Overview

Multiple environmental benefits result when fragile cropland is enrolled in the Conservation Reserve Program (CRP) through planting grass, trees, buffers and restoring wetlands. Carefully identifying and quantifying CRP’s benefits helps USDA Farm Service Agency’s (FSA) target conservation efforts. The CRP uses these estimates to identify program benefits, provide standards for setting goals and measuring progress, and more effectively administer CRP.

CRP also protects groundwater and helps improve the condition of lakes, rivers, ponds and streams by reducing water runoff and sedimentation. Another benefit is the protection of millions of acres of American topsoil from erosion. In addition, CRP sequesters more carbon on private lands than any other federally-administered program.

CRP Fosters Wildlife

The 34.5 million acres of grass, trees and wetlands enrolled in CRP have enhanced wildlife habitat, helping numerous species thrive. Recently completed independent studies have found that CRP has a positive effect on multiple bird populations. Several examples:

- Prairie Pothole Ducks - CRP areas in North Dakota, South Dakota and northeastern Montana created habitat that led to a net increase of about 2 million ducks per year since 1992, a 30 percent rise in production. Recent droughts have reduced the annual increase in the duck population. (U.S. Fish and Wildlife Service study)

- Ringed-necked Pheasants - Researchers found that, in prime pheasant habitat, a 4 percent increase in CRP herbaceous vegetation was associated with a 22 percent increase in pheasant counts. (Western EcoSystems Technology, Inc., study)

- Sage Grouse - Substantial CRP enrollment helped slow a decline in sage grouse populations. These populations had declined by 25 percent between 1970 and 1988 before CRP covers were established. Moreover, the sage grouse population continued to decline in the control region without substantial CRP enrollment. (Washington Department of Natural Resources study)

- Northern Bobwhite Quail - More quail were observed in certain grass-legume and tree-based CRP areas than sites without these practices. The quail population response varied by region. Increases were due to the CRP covers providing necessary, but limited, habitats to meet seasonal requirements such as nesting and brood-rearing. (Mississippi State University study)
Fact Sheet
Conservation Reserve Program (CRP) Benefits:
Water Quality, Soil Productivity and Wildlife Estimates

March 2008

Conservation Reserve Program (CRP) Benefits:

Grassland Birds -
Researchers estimate that without CRP, populations could decline by 2 to 52 percent for five grassland bird species in the Prairie Pothole Region of North Dakota and South Dakota. The estimated combined loss ranges from 0.9 to 1.8 million birds. This is especially important because two of the species, the grasshopper sparrow and the dickcissel, were designated as species of continental importance by Partners in Flight. (U.S. Fish and Wildlife Service, U.S. Geological Survey and University of Montana study)

Upcoming studies will look at how CRP has benefited mammals, fish and amphibians.

CRP Improves Water Quality

CRP helps enhance water quality in a variety of ways.

- Grass filters and riparian buffers (partial field enrollments) intercept sediment, nutrients and other contaminants before they enter waterways. FAPRI estimated 203 million pounds of nitrogen and 49 million pounds of phosphorus were intercepted by CRP buffers in 2007 (Figure 2, p. 3).
- CRP reduced the amount of sediment released into the environment by 207 million tons in 2007.

(See Figures 1 and 2, p. 3)

CRP Improves Soil

CRP protects soil productivity by establishing conservation covers on fragile cropland to reduce sheet, rill and wind erosion. In 2007, CRP reduced soil erosion by an estimated 470 million tons from pre-CRP levels.

CRP Sequesters Carbon

CRP sequesters more carbon on private lands than any other federally administered program. In 2007, grass cover planted under CRP helped stop more than 50 million metric tons of carbon dioxide from entering the environment. Carbon sequestration helps offset the release of greenhouse gases (GHG) into the atmosphere. GHG have been associated with global warming.

(See Figure 3, p.3)
Table 1: Diverse CRP Environmental Benefits

<table>
<thead>
<tr>
<th>Environmental Benefit</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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</thead>
<tbody>
<tr>
<td>Reduced Nitrogen (lbs)</td>
<td>452 million</td>
<td>456 million</td>
<td>471 million</td>
<td>480 million</td>
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<tr>
<td>Reduced Erosion (tons)</td>
<td>454 million</td>
<td>455 million</td>
<td>464 million</td>
<td>470 million *</td>
</tr>
<tr>
<td>Reduced Phosphorus (lbs)</td>
<td>102 million</td>
<td>103 million</td>
<td>106 million</td>
<td>108 million</td>
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<tr>
<td>Sequestered Carbon Dioxide (metric tons)</td>
<td>47 million</td>
<td>48 million</td>
<td>49 million</td>
<td>50 million</td>
</tr>
<tr>
<td>Increased Duck Population</td>
<td>1.014 million</td>
<td>0.9 million *</td>
<td>0.9 million *</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Intercepted by buffers or reductions in amount leaving field.   Preliminary.

Figure 1: Reduced Nitrogen and Phosphorus Leaving CRP Fields, 2007

Figure 2: Nitrogen and Phosphorus Intercepted by CRP Buffers, 2007

Figure 3: Net Carbon Dioxide Sequestered by CRP