United States Department of Agriculture
Natural Resources Conservation Service 2013 Ranking Period 1

Supplemental payment activity –CCR99–Resource Conserving Crop Rotation (RCCR)

Enhancement Description
Resource-conserving crop rotation means a crop rotation that:
1. Includes at least one resource conserving crop as determined by the State Conservationist;
2. Reduces erosion;
3. Improves soil fertility and tilth;
4. Interrupts pest cycles; and
5. In applicable areas, reduces depletion of soil moisture or otherwise reduces the need for irrigation.

Resource-conserving crop means a crop that is one of the following:
1. A perennial grass;
2. A legume grown for use as forage, seed for planting, or green manure;
3. A legume-grass mixture;
4. A small grain grown in combination with a green manure crop consisting of a grass, legume, forbs, or grass-forbs mixture, whether interseeded or planted in rotation.

Land Use Applicability
Cropland

Benefits
Resource-conserving crop rotations provide:
- Substantial aboveground residue and extensive root systems resulting in controlled erosion, improved soil tilth and carbon sequestration into soil organic matter.
- Improved soil condition and deep root channels resulting in enhanced water infiltration and soil moisture holding capacity; all of which reduce runoff losses as well as the frequency and amount of irrigation required.
- Improved soil biological activity for enhanced soil health via green manures and rhizodeposition (i.e., root exudates; fine root sloughing).
- Biological N fixation by legumes for soil fertility building and reduced energy consumption.
- Disrupted pest and weed life cycles by varying plant families and timing of field management activities

Conditions Where Enhancement Applies
This enhancement applies to all annually planted crop land use acres. The enhancement does not apply to permanent hayland, orchards, or vineyards.

Criteria
Design the crop rotation with sufficient diversity in plant family and species as well as timing and type of field operations to reduce the weed and pest populations. The rotation plan should reduce anticipated needs for pesticides, cultivation, or other pest/weed control measures.

The resource conserving crop rotation shall include at least one of the following resource conserving crops:
1. With at least one other crop in the rotation, include a perennial grass grown at least 2 years from time of planting;
2. With at least one other crop in the rotation, include a legume that is grown at least 2 years from time of planting;
3. With at least one other crop in the rotation, include a legume-grass mixture that is grown at least 2 years from time of planting;
4. With at least one other crop in the rotation, include a grass-forbs or legume-grass-forbs mixture, in which at least the grass component of the mixture is grown at least 2 years from time of planting, or
5. With at least two other crops in the rotation, include a small grain grown in combination with a grass, legume, forbs or any grass-forbs mixture that is used as a green manure, whether interseeded or planted after small grain harvest. Neither the small grain residue nor the cover crop shall be harvested or grazed.

Contract Criteria
1. The rotation shall cover at least 3 fiscal years of the CSP contract.
2. The resource conserving crop must be adopted by the third fiscal year of the contract and established or planted on all planned acres prior to the final annual payment.

Adoption Requirements
This enhancement is considered adopted when the resource conserving crop rotation is planted on at least 1/3 of the rotation acres.

Documentation Requirements
Planned Resource-Conserving Crop Rotation(s):

List crop rotation(s), resource conserving crops, and cover crops that will follow the specific crops as applicable for each rotation to receive supplemental payment:

Rotation#1: _____Fields: _____Years_____
Resource Conserving Crop(s) to be used: _____

Rotation#2: _____Fields: _____Years_____
Resource Conserving Crop(s) to be used: _____

Rotation#3: _____Fields: _____Years_____
Resource Conserving Crop(s) to be used: _____

Records:
a. Crop rotation records by field
b. Cover crops planted
c. Photographs of representative fields showing different phases of the rotation
d. Seed tags and receipts

2013 Indiana CSP Enhancement Supplemental Information

CCR99 – Conserving Crop Rotation

Cropping Criteria Options:
Examples:
(1). A minimum of two crops if one of the crops is a perennial grass lasting at least 1 year after the seeding year and at least 1 other crop is in the rotation.

- Corn silage-wheat-timothy hay where hay is maintained for a minimum of 12 months after the seeding year.

(2) A legume grown for use as forage, seed for planting, or green manure that is left for at least 1 year after the seeding year, and at least 1 other crop is in the rotation.

- Corn -Wheat with clover inter-seeded into the wheat and left at least 1 year after the seeding year.

(3) A legume-grass mix grown for at least 1 year after the seeding year, and at least 1 other crop is in the rotation.

- Corn silage-wheat-alfalfa/orchardgrass hay where hay is maintained for a minimum of 12 months after the seeding year.

(4) A small grain grown in combination with a grass or a legume used as a green manure, whether interseeded or planted after grain harvest with at least two other crops in rotation.

- Corn-Soybeans-Wheat -red clover where red clover interseeded in March and is maintained through fall and not harvested for hay or grazed.
- Corn- Tomatoes – Wheat with a crimson clover/oilseed radish cover crop mix planted after wheat and not harvested for hay or grazed.

Indiana Resource Conserving Crop Types

Perennial Grasses and Legumes 1/	Small Grain Crops 2/ + (must also include a cover/green manure crop)	Cover/Green Manure Crops 3/
Alfalfa	Barley	Alsike Clover
Alsike Clover	Millet	Annual Ryegrass
Birdsfoot Trefoil	Oats	Barley
Festulolium	Rye	Buckwheat*
Kentucky Bluegrass	Triticale	Canola/rape*
Lespedeza, Korean, common	Wheat	Cowpeas
Orchardgrass		Crabgrass (red river)
Perennial Ryegrass	**Footnotes:**	Crimson Clover
Red Clover	**1/** Cover must be grown for one year after the seeding year. Must have at least one Other crop in rotation.	Field Peas/winter peas
Redtop	**2/** Annual (winter or spring) cereal crops. Not harvested for silage, straw or biomass. Only a Resource Conserving Crop if a **cover crop/green manure crop** is interseeded or planted after small grain harvest and in a rotation with at least 2 other crops.	Hairy Vetch
Smooth Brome	**3/** Cover to be established early enough in growing season to provide adequate cover. May not be harvested or grazed.	Millet
Tall Fescue		Oats
Timothy		Radish, forage &/or oilseed*
White Clover		Red Clover
Wildrye, Canada, Riverbank, Virginia		Rye
		Sorghum-Sudangrass Hybrids
		Triticale
		Turnips*
		Wheat
		*May only be used if in a mix with a grass or a legume

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