

## Conservation Reserve Program Sign-Up 41 Environmental Benefits Index (EBI)

### Overview

USDA's Farm Service Agency (FSA) will hold a Conservation Reserve Program (CRP) general sign-up from March 14 through April 15, 2011.

CRP is a voluntary program that helps agricultural producers use environmentally sensitive land for conservation benefits. Producers enrolled in CRP plant or maintain long-term, resource-conserving covers to control soil erosion, improve water and air quality and enhance wildlife habitat.

More information on sign-up 41 is available in the FSA fact sheet "Conservation Reserve Program General Sign-up 41, March 14 through April 15, 2011."

### Ranking CRP Offers

FSA will rank offers for CRP sign-up 41 according to the Environmental Benefits Index (EBI). FSA collects data for each EBI factor based on the relative environmental benefits for the land offered. EBI rankings are unique for each tract of land offered into CRP.

FSA assigns each offer a point score based on the offer's relative environmental factors. Each offer competes with all other offers. FSA determines offer acceptability based on the ranking results.

For sign-up 41, FSA will use the following EBI factors to assess the environmental benefits for the land offered:

- Wildlife habitat benefits resulting from covers on contract acreage (N1);

- Water quality benefits from reduced erosion, runoff and leaching (N2);
- On-farm benefits from reduced erosion (N3);
- Benefits that will likely endure beyond the contract period (N4);
- Air quality benefits from reduced wind erosion (N5) and;
- Cost (N6).

### N1 - Wildlife Factor Point score: 0 to 100

Factor N1 is an evaluation of the expected wildlife benefits of the offer and is comprised of three subfactors (N1a-c). The formula for  $N1 = N1a + N1b + N1c$ .

#### • N1a - Wildlife Habitat Cover Benefits (0 to 50 points)

This subfactor is an evaluation of the wildlife habitat cover offered. FSA assigns points for cover practice planting mixtures based on the potential value to wildlife within each state. FSA awards higher scores for cover types that are more beneficial to wildlife. Local USDA Service Centers have a list of approved planting mixes and the assigned point scores for each cover mix. Point scores are based on the weighted average score for cover mixes the producer selects. Native mixes of diverse species generally receive the highest point scores. Eligible cover practices under the N1a criteria are in Table 1.

*(Producers should note that wildlife habitat cover selection is the most critical factor impacting wildlife benefits. Optimum cover types significantly increase the*

*point score for this factor).*

#### • N1b - Wildlife Enhancement (0, 5, or 20 points)

This subfactor provides up to 20 points for actions producers take to enhance the wildlife benefits for the offered acreage. Enhancement to the acreage is necessary in order to receive the points. For example, to receive 20 points producers may offer to establish a minimum of 10 percent of the acreage offered to pollinator habitat. Eligible practices under the N1b criteria are provided in Table 2.

#### • N1c - Wildlife Priority Zones (0 or 30 points)

FSA consulted with farm, commodity, wildlife and environmental groups to develop high-priority wildlife areas that would benefit from being enrolled in CRP. For land located within this defined geographic area, points are awarded for planting cover mixes to benefit wildlife species. This subfactor provides 30 points if at least 51 percent of the offered acreage is located within the wildlife priority zone and the weighted average N1a score is greater than or equal to 40 points.

### N2 - Water Quality Benefits from Reduced Erosion, Runoff and Leaching Point Score: 0 to 100

One of CRP's main goals is to reduce the amount of sediment, nutrients and pollutants that enter our nation's waterways. Factor N2 is an evaluation of the potential impacts that CRP may have on both surface and groundwater quality. N2 is comprised of three subfactors (N2a-c). The formula

for  $N2 = N2a + N2b + N2c$ .

- **N2a - Location (0 or 30 points)**

This subfactor is an evaluation of the benefits of improving ground or surface water quality impaired by crop production. States have identified water quality zones for protection. At least 51 percent of the acreage offered must be within an approved water quality zone to receive 30 points. Local USDA Service Centers have detailed maps of the approved water quality zones.

- **N2b - Groundwater quality (0 to 25 points)**

This subfactor is an evaluation of the predominant soils, the potential leaching of pesticides and nutrients into groundwater, and the impact to people who rely on groundwater as a primary source of drinking water. Point scores are based on the weighted average leach index for soils offered for enrollment and the population that utilizes groundwater for drinking.

- **N2c - Surface water quality (0 to 45 points)**

This subfactor is an evaluation of the amount of sediment that may be delivered into streams or other water courses and the human population that may be affected. This factor is determined by potential water erosion, distance to the water and the watershed in which the offer is located.

