Farm Service Agency

October 1997



Fact Sheet

Conservation Reserve Program Sign-Up 16

Environmental Benefits Index

Overview

The Environmental Benefits Index (EBI) is used to classify and rank land offered for enrollment in U.S. Department of Agriculture's Conservation Reserve Program (CRP) during a general signup. Scores are based on the expected environmental improvement in soil resources, water quality, wildlife habitat, and other resource concerns during the time the land is to be enrolled in the program. Each offer submitted by an applicant is assigned a point score based on its relative environmental benefits. Each offer is compared nationally with all other offers. Offers are accepted or rejected based on the resulting ranking.

EBI Components

The EBI for Sign-Up 16 is composed of six environmental factors plus a cost factor. The six environmental factors are:

N1 - Wildlife Factor (0 to 100 points)

Evaluates the expected wildlife benefits of the offer and is composed of six subfactors. The formula is: N1 = (N1a ÷ 50)x(N1a + N1b + N1c + N1d + N1e + N1f).

N1a Wildlife Habitat Cover
Benefits (0 to 50 points) - This
subfactor evaluates the cover
existing or to be established on
the offered land. Certain cover
practice planting mixtures have
been assigned points based on
the value to wildlife within the
State. The better cover types

Table 1 - N1a Cover Practices

Practice /1	Points
CP1, Permanent Introduced Grasses and Legumes	
Planting of one or two species of an introduced grass species.	10
Mixture (minimum of 3 species) of at least one introduced grass and one forb or legume beneficial to wildlife in the area.	30
Mixture (minimum of 4 species) of at least two introduced grasses and at least one forb or legume best suited for wildlife in the area.	40
CP2, Establishment of Permanent Native Grasses	
Solid stand of one, two, or three native species.	20
Mixed stand (minimum of 4 species) of at least two native grasses and at least one shrub, forb, or legume beneficial to wildlife in the area.	40
Mixed stand (minimum of 5 species) of at least three native grasses and at least one shrub, forb, or legume best suited for wildlife in area or any native prairie restoration mix of 5 or more species.	50
CP3, Tree Planting (general) /2	
Solid stand of pine/softwood (greater than 500 trees per acre).	10
Longleaf pine or Atlantic white cedar planted at more than 500 trees per acre.	10
Pine/softwood planted at less than or equal to 500 trees per acre.	20
Pine/softwood planted at less than 500 trees per acre and 15 to 20 percent openings of native herbaceous and/or shrub plantings best suited for wildlife in the area. Natural regeneration of native herbaceous vegetation with required maintenance may be permitted if it is consistent with NRCS technical standards and has the concurrence of the State fish and game or U.S. Fish and Wildlife Service.	50
(Table continu	and nove mana)

(Table continued next page)

- /1 Cover established must accomplish the purpose of the practice.
- /2 State conservationist may revise Field Office Technical Guide on planting rate to be consistent with CRP.

Table 1 - N1a Cover Practices (cont.)

Practice /1	Points
CP3A, Hardwood Tree Planting /2	
Solid stand of nonmast producing hardwood species.	20
Solid stand of a single mast producing species.	40
Mixed stand of hardwood species best suited for various wildlife species in the area.	50
New longleaf pine or Atlantic white cedar planted at less than 500 trees per acre.	50
CP10, Vegetative Cover - Grass - Already Established	
Solid stand of one or two species of introduced grass.	10
Solid stand of one or two species of native grass.	20
Mixed stand (minimum of 3 species) of at least one introduced or native grass and at least one shrub, forb, or legume beneficial to wildlife in the area.	30
Mixed stand (minimum of 4 species) of at least two introduced or native grasses and at least one shrub, forb, or legume beneficial to wildlife in the area.	
Mixed stand (minimum of 5 species) of at least three native grasses and at least one shrub, forb, legume or a native prairie mix of at least 5 species determined as best suited for wildlife in the area.	50
CP11, Vegetative Cover - Trees - Already Established	
Solid stand of pine/softwood (greater than 300 trees per acre).	10
Solid stand of nonmast producing hardwood species.	20
Pine/softwood established with or thinned to less or equal to 300 trees per acre. Thinning to be completed within 3 years.	30
Solid stand of a single mast producing hardwood species.	40
Pine/softwood established with or thinned to less than or equal to 300 trees per acre, 15 to 20 percent openings of native herbaceous and/or shrub plantings best suited for wildlife in the area, mixed hardwoods established, or longleaf pine. Thinning to be completed within 3 years. Natural regeneration of native herbaceous vegetation with required maintenance may be permitted if it is consistent with NRCS technical standards and has the concurrence of the State fish and game or U.S. Fish and Wildlife Service	50
CP23, Wetlands Restoration /3	
Wetland hydrology restored, as determined technically feasible, to all Farmed Wetlands (FW), if present, and recommended vegetative cover established in the field.	30
Wetland hydrology restored, as determined technically feasible, to all FWs and Prior Converted Wetlands (PC), if present, and recommended vegetative cover established in the field.	50

