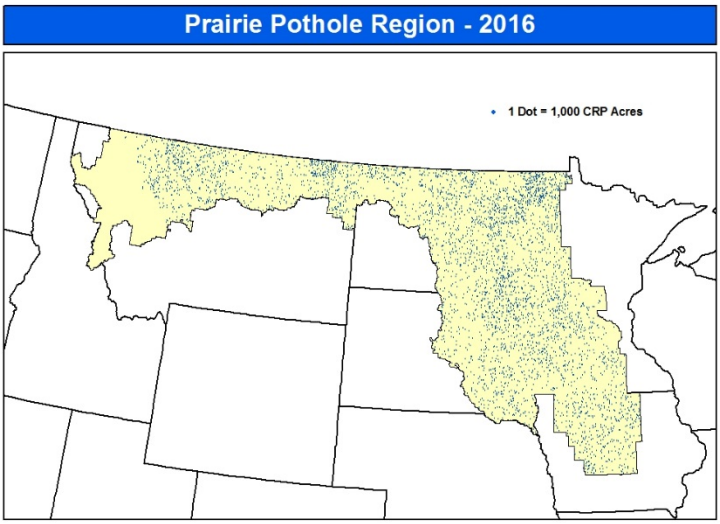
Environmental Benefits of the Conservation Reserve Program

2016

Prairie Pothole Region



Fiscal Year		2011	2012	2013	2014	2015	2016
Land Enrolled*	million acres	7.1	6.6	5.4	4.9	4.4	4.5
In Wetlands	million acres	1.7	1.7	1.5	1.4	1.3	1.4
Buffers	1,000 acres	320	312	285	274	268	262
Reductions (intercepted by buffers or not leaving field) **							
Sediment	million tons	24	24	22	22	21	21
Nitrogen	million lbs	117	113	103	99	94	95
Phosphorus	million lbs	12	12	11	10	10	10
Greenhouse Gas Reduction **	Mil. metric tons CO2 equivalent/yr	11	10	9	8	7	7

*Cumulative acres. ** Annual estimate, see Estimation Methodology.

- CRP reduces the nitrogen and phosphorus leaving a field in runoff and percolate. Nitrogen and phosphorus leaving CRP fields are 95 and 86 percent less, respectively, compared to land that is cropped.
- Grass filter strips and riparian buffers intercept sediment, nitrogen, phosphorus, and other contaminants, before they enter waterways. Because buffers both reduce contaminants on the land they occupy and intercept contaminants from other lands they have disproportionate water quality benefits.
- Using models developed by the Food and Agricultural Policy Research Institute (FAPRI), CRP reduced nutrient losses in 2016, by an estimated 95 million pounds of nitrogen and 10 million pounds of phosphorus, compared to land that is cropped. Sediment losses were reduced by an estimated 21 million tons.
- The U.S. Fish and Wildlife Service (USFWS) estimated that CRP contributes to a net increase in ducks each year. Between 1992 and 2012 CRP resulted in over 37 million additional ducks from the North Dakota, South Dakota, and northeastern Montana portion of the Prairie Pothole region. Because CRP enrollment in the Prairie Pothole region has decreased, annual waterfowl numbers attributable to CRP have also decreased. However, with CRP enrollment of 4.5 million acres in the Prairie Pothole region,

including 1.4 million acres of wetlands, CRP continues to strongly benefit duck populations.

- Researchers from the USFWS, U.S. Geological Survey, and the University of Montana have demonstrated that, since its inception, CRP has had a large impact on grassland bird populations in the Northern Plains, including two birds designated as species of continental importance by Partners in Flight. Further, CRP has repeatedly been identified as important to grassland birds by the North American Bird Conservation Initiative. The 2013 '*State of the Birds*' report states: "CRP is restoring grassland habitat for breeding birds. Henslow's Sparrow populations, which declined more than 95% between the mid-1960s and 1990s, rebounded in some areas through CRP. In Illinois, the regional Henslow's Sparrow … spring bird counts … are now about 25 times greater than … prior to CRP."
- In prime ringed-neck-pheasant habitat, a 4 percent increase in CRP herbaceous vegetation was associated with a 22 percent increase in pheasant count.
- Upstream CRP lands reduce downstream flood damage. Peak flows are reduced by slowing, storing, and infiltrating storm water runoff. CRP restores Prairie Pothole floodwater storage function – USGS estimated that CRP wetland catchments could store approximately 458,000 acre-feet of water annually, reducing water available for downstream flooding.
- In 2016, CRP resulted in the equivalent of a 7 million metric ton net reduction in atmospheric CO_2 from sequestration, reduced fuel use, and nitrous oxide emissions avoided from not applying fertilizer. Carbon sequestration helps offset the release of greenhouse gases (GHG) from other sources into the atmosphere. CRP sequesters more carbon on private lands than any other federally administered program.