

# CRS Report for Congress

## Land Conversion in the Northern Plains

April 5, 2007

Megan Stubbs  
Presidential Management Fellow  
Resources, Science and Industry Division



Prepared for Members and  
Committees of Congress

# Land Conversion in the Northern Plains

## Summary

Land is being converted from native grass or rangeland into crop production in the Northern Plains region, especially in South Dakota, North Dakota, and Montana. Advocates of wildlife protection and enhancement, and grazing interests, are concerned that landowners in this region will continue to convert grasslands to crop production, especially to corn production, as long as market prices remain high. As the rate of land conversion accelerates, those concerned suspect it will have significant environmental impacts and reduce the amount of land available for both wildlife habitat and grazing. They are seeking changes in public policy that might slow, halt, or reverse this process.

The availability of reliable and timely data to examine these concerns is limited. Though not enough time has passed to document current trends in periodic surveys, anecdotal evidence from numerous sources suggests that grassland conversion to cropland is being observed more frequently in the Northern Plains than in years past. Identified data sets — each offering different time frames, collection techniques, and insights on this topic — indicate a shift in land use in the region. Questions concerning exactly how much land is being converted to cropland, where this land is located, and what forces are driving the change can be only partially examined with the limited data currently available.

While the forces encouraging the conversion of land are not discussed in depth in this report, it is widely thought that the recent push for renewable energy from biofuels, rising market prices for corn, and advances in biotechnology are intensifying the conversion rate. Some of the possible conversion forces, such as expiring Conservation Reserve Program (CRP) contract acres, commodity support program policy, and existing conservation compliance policy, might be reviewed by Congress in the context of the upcoming farm bill. Discussion on topics such as current policy, technological advances in crop production, changes in wildlife habitat and population, regional economics, and environmental sustainability could assist anticipated farm bill discussions.

## Contents

Background .....	1
Available Data and Information .....	3
National Resource Inventory (NRI) .....	3
Farm Service Agency (FSA) New Breakings .....	4
Ducks Unlimited .....	5
Issues for Congress .....	7
Commodity Program Impact .....	7
Expiring Conservation Reserve Program (CRP) Contracts .....	8
Conservation Compliance .....	11
Remaining Questions .....	12

## List of Figures

Figure 1. Land Cover/Use, 2003, by Major River Basin .....	4
Figure 2. Geographic Extent of the Prairie Pothole Region and Missouri Coteau .....	6
Figure 3. Analysis Area Covered by Ducks Unlimited Research .....	7
Figure 4. Expiring CRP Acres, 2007 .....	10

## List of Tables

Table 1. National Land Use Changes Between 1982 and 2003 .....	3
Table 2. Newly Broken Land Acres, 2005-2006 .....	5
Table 3. CRP Enrollment and Re-enrollment by State .....	9

# Land Conversion in the Northern Plains

Within the past year increased discussion has occurred about rates and patterns of land conversion in the Northern Plains, particularly conversion from native grass or rangeland into crop production. This discussion is driven by two concerns: (1) that this type of land conversion is becoming more widespread in the Dakotas and in the Northern Plains generally, and (2) that land conversion is reducing the amount of land available for both wildlife habitat and grazing. These concerns are expressed most strongly by advocates of wildlife protection and enhancement. Those concerned fear that landowners in the region will continue to convert grasslands to crop production, especially to corn production, as long as commodity market prices remain high. This report examines these concerns, focusing on the available evidence, which is limited, about rates and patterns of land conversion. It also presents additional questions on policy options that would respond to these concerns, most likely in the context of the 2007 farm bill.<sup>1</sup>

## Background

The issue of increased land conversion activity in the Northern Plains over the past year, with a particular focus on central South Dakota, has been brought to the attention of Congress through field hearings and constituent correspondence.<sup>2</sup> Constituents who object to visual indications that more land is being converted to crop production view the continuing pressure to convert land in the future, and at a rapid rate, as the larger issue. On the other hand, agricultural production is market driven. Landowners are responding to higher market prices by converting grassland into crop production. Rising corn prices and the emergence of national policies that encourage additional production of crops as a domestic source of energy have created additional incentives for landowners to convert to crop production.<sup>3</sup> The U.S.

---

<sup>1</sup> The U.S. Government Accountability Office (GAO) has been requested to explore this topic as well. GAO expects to issue a report to Congress based on a more extensive examination of this topic later in 2007.

<sup>2</sup> Testimony presented at field hearings before the Subcommittee on General Farm Commodities and Risk Management of the Committee on Agriculture, House of Representatives, Serial No. 109-28, July 31, 2006, Wall, SD. Direct opposition to land conversion and commodity support programs as a driving factor to conversion were expressed in testimony by Wendi Rinehart and Judge Jessop, producers in the Northern Plains region. Also, on April 3, 2007, the Senate Agriculture, Nutrition, and Forestry Committee held a field hearing scheduled in Fargo, North Dakota, entitled "Northern Plains Priorities in the 2007 Farm Bill."