**N3 - Erosion Factor Point score: 0 to 100**

CRP helps maintain the long-term productivity of the land for future generations. Factor N3 is an evaluation of the potential for the land to erode as the result of either wind or water erosion. This factor is measured using an Erodibility Index (EI). FSA awards points for

the weighted average of the higher value of either the wind or water EI, based on the results from Table 3.

**N4 - Enduring Benefits Factor Point Score: 0 to 50**

Factor N4 is an evaluation of the likelihood for certain practices to remain in place beyond the CRP contract period. N4 values are determined by calculating the weighted average score for all practices in Table 4.

**N5 - Air Quality Benefits From Reduced Wind Erosion Point Score: 0 to 45 points**

Factor N5 is an evaluation of the air quality improvements by reducing airborne dust and particulate caused by wind erosion from cropland. In addition, this factor has points for the value of CRP land that provides carbon sequestration. This factor is comprised of four subfactors (N5a-d). The formula for  $N5 = N5a + N5b + N5c + N5d$ .

- **N5a - Wind Erosion Impacts (0 to 25 points)**

FSA will determine the potential for the site to have wind erosion damage. FSA will award points based on potential wind erosion and the amount of population that may be impacted by the erosion. The potential wind erodibility is based on a climatic factor (wind speed, wind direction and duration of wind events) and soil erodibility.

- **N5b - Wind Erosion Soils List (0 or 5 points)**

A list of soils that are susceptible to wind and contribute significantly to nonattainment of air quality standards has been developed. These soils have a dominant component of volcanic or organic materials that are highly erodible and

can be transported great distances on the wind. If at least 51 percent of the offered acres are comprised of these soils, the offer is awarded five points.

- **N5c - Air Quality Zones (0 or 5 points)**

FSA awards a maximum of five points if at least 51 percent of the acreage offered is located in an air quality zone that contributes to nonattainment of air quality standards and the calculated weighted wind EI is equal to or greater than three.

- **N5d - Carbon Sequestration (3 to 10 points)**

The subfactor is an evaluation of the benefits of sequestering greenhouse gases by practice over the expected life of the practice. FSA awards points based on a weighted average of carbon sequestration benefits for all practices using the value in Table 5.

**N6 - Cost**

Factor N6 is an evaluation of the cost of environmental benefits per dollar expended. This factor assists in optimizing environmental benefits per dollar for CRP rental payments. Factor N6 is comprised of two subfactors (N6a and N6b). The formula for  $N6 = N6a + N6b$ .

- **N6a - Cost (point value determined after end of sign-up based on actual offer data)**

Offers with lower per acre rental rates may increase chances of being accepted.

- **N6b - Offer Less Than Maximum Payment Rate (0 to 25 points)**

Offers equal to the maximum payment rate will receive 0 points. Offers below the maximum payment rate will receive points ac-

ording to the value in Table 6.

**EBI Threshold for Acceptance**

After sign-up 41 ends on April 15, 2011, FSA will analyze and rank all eligible offers. The Secretary will then determine the EBI threshold used to accept offers. Because CRP is a highly competitive program, producers who would have met previous sign-up EBI cutoffs are not guaranteed an offer acceptance under sign-up 41.

**Making CRP Offers More Competitive**

While the United States has over 360 million acres of cropland, the maximum CRP enrollment authority is 32 million acres. As such, the demand to enroll land in CRP is expected to be greater than the amount that FSA can accept.

To make offers more competitive, producers should consider the following:

- The single most important producer decision involves determining which cover practice to apply to the acreage offered. Planting or establishing the highest scoring cover mixture is the best way to improve the chances of offer acceptance.
- Producers should only offer the most environmentally sensitive land. Where possible, subdividing fields to include only the most sensitive acreage can substantially increase the point score for erosion and improve the water quality score and/or air quality score. Producers should consider enhancing covers for the benefit of wildlife by developing permanent water sources or establishing pollinator habitat. In addition, producers may

plant and manage hardwood or softwood trees that increase wildlife habitat values or restore certain rare and declining habitats to increase the EBI score in subfactors N1a and N4.

- Producers should consider accepting a lower payment rate than the maximum amount FSA is willing to offer.

FSA also encourages producers to consult with local USDA experts on steps to take to maximize EBI points and increase the likelihood that an offer will be accepted.

