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

National CSP 2015 Enhancement Activity Job Sheet: CCR99

Resource-Conserving Crop Rotation

Application of this enhancement activity must meet NRCS Regulations and Policy

Associated Conservation Practices

Conservation Crop Rotation 328 http://efotg.sc.egov.usda.gov/references/public/CO/CO328.pdf

Cover Crop 340 http://efotg.sc.egov.usda.gov/references/public/CO/CO340_2014-12.pdf

Criterion 1 – 4

Resource Conserving Crops

1. 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 grass, or legume green manure crop, whether interseeded or planted in rotation

Select grasses and/or legumes that are appropriate for the site, from Colorado Plant Materials Technical Note No. 59, Plant Suitability and Seeding Rates for Conservation Plantings in Colorado, Table 6, Suitability. http://efotg.sc.egov.usda.gov/references/public/CO/COPMTN_59_2012-03.xls

Producer will develop site-specific seeding specifications including site preparation, planting method, adapted species, seeding rates and dates, and required inoculants, within a Colorado CO-ECS-05, Grass Seeding Planned and Applied worksheet. (http://efotg.sc.egov.usda.gov/references/public/CO/CO-ECS-05_2013-07.xlsm)

Criterion 5

Producer shall develop the green manure cover crop planning and application within a Colorado Cover Crop 340 Job Sheet. (http://efotg.sc.egov.usda.gov/references/public/CO/CO340_JS.xlsm)

Do not plant cover crop species that may be an alternate host for crop pests in the rotation.

Additional Documentation Requirements

Grass Seeding Planned and Applied Worksheet, CO-ECS-05

Cover Crop 340 Job Sheet