



Fact Sheet

March 2008

**Conservation Reserve Program (CRP) Benefits:
Water Quality, Soil Productivity and Wildlife Estimates**

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 is a voluntary program available to agricultural producers to help them safeguard environmentally sensitive land. Producers enrolled in CRP plant long-term, resource-conserving covers to improve the quality of water, control soil erosion and enhance wildlife habitat. In return, FSA provides participants with rental payments and cost-share assistance. Contract duration is between 10 and 15 years.

**Environmental Benefits
Are Diverse**

CRP is designed to safeguard the nation's natural resources. The program is a major contributor to increased wildlife populations in many parts of the country because enrolled acreage is planted to resource-conserving vegetative covers.

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.

(See Table 1, p. 3)

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)

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- 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)
- 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)

For More Information

For more information about FSA and its conservation programs, visit your local FSA service center or online at: <http://www.fsa.usda.gov>. For details on the studies highlighted above, go to: <http://www.fsa.usda.gov/FSA/w ebapp?area=home&subject=ec pa&topic=nra>

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.

- CRP reduces the nitrogen, phosphorus, and sediment leaving a field in runoff and percolate. The Food and Agricultural Policy Research Institute (FAPRI) estimated 278 million pounds less nitrogen and 59 million pounds less phosphorus left fields in 2007 due to CRP (Figure 1, p. 3), 95 and 86 percent reductions, respectively.

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Table 1: Diverse CRP Environmental Benefits

Environmental Benefit	2004	2005	2006	2007
<i>Reduced Nitrogen</i> ¹ (lbs)	452 million	456 million	471 million	480 million
<i>Reduced Erosion</i> (tons)	454 million	455 million	464 million	470 million*
<i>Reduced Phosphorus</i> ¹ (lbs)	102 million	103 million	106 million	108 million
<i>Sequestered Carbon Dioxide</i> (metric tons)	47 million	48 million	49 million	50 million
<i>Increased Duck Population</i>	1.014 million	0.9 million*	0.9 million*	N/A

¹ Intercepted by buffers or reductions in amount leaving field. * Preliminary.

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

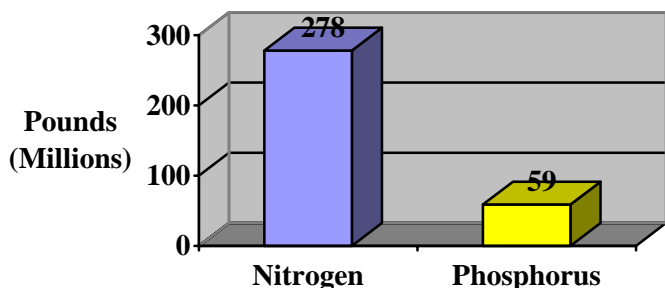


Figure 2: Nitrogen and Phosphorus Intercepted by CRP Buffers, 2007

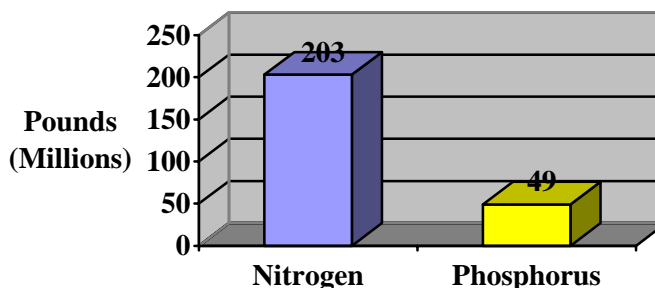


Figure 3: Net Carbon Dioxide Sequestered by CRP