For More Information

**For more information on CRP,** contact your local FSA office or visit FSA's CRP website at <http://www.fsa.usda.gov/crp>

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<b>Table 1 – Cover Practices (CP) for the N1a Criteria</b>	
	<b>Point Score</b>
<b>CP1 – Permanent introduced grasses and legumes</b>	
Existing stand one to three species or planting new stand of two to three species of an introduced grass species	10
Existing stand or planting mixture (minimum of four species) of at least 3 introduced grasses and at least one forb or legume species best suited for wildlife in the area.	40
<b>CP2 – Establishment of new permanent native grasses and legumes</b>	
Existing stand (minimum of one to three species) or planting mixed stand (minimum of three species) of at least two native grass species and at least one forb or legume species beneficial to wildlife.	20
Existing stand or planting mixed stand (minimum of five species) of at least 3 native grasses and at least one shrub, forb, or legume species best suited for wildlife in the area.	50
<b>CP3 – Tree planting (general) 2/</b>	
Southern pines (softwoods) – Solid stand of pines/softwoods (existing, according to state developed standards, or planted at more than 550 trees per acre).	10
Northern conifers (softwoods) – Solid stand of conifers/softwoods (existing, according to state developed standards, or planted at more than 850 trees per acre).	10
Western pines (softwoods) – Solid stand of pines/softwoods (existing, according to state developed standards, or planted at more than 650 trees per acre).	10
Southern pines (softwoods) – Pines/softwoods existing or planted at a rate of 500 to 550 per acre depending upon the site index (state-developed standards) with 10 to 20 percent openings managed to a CP4D wildlife cover.	50
Northern conifers (softwoods) – Conifers/softwoods existing or planted at a rate of 750 to 850 trees per acre depending upon the site index (state-developed standards) with 10 to 20 percent openings managed to a CP4D wildlife cover.	50
Western pines (softwoods) – Pines/softwoods existing or planted at a rate of 550 to 650 per acre depending upon the site index (state-developed standards) with 10 to 20 percent openings managed to a CP4D wildlife cover.	50
<b>CP3A – Hardwood tree planting</b>	
Existing or planting solid stand of nonmast producing hardwood species.	10
Existing or planting solid stand of a single hard mast producing species.	20
Existing or planting mixed stand of two hardwood species best suited for wildlife in the area.	30
Existing or planting mixed stand (three or more species) of hardwood species best suited for wildlife in the area.	50
Existing or planting stand of Longleaf pine or Atlantic white cedar - Planted at rates appropriate for the site index.	50
<b>CP4B - Permanent wildlife habitat (corridors), noneasement.</b>	
Existing stand or planting mixed stand (minimum of four species) of either grasses, trees, shrubs, forbs, or legumes planted in mixes, blocks, or strips best suited for various wildlife species in the area. A wildlife conservation plan must be developed with the participant.	40
Existing stand or planting mixed stand (minimum of five species) of either predominantly native species including grasses, forbs, legumes, shrubs, or trees planted in mixes, blocks, or strips best suited to providing wildlife habitat. Only native grasses are authorized. Introduced grasses are not authorized for and cannot be included in cover mixes for 50-point N1a scores for CP4B. A wildlife conservation plan must be developed with the participant.	50

<b>Table 1 – Cover Practices (CP) for the N1a Criteria</b>	
	<b>Point Score</b>
<b>CP4D - Permanent wildlife habitat, noneasement</b>	
Existing stand or planting mixed stand (minimum of four species) of either grasses, trees, shrubs, forbs, or legumes planted in mixes, blocks, or strips best suited for various wildlife species in the area. A wildlife conservation plan must be developed with the participant.	40
Existing stand or planting mixed stand (minimum of five species) of either predominantly native species including grasses, forbs, legumes, shrubs, or trees planted in mixes, blocks, or strips best suited to providing wildlife habitat. Only native grasses are authorized. Introduced grasses are not authorized for and cannot be included in cover mixes for 50-point N1a scores for CP4D. A wildlife conservation plan must be developed with the participant.	50
<b>CP12 –Wildlife food plot <u>3/</u></b>	
Wildlife food plots are small non-cost-shared plantings in a larger area. Wildlife food plots will never be the predominant cover.	NA
<b>CP25 –Rare and declining habitat restoration <u>4/</u></b>	
Existing stand or seeding or planting will be best suited for wildlife in the area. Plant species selections will be based upon Ecological Site Description data.	50
<b>CP42 – Pollinator Habitat</b>	
Existing stand or planting of a diverse mix of multiple species suited for pollinators.	50
Footnotes:	
<p><u>1/</u> Cover that is existing or will be established must accomplish the purpose of the practice.</p> <p><u>2/</u> State Conservationist may revise the Field Office Technical Guide (FOTG) on planting rate to be consistent with CRP. The opening for southern and western pines must be a minimum of two acres up to a maximum of five acres in size for fields of 20 acres and larger. For smaller fields, the size is based on a percentage. Opening in northern conifers will be one-half to two acres in size. The opening may include buffers on the interior of the field. Field edges (borders) may be used if they are irregular in shape and average 30 feet in width. Natural regeneration of native herbaceous or shrubby vegetation with required maintenance may be permitted within open areas if it is consistent with USDA Natural Resources Conservation Service (NRCS) technical standards and the Northern Bobwhite Conservation Initiative, and has concurrence from state fish and wildlife service (FWS) or U.S. FWS officials. Open areas of native grasses and/or shrub planting best suited for wildlife in the area is considered CP3 for EBI scoring and contract purposes.</p> <p><u>3/</u> CP12 acreage is not included in the weighted average point score. For example, a 50-acre offer with 45 acres planted to CP25 and five acres planted to a wildlife food plot would calculate a weighted average using only the 45 acres of the CP25 planting. This calculates as follows: 45 acres x 50 points (CP 25 EBI score) = 2,250 points. 2,250 points / 45 acres = 50 points.</p> <p><u>4/</u> Technical practice standards for the selected habitat type must meet applicable standards and be approved by FSA at least 30 calendar days before the beginning of sign-up.</p>	

