

# Expiring CRP Options: Conservation Buffers Eastern 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 runoff and prevent gully erosion**
- **Reduce or eliminate offsite sediment damage**
- **Reduce road ditch maintenance costs**
- **Reduce sediment, nutrients, and pesticides in runoff water**
- **Reduce nitrogen and pesticide contamination of shallow groundwater**
- **Reduce snow removal costs by thousands of dollars per mile of road**
- **Protect fields from flood damage and flood debris**
- **Increase crop yields by 10-to-30 percent, depending upon the crop and the buffer**
- **Square up fields for ease of crop production**
- **Provide wildlife habitat**

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



## Filter Strips



Filter strips are areas of permanent vegetation used to reduce sediment, pesticides, and nutrients in runoff. Established filter strips generally consist of stiff, upright sod-forming grasses such as switchgrass; however, your existing CRP cover can be effective. Filter strips enrolled in CRP must be at least 30 feet wide and can be up to 120 feet wide. When managed effectively, they trap sediment on the upper edge of the filter strip and within the adjacent field. They increase infiltration, and transform entrapped pollutants to nontoxic compounds.

Filter strips are most effective when combined with residue management, crop rotation, and grassed waterways. Nutrients and sediments are kept in the field where they can be used for crop production. When properly designed and installed, filter strips can be used to “smooth” field edges, making the adjacent field easier to farm. Properly managed, they provide nesting and winter cover for wildlife.

## Riparian Forest Buffer

Riparian forest buffers consist of trees and shrubs planted next to streams and other water bodies that were forested prior to crop production. When combined with a narrow band of dense grass (filter strip) on the upper edge of the buffer, they effectively reduce sediment, nutrient, and pesticide concentrations moving into the adjacent water body. Additionally, the deep roots of the trees and shrubs can anchor streambanks and pull nutrients from deep in the soil profile, reducing leaching into ground or surface water. Riparian forest buffers must have a minimum of 35 feet of trees and shrubs and can include 20-to-120 feet of grass along the outside edge of the buffer. The total combined width cannot exceed 180 feet.

Other benefits of riparian forest buffers include woody wildlife habitat and wood product production. When along major streams, healthy mature trees can effectively strain flood debris, leaving less debris to clutter adjacent fields.



## Windbreaks/Shelterbelts



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

As a CRP practice, Field Windbreaks (CP5A) may consist of 1 to 5 rows planted in an orientation perpendicular to the prevailing winds. No more than 2 rows may be planted of the same species. In Eastern Kansas, there must be a minimum distance of 220-to-240 feet between field windbreaks.

## 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.