

New Mexico Supplemental Criteria and Documentation Requirements For

CONSERVATION STEWARDSHIP PROGRAM

All 340 Cover Crop Enhancements: E340101Z, E340102Z, E340106Z1, E340106Z2, E340106Z3, E340106Z4, E340107Z, E340118Z, E340119Z, E340134Z

The cover crops for use in New Mexico are presented in the table below according to the primary purpose of the cover crop. If a particular species is not listed but is preferred in management, the NRCS Field Office will contact the NRCS State Agronomist for approval of that species. Cover crops for CSP enhancements must consist of a minimum of two species. When a specific purpose is identified in the enhancement the cover crop mix must consist of at least 75% of the species listed for that purpose.

NRCS will prepare the Cover Crop Implementation Requirement and specify the seeding rates, planting dates, canopy cover, biomass or other relevant factor that must be met in order to achieve the enhancement objective.

Cover crops cannot be harvested for seed.

Cover Crop Termination

Due to limited moisture/water in New Mexico systems cover crops should be terminated upon 50% of the cover crop reaching reproductive phase. If a particular species in the mix is more advanced in its growth and has the potential to set seed, then cover crop should be terminated at this point. This is done to prevent both soil moisture depletion and prevent weedy problems in the subsequent crop. Acceptable methods of termination include winter kill, mowing/shredding, roller/crimper, grazing and herbicides. If later terminations are needed, document the reasons and how problems will be avoided in the subsequent crop. Each enhancement has particular requirements for termination, so those must be followed properly.

<u>New Mexico NRCS recommends that for non-irrigated cropland producers consult with their crop</u> <u>insurance provider before selecting any of the 340 enhancements.</u> Fields insured under RMA insurance must follow the *NRCS Cover Crop Termination Guidelines- Non-Irrigated Cropland (December 2013)* found at eFOTG, Section IV, Conservation Practices, Cover Crop, Cover Crop Standard Attachment.

Supplemental Documentation Required from Producers in addition to what is required per CPS 340 Cover Crop standard and specification:

• Soil test results if available.

Cover Crop Enhancements	June 2017	Page 1



United States Department of Agriculture

- Pictures after germination that show plant density. (One photo taken straight downward and one across the field)
- Pictures at termination that show biomass production. (One photo taken straight downward and one across the field)
- For E340106Z3, pictures every 3 months that show soil coverage.
- For E340106Z4 the soil health assessment conducted in Year 1 and Year 3 must either use the NM Soil Health Score Card found at eFOTG Section 1, Agronomy Technical Note #80 or be an assessment that includes all the physical, biological and chemical indicators in the NM Soil Health Score Card.
- Records that document planting method, planting dates, seeding rates, termination method and termination date for each field contracted.
- Optional and encouraged: Recorded observations such as soil temperature at planting, pests impacts on the cover crop, changes in soil properties, water infiltration, etc.

Cover Crops for Water and Wind Erosion	Cover Crops for Soil Compaction Reduction
E340101Z, E340102Z: the crop following the	E340107Z: mix must include fibrous and deep-
cover crop must be no-till planted.	rooted species.
Austrian Winter Peas (Very Good)	Barley (Very Good)
Barley (Excellent)	Clovers (Excellent-Very Good)
Clovers (Very Good-Good)	Millets (Very Good)
Cowpeas (Excellent)	Oats (Very Good)
Mustards (Very Good)	Radish, Tillage (Excellent)
Oats (Very Good)	Rye (Very good)
Radish (Very Good)	Sorghums and sudangrass (Excellent)
Rye (Excellent)	Sunflower (Very Good)
Sorghums and Sudangrass (Excellent)	Triticale (Very Good)
Triticale (Very Good)	Vetch, Hairy (Very Good) *May become weedy
Wheat (Very Good)	Wheat (Very Good)
	Woolypod Vetch (Very Good)

*Performance Measures according to Managing Cover Crops Profitably and NMSU publication "Principles of Cover Cropping for Arid and Semi-Arid Cropping Systems." Producers are encouraged to study both publications to understand the advantages and disadvantages of the different species: http://www.sare.org/Learning-Center/Books/Managing-Cover-Crops-Profitably-3rd-Edition (free download and books for purchase) and http://aces.nmsu.edu/pubs/a/A150.pdf

<u>*CSG- Cool season grass, WSG- Warm season grass, CSB- Cool season broadleaf, WSB- Warm season</u> <u>broadleaf</u>

Cover Crop Enhancements	June 2017	Page 2

CONSERVATION STEWARDSHIP PROGRAM



United States Department of Agriculture

Cover Crops for Quick Growth and Weed Suppression	Cover Crop to Break Pest Life Cycles The IR must specify which pest is being addressed.
Barley (Very Good)	Nematodes
Buckwheat (Excellent) *May become weedy	Rye, Sorghum/Sudan
Clovers, Berseem and Subterranean (Excellent)	Field Peas and Medics
Clovers, Crimson, Red, White, Sweet (Very Good)	Mustards, Radish, Rapeseed
Cowpeas (Excellent)	
Field Peas (Good)	<u>Diseases</u>
Hairy Vetch (Good) *May become weedy	Barley, Oats, Rye
Black Medic (Excellent)	Mustards, Radish, Rapeseed,
Millets (Excellent)	Hairy Vetch *May become weedy
Mustards (Very Good)	Crimson Clover
Oats (Excellent)	Field Peas
Radish (Excellent)	Medics
Rapeseed (Very Good)	Sorghum/Sudan
Rye (Excellent)	
Wheat (Very Good)	
Woolypod vetch (Excellent)	
Sorghums and sudangrasses (Excellent)	

Cover Crops to increase Organic Matter Content E34010671: minimum of 3 species from this	Cover Crops to Uptake Excess Nutrients in the Soil
category.	E340119Z
E340106Z2: minimum of 4 species, with at least	E340118Z
2 species from each of the crop types missing in	
the rotation. Species from other categories can	Soil test result or nutrient budget should be
be used as long as 75% are from this category.	attached to the IR to document the excess
E340106Z3: minimum of 2 species from this	nutrients present in the soil profile.
category.	
Barley (Very Good)-CSG	Barley (Very Good)
Clovers (Excellent-Good)-CSB	Oats (Very Good)
Hairy Vetch (Excellent) *May become weedy	Millets (Very Good)
Millets (Very Good)- WSG	Radish (Excellent)
Mustards (Very Good)- CSB	Rye (Excellent)
Radish (Very Good)-CSB	Sorghums and sudangrass (Excellent)
Rye (Excellent)- CSG	Triticale (Very Good)
Sorghums and sudangrass (Excellent)- WSG	Wheat (Very Good)
Triticale (Very Good)- CSG	
Wheat (Very Good)- CSG	
Woolypod Vetch (Excellent)-CSB	

Cover Crop Enhancements	June 2017	Page 3