- /1 Cover established must accomplish the purpose of the practice.
- /2 State conservationist may revise Field Office Technical Guide on planting rate to be consistent with CRP.
- /3 Applicable to fields entered under the wetlands criteria and fields where PCs will be restored.

NOTE:

This table lists the most frequently-used practices; however, other practices are available. For more information, contact your local USDA Service Center, Farm Service Agency, or Natural Resources Conservation Service offices.

for wildlife are awarded the highest scores. The local USDA Service Center will provide a list of approved planting mixes and the assigned point scores for each cover mix. If the offer is for enhancing an existing cover on acreage under an expiring CRP contract or one that expired September 30, 1997, at least 51% of the acreage offered must be improved. Cost-share assistance of up to 50 percent may be available to improve cover. With acreage not under an expiring CRP contract, at least 90% must be devoted to the approved cover to receive the points associated with the approved cover. If the offer is a combination of new acreage and existing CRP acreage, at least 70% must be devoted to the approved cover to be awarded higher points. (See Table 1.)

NOTE: Cover selection is the most critical factor impacting wildlife benefits. Optimum cover types (50 points score) will significantly increase the point score for this factor.

N1b Endangered species (0 to 15 points) - Evaluates the expected benefits to Federal and State Threatened, Endangered, and Candidate (T&E&C) plant or animal species. The USDA Service Center can provide a list of areas that have T&E&C species and the cover types that provide them a benefit. Point scores are awarded

based on Table 2.

Table 2 - N1b Expected Cover Benefits	Points
No benefit to listed, proposed, and/or candidate (plant or animal) species.	0
Cover to be established is within the range of a Federal or State listed or candidate migratory species, during a portion of their life cycle. Cover practice must benefit the habitat of the species.	5
Cover to be established provides habitat best suited for Federal or State listed or candidate resident plant or animal species or nesting or wintering cover for Federal or State listed Threatened or Endangered or candidate migratory species.	15
For Federal or State listed or candidate aquatic species, multiply factor N2c by 0.4 for points for N1b (points score can not exceed 15). Round to the nearest whole number.	0 to 15

N1c Proximity to Water (0, 5 or 10 points) - Evaluates the proximity of the offer to permanent water. Point scores are awarded based on Table 3. Permanent water sources developed for wildlife include spring developments, wildlife watering facilities, shallow water areas for wildlife, and farm ponds. The distribution of water development(s) must meet the requirements of NRCS practice 648 - Wildlife Watering Facility.

10 points may be awarded for agreeing to develop a *permanent* water source for wildlife on the offered acres, *on a site* where lack of water limits wildlife.