**FACT SHEET**

**CRP Sign-Up 41 Environmental Benefits Index**

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<b>Table 2 - Practices for the N1b Criteria</b>							
<b>Practice</b>	<b>Point Score</b>						
Conversion of at least 51 percent of a primarily monoculture stand to a mixture of native species that provides wildlife benefits.	20						
Establishment of pollinator habitat (CP42) that remains in the location of the CRP-1. The habitat size, shape, and composition must meet the following requirements:  <b>Size</b>	20						
<table border="1"> <thead> <tr> <th><b>CRP Parcel</b></th> <th><b>Habitat Size Requirement</b></th> </tr> </thead> <tbody> <tr> <td>Less than 10 acres</td> <td>At least one acre of pollinator habitat. Habitat areas must be at least 0.5 acre.</td> </tr> <tr> <td>10 acres or greater</td> <td>At least 10 percent of the parcel in pollinator habitat. Habitat areas must be at least 0.5 acre.</td> </tr> </tbody> </table>	<b>CRP Parcel</b>	<b>Habitat Size Requirement</b>	Less than 10 acres	At least one acre of pollinator habitat. Habitat areas must be at least 0.5 acre.	10 acres or greater	At least 10 percent of the parcel in pollinator habitat. Habitat areas must be at least 0.5 acre.	
<b>CRP Parcel</b>	<b>Habitat Size Requirement</b>						
Less than 10 acres	At least one acre of pollinator habitat. Habitat areas must be at least 0.5 acre.						
10 acres or greater	At least 10 percent of the parcel in pollinator habitat. Habitat areas must be at least 0.5 acre.						
Annual or permanent food plot (CP12) that remains in the same location for the contract length, or rotated food plot (CP12) for which the location on the contract is moved during the contract length consistent with the NRCS Field Office Technical Guide up to 10 percent of a field, not to exceed 5 acres per field.	5						

<b>Table 3 - Erodibility Index Points 1/</b>					
<b>EI</b>	<b>Points</b>	<b>EI</b>	<b>Points</b>	<b>EI</b>	<b>Points</b>
4	1	10	22	16	79
5	2	11	29	17	92
6	4	12	37	18	97
7	7	13	46	19	98
8	11	14	56	20	99
9	16	15	67	21+	100

1/ EI of less than 4 = 0 points

<b>Table 4 - Practices for the N4 Criteria</b>	
<b>Practice</b>	<b>Point Score</b>
New hardwood tree, longleaf pine, and/or Atlantic white cedar plantings (CP3A) and CP25 (Rare and declining habitat restoration) if the plant community is existing or will be established to primarily trees.	50
Existing or enhanced stand of hardwood tree, longleaf pine, and/or Atlantic white cedar plantings (CP3A).	40
New pine/softwood tree (CP3).	30
Rare and declining habitat restoration (CP25) where the plant community is existing or will be established to a primarily grass and/or shrub complex, or CP42.	25
Existing pine/softwood tree - original contract signed as CP3.	20
CP1, CP2, CP4B, CP4D.	0

<b>Practice</b>	<b>Point Score</b>
CP3 (Tree planting - general), CP3A (Hardwood tree planting), and CP25 (Rare and declining habitat restoration) planted to trees.	10
CP25 (Rare and declining habitat restoration) planted to grass/shrub complexes, and CP42 (Pollinator Habitat).	5
CP4B (Permanent wildlife habitat (corridors), noneasement) and CP4D (Permanent wildlife habitat, noneasement).	4
CP1 (Permanent introduced grasses and legumes) and CP2 (Establishment of permanent native grasses).	3
CP12 (Wildlife food plot).	0

<b>Percent Below Maximum Payment Rate</b>	<b>N6b Points</b>
1	2
2	4
3	6
4	8
5	10
6	12
7	14
8	16
9	18
10	20
11	21
12	22
13	23
14	24
>=15	25