United States Department of Agriculture
Natural Resources Conservation Service

Kansas Fact Sheet
October 2009
www.ks.nrcs.usda.gov

Expiring CRP Options:
Conservation Buffers
Western Kansas

Kansas landowners presently have 3.1 million active Conservation Reserve Program (CRP) acres of which approximately 364,000 acres are scheduled to expire on September 30, 2009. Establishment of CRP cover (grass, legumes, trees, and shrubs) has resulted in tremendous environmental benefits to our landscape. CRP has greatly reduced wind and water erosion, improved air quality, and reduced the amount of sediment, nutrients, and pesticides in our water resources while providing benefits to resident and migratory wildlife.

As your CRP contract nears its end, you will be making decisions on what to do next with your land. While much of the CRP land in Kansas is productive and potentially could go back into crop or hay production, many acres of CRP land are environmentally sensitive and should remain in permanent vegetation. These areas, if maintained and managed as permanent cover, will continue to provide many of the environmental benefits listed above. Known as conservation buffers, these patches of vegetation have the potential to:

- **Reduce wind erosion and protect crops from wind blown sediment damage**
- **Trap snow to provide additional soil moisture**
- **Reduce snow removal costs by thousands of dollars per mile of road**
- **Reduce runoff and prevent gully erosion**
- **Reduce or eliminate offsite sediment damage**
- **Reduce nitrogen and pesticide contamination of shallow groundwater**
- **Increase crop yields by 10-to-30 percent, depending upon the crop and the buffer**
- **Reduce sediment, nutrients, and pesticides in runoff water**
- **Square up fields for ease of crop production**
- **Provide wildlife habitat**

Following is a brief discussion of primary buffer practices for Western Kansas. For more details concerning qualifications for Continuous CRP and incentives, contact your local Natural Resources Conservation Service (NRCS) or Farm Service Agency office.

Grassed Waterways

Grassed waterways are natural or constructed channels that direct concentrated runoff to stable outlets without creating a gully and reduce off-site sediment delivery. Before converting CRP to crop production, concentrated flow areas should be located and left in grass to control gullies. Grassed waterways work best when combined with other conservation practices like residue management, terraces, and contouring.

Field Borders

A field border is a strip of perennial vegetation at the edge of a cropland field. They can eliminate end rows, provide space to turn machinery, and reduce inefficient use of crop inputs (fertilizer, herbicides, etc.) due to overlapping. Field borders can also act as a filter for runoff water exiting a field and provide wildlife habitat. Field borders must be at least 30 feet wide, or wide enough to eliminate end rows and turn equipment. However, if enrolled in Continuous CRP, field borders cannot be used to turn equipment.

Cross Wind Trap Strips

Cross wind trap strips (CWTS) are strips of permanent vegetation which are established within cropland in an orientation that is perpendicular to the prevailing wind. Optimum orientation will generally be east-west or northeast-southwest in western Kansas. CWTS reduce on-field wind erosion by reducing field length and trapping windborne sediments that perpetuate detachment of soil particles. CWTS also provide nesting and brood rearing habitat for upland birds. To be eligible for CRP (CP24), at least 2 strips must be established per field, and cannot exceed 10 percent of the field.

Each strip shall:

- **Be a minimum width of 15 feet**
- **Not exceed 25 feet in width**
- **Consist of permanent vegetation that is a minimum of 12 inches in height**

Optimum distance between strips depends on site conditions such as existing barriers or windbreaks and soil type. For example, a half mile long trap strip 25 feet wide would measure 1.5 acres; therefore, up to 11 strips could be established in a 160-acre quarter section leaving a distance between strips of 200-to-240 feet that can be adjusted to fit equipment.

Windbreaks/Shelterbelts

Windbreaks consist of multiple rows of trees and shrubs designed to protect soils from wind erosion, livestock from chilling winds, and crops from water sapping summer winds, manage snow, and benefit wildlife.

Herbaceous Wind Barriers (*Herbaceous wind barriers are not a continuous CRP practice)*

Herbaceous wind barriers are narrow strips of tall perennial grasses or annual crops established to protect soils and crops. If tillage is used to prepare soils for planting, herbaceous wind barriers reduce erosion, manage moisture, and protect crops. They improve snow distribution with subsequent crop moisture responses. If the expiring CRP field has a tall grass component such as switchgrass, tall or intermediate wheatgrass, the tall perennial grass can be left in place in narrow bands a minimum of 30 inches wide. Wider barriers provide greater wildlife benefit and additional sediment trapping capacity. Arrangement and distance between barriers is similar to CWTS and is dependent upon cropping sequence and tillage system in order to adequately control wind erosion.

Other Considerations

Conservation buffers are not the entire answer to protecting soil and water resources. However, when applied in the correct locations and maintained properly, they return conservation benefits far in excess of the small footprint of land taken from traditional production.

For more information on conservation buffers or if you are interested in installing one more of these practices, please contact your local NRCS office.