N1d Adjacent protected areas (0, 5, or 10 points) -Evaluates the proximity of the offer to protected wildlife habitat. Point scores are awarded based on Table 4. Protected areas for this sub-factor is any area protected

Table 3 - N1c Proximity to Water	Points	Table 4 - N1d Adjacent Protected Areas	Points
Streams, permanent wet- lands, or other permanent water sources more than 1 mile from the offered acreage	0	Federal, State, local, or other protected wildlife habitat more than 1 mile from the offered acreage	0
Streams, permanent wet- lands, or other permanent water sources .25 to 1 mile from the offered acreage	5	Federal, State, local, or other protected wildlife habitat .25 to 1 mile from the offered acreage	5
Streams, permanent wet- lands, or other permanent water sources less than .25 mile from the offered acreage	10	Federal, State, local, or other protected wildlife habitat less than .25 mile from the offered acreage	10

for at least the term of the contract for the primary purpose of wildlife management or protection.

N₁e Contract size (0, 2, or 5 points) - Evaluates the offer in relation to the State average contract size. In general, larger contiguous blocks of habitat provide greater benefits than smaller acreages. The local USDA Service Center will provide information on average contract size for the State. Points are awarded based on relative contract size (See Table 5).

Table 5 - N1e Contract Size	Points
Less than State Average	0
Equal to State average or up to twice the State average	2
Greater than twice the State average	5

N1f **Restored Wetland to Upland** Percentage (0, 1, 5, or 10

points) - Evaluates the percentage of upland acres relative to associated wetlands. Offers with the appropriate percentage of restored wetlands to associated uplands providing the optimum nesting habitat for waterfowl are awarded more points. Wetlands must be restored to receive these points.

N2 - Water Quality Factor (0 to 100 points)

Evaluates the potential impacts that CRP may have on both surface and ground water quality.

N2 is composed of four subfactors:

N₂a **Location points** - Evaluates

the impact of continued crop production, by location, on the impairment of ground or surface water quality. States have identified water quality areas for protection. At least 51% of the offer must be within an approved designated area to receive 30 points. The local field office will provided detailed maps of the approved designated areas.

N₂b **Ground water quality benefits**

points - Evaluates the leachability of the soils for the downward movement of pesticides and nutrients into ground water and the population using groundwater for drinking. Point scores are based on the soils offered for enrollment into the program.

N₂c Surface water quality ben-

efits points - Evaluates the amount of sediment that may be delivered into streams or other water courses and the population that may be impacted. This factor is determined by the inherent water erosion, distance to the water resources, and the county in which the offer is located. The USDA Service Center will provide details on this factor.

N2d Wetland benefits points -

Evaluates the water quality improvements associated with wetlands. If 10 percent or more of an offered acreage is cropped wetlands, 10 points are added.

N3 - Erosion Factor (0 to 100 points)

Evaluates the inherent potential (measured using Erodability Index(EI)) for the land to erode as the result of either wind or water. Enrollment in CRP will help maintain the long-term productivity of the land for future generations.

NRCS will calculate the weighted average EI for each offer and use Table 6 to determine the points to be awarded.

Table 6 - N3 **Erosion Factor***

EI	Points	EI	Points	EI	Points
4	5	10	35	16	65
5	10	11	40	17	70
6	15	12	45	18	75
7	20	13	50	19	80
8	25	14	55	20	90
9	30	15	60	21+	100

* El of less than 4 = 0 points.

N4 - Enduring Benefits Factor (0 to 50 points)

Evaluates the likelihood of certain practices to remain in place beyond the contract period. Points are awarded based on Table 7. An applicant may increase the score by offering practices that have a higher likelihood of remaining after contract expiration.

Table 7 - N4 Enduring Benefits

Practice	Points
New hardwood tree, longleaf pines, or Atlantic white cedar plantings (CP3A if planted to longleaf pine or white cedar at 500 or fewer trees per acre)	50
New pine/softwood tree (CP3)	40
New cropped wetland restoration (CP23)	25
Existing hardwood tree, long leaf pine, and/or Atlantic white cedar (CP11)	25
Restoration of rare and declining habitat (CP25)	25
Shrub plantings on an aggregate of at least 5 percent of the offered acreage	25
Offered acreage is on a site that is listed on the National Register of Historic Places or is a Traditional Cultural Property	10
Post - CRP contract obligation to maintain the functions of CRP practice	10
New/existing native grass seeding of 5 or more species	10
Existing pine/softwood tree (CP11)	10
Cultural Resources Present on offered acreage.	5

N5 - Air Quality Benefits From Reduced Wind Erosion (0 to 35 points)

Evaluates the air quality improvements from reducing airborne dust and the damages caused off-farm by wind erosion. This factor is comprised of 3 subfactors. The formula is:

N5 = (N5a + N5b + N5c).

