to program participation. I've shared all these concerns with area NRCS employees who have shared similar concerns.

I've watched other growers who chose to seed cover crops without NRCS program assistance at reduced rates and species still achieve stands to help with erosion and weed control. Others had utilized NRCS programs in the past and then chose to reduce seeding rates and species when they paid for the cover crops on their own. By reducing the seeding rates for commonly used species and mixes, the cost is brought in range of what a producer would typically pay without the assistance of a government program. The seeding rates and species in this variation request are based on ground-truthing what growers are currently doing successfully in Nebraska.

This practice variation allows less experienced growers to try a lower risk option for entry into a more regenerative system. It also provides greater practicality for growers to consider NRCS program funding for cover crops and to hopefully maintain cover crop adoption on their own post-funding. For these reasons, I strongly support Nebraska Corn's practice variation request.

Respectfully,

Jennifer Rees
Nebraska Extension Educator, York and Seward Counties



Nebraska Extension in York County
2345 Nebraska Ave. | York, NE 68467-9301 | 402.362.5508

September 05, 2023

EXTENSION
INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES
Phelps-Gosper County

Katina Hanson
Acting Senior Advisor for Climate-Smart Commodities
U.S. Department of Agriculture
Washington, D.C.

Dear Mrs. Hanson,

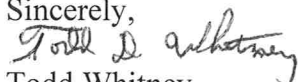
As a Nebraska Extension Cropping Systems, Soil Health & Water Educator, I support the NRCS 340 practice variation request submitted by Nebraska Corn in partnership with Illinois Corn Growers Association and Kentucky Corn under the Farmers for Soil Health Climate-Smart Commodities program.

This practice variation is an opportunity to make cost-share programs more practical for growers, providing an “on-ramp” for farmers new to cover crops that offers lower risk and simplified options. Any reduction in GHG benefits that would come from lower seeding rates will be overcome by the number of producer participants gained and overall impact will be greater over time.

Existing seeding rates for Nebraska’s NRCS 340 practice standard often serve as a barrier to program participation. Although multi-species cover crops mixes are highly recommended, economics is still extremely important for producers. For example, simple economic three- or four-way cover crops mixes with turnips, cereal rye, wheat and/or oats, might provide valuable soil building benefits. Whereas specialty legumes and/or hybrid radishes and pollinator seeds might increase the seed mix costs making adoption post contract difficult to maintain. Current Nebraska NRCS requirements for cover crops do not accurately consider the degree of risk and up-front cost taken on by the grower. By reducing the seeding rates for commonly used species and mixes, the cost is brought in range of what a producer would typically pay without the assistance of a government program.

In closing, this practice variation allows less experienced farmers to try a lower risk option for entry into a more regenerative system. The soil health and GHG reduction benefits of greater cover crop adoption across Nebraska’s landscape far outweigh any potential for reduced efficacy when using a reduced seeding rate. For these reasons, I strongly support Nebraska Corn’s practice variation request.

Sincerely,



Todd Whitney

Nebraska Extension Educator
Cropping Systems, Soil Health, and Water

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