N5a Wind Erosion Impacts (0 to 25 points) - NRCS will determine the potential for the site to have wind erosion damage.

Points will be awarded based on potential wind erosion and the amount of population that may be impacted by wind erosion. These tables have been revised for the 16th signup.

N5b Wind Erosion Soils List (0 or 5 points) - A list of soils has been developed that are susceptible to wind and contribute significantly to non-attainment of air quality standards. These soils have a dominant component of volcanic or organic material. If at least 51% of the soils on the offer are comprised of these soils the offer is awarded 5 points.

N₅c

Air Quality Zones (0 or 5 points) - If at least 51% of the offer is located in an area designated as contributing to non-attainment of air quality standards or impacting Class 1 air quality zones such as National Parks, 5 points are awarded.

N6 - State or National Conservation Priority Areas (CPAs) (0 to 25 points)

This factor evaluates the location of the offer relative to these National or approved State CPA designations. If at least 51% of the offer is located within a CPA and the offer is consistent with goals of the CPA (scores of at least 40 percent of the possible point score for the practice corresponding to the purpose of the CPA), 25 points are awarded.

EXAMPLE: If a CPA is approved for water quality, an offer in the water quality priority area will receive 25 points for factor N6 - *if* 40 or more points are awarded to factor N2, Water Quality Benefits.

COST

The cost factor is comprised of 3 subcomponents.

- 1. Provides 10 additional EBI points if no government cost-share is requested.
- Provides more points for eligible offers submitted for rental rates lower than the calculated maximum payment rate. The decision on how this subfactor is weighted will be made after signup concludes.
- for every whole dollar below the Maximum Acceptable Rental Rate, not to exceed 15 points. (EXAMPLE: The offer's Maximum Acceptable Payment Rate is \$80/acre. An applicant that offers \$76 /acre would receive 4 additional EBI points under this subfactor.)

Improving an EBI Score

While some EBI factors evaluate environmental benefits over which an applicant has no control, such as location of the offer in relation to an identified Conservation Priority Area, some decisions will have a significant effect on an offer's ranking.

- 1. The single most important producer decision involves the cover practice applied to the acreage offered. Deciding to plant or establish the highest scoring cover mixture is the best way to improve the chances of an offer being accepted.
- 2. Where possible, subdividing offered fields to include only the most environmentally sensitive portions can often substantially increase the average erosion rate of the offer and greatly improve the chances of being accepted.
- Reducing the amount of the annual rental rate offered makes an offer more competitive.
- 4. In addition, agreeing to restore cropped wetlands (Subfactors N1a and N2d), plant and manage hardwood or softwood trees according to specifications that increase wildlife habitat values, or restoring certain rare wildlife habitats increase the EBI score in subfactors N1a and N4.

Depending on the offer's location, the following may also increase the EBI score:

- Selecting cover practices considered to benefit Federal or State threatened, endangered, or candidate species present in the area receive higher ranking in subfactor N1b.
- Agreeing to develop permanent water sources for wildlife such as restoring permanent wetlands or creating permanent shallow water areas can increase the score of sub-factor N1c.
- Offering the appropriate mix of restored wetlands and associated upland acres that provides the optimum nesting habitat for wildlife increases the score in subfactor N1f.

IMPORTANT

The decision on the EBI cutoff level necessary for enrollment in the program will be determined after signup concludes. Exceeding the previous EBI cutoff level of 259 for the 15th signup does not assure acceptance into the program.

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C., 20250, or call 1 800-245-6340 (voice) or (202) 720-1127 (TDD).

USDA is an equal employment opportunity employer.