<sup>3</sup> This was discussed by James Ham, President of the Georgia Association of Conservation District Supervisors, during a Senate hearing before the Agriculture, Nutrition, and Forestry Committee, on *Working Land Conservation: Conservation Security and Environmental* (continued...)

Department of Agriculture (USDA) currently estimates that 90.5 million acres nationwide will be planted in corn during the 2007 crop year.<sup>4</sup> These acres will come from several sources, including land that had been planted to other crops and idled land that will be returned to production; some portion of the expansion may occur in grassland that is converted to crop production, though exactly how much remains to be seen.

Many forces that may be encouraging the conversion of land in the Northern Plains have intensified recently. The recent push for renewable energy from biofuels and rising market prices for corn since August 2006, as a growing portion of this crop is used as a bioenergy feedstock, appear to be providing economic incentives to convert land. Conversion also may be facilitated by advances in biotechnology that have led to the availability of herbicide resistant crop varieties, and the promise of drought-resistant varieties in the near future. Some assert that the availability of federal farm commodity support programs is providing farmers with additional incentives to convert land from native grass into commodity crops, protecting them from full financial loss if a crop should fail. This is discussed more under “Issues for Congress,” below. Those concerned about conversion maintain that the major undesirable results that accompany land conversion in the Northern Plains are (1) native old-growth grasslands being disrupted or destroyed; (2) wildlife and nesting habitat being lost; and (3) land rental rates and sale prices increasing rapidly. Some landowners and producers would likely counter that this increase in production is resulting in (1) increased economic activity in rural communities; (2) lower federal spending resulting from high commodity prices; and (3) meeting the demand for a renewable domestic fuel supply. This report does not analyze these possible impacts, primarily because they are so recent that few data are available.

Questions concerning changing land use, the amount of acreage involved, and where the change is located have focused either on the Northern Plains generally, or more specifically on parts of South Dakota where conversions appear to be concentrated. Significant conversions also may be occurring in other areas of the country. However, this report discusses only conversions in the Northern Plains. Data are limited, mainly because not enough time has passed to document these very recent trends in periodic surveys. However, anecdotal evidence from numerous sources suggests grassland conversion to cropland is being observed more frequently in the Northern Plains than in previous years.

---

<sup>3</sup> (...continued)

*Quality Incentives Program*, January 17, 2007. Mr. Ham expressed interest in the early release of CRP acres, citing missed opportunities in high market prices. Hearing transcripts are forthcoming.

<sup>4</sup> On March 30, 2007, the USDA’s National Agricultural Statistics Service (NASS) reported that 90.5 million acres nationwide are expected to be planted in corn for all purposes in 2007. If realized, this would be the highest planting of corn since 1944. Northern Plains states — South Dakota, North Dakota, and Montana — are projected to plant, respectively, 15%, 54%, and 9% more corn in 2007 than in 2006. USDA, NASS, “Prospective Plantings,” March 2007, at [<http://www.usda.gov/nass/PUBS/TODAYRPT/pspl0307.pdf>].

## Available Data and Information

The actual amount of grassland converted to cropland (also referred to as “busting out” land) in the Northern Plains is difficult to ascertain. Following are summaries of three data sets that evaluate land use activities and changes at a state or regional scale.<sup>5</sup> Each offers varying vantage points on this topic from different time frames, locations, and data collection and compilation techniques.

### National Resource Inventory (NRI)

Historical data from the NRI, maintained by the Natural Resources Conservation Service (NRCS) at the U.S. Department of Agriculture (USDA), show that both pasture and rangeland had declined nationally within a two-decade period (see **Table 1**). Between 1982 and 2003, pasture land declined over 10%, and rangeland declined over 2%. During this same time period, cropland (cultivated and non-cultivated) declined by over 12%. Other land use categorized by the NRI such as forest land, development, water areas, Conservation Reserve Program (CRP)<sup>6</sup> acres, and federal lands have all increased in acreage.<sup>7</sup>

**Table 1. National Land Use Changes Between 1982 and 2003**  
(acres in millions)

	1982	2003	Percentage Change
Pasture land	131	117	-10.69 %
Rangeland	416	405	-2.64 %
Cropland	420	368	-12.38 %

**Source:** Data obtained from USDA, Natural Resources Conservation Service, “National Resources Inventory 2003 Annual NRI: Land Use,” February 2007, at [<http://www.nrcs.usda.gov/technical/land/nri03/nri03landuse-mrb.html>].

According to NRI data, between 1997 and 2003, the national net decline in grazing land<sup>8</sup> acreage was about 1%, or 1 million acres, per year. For the Missouri River Basin (where the Northern Plains are centered) the NRI reports a decline of 1.3 million acres in pasture and rangeland between 1992 and 2003 (see **Figure 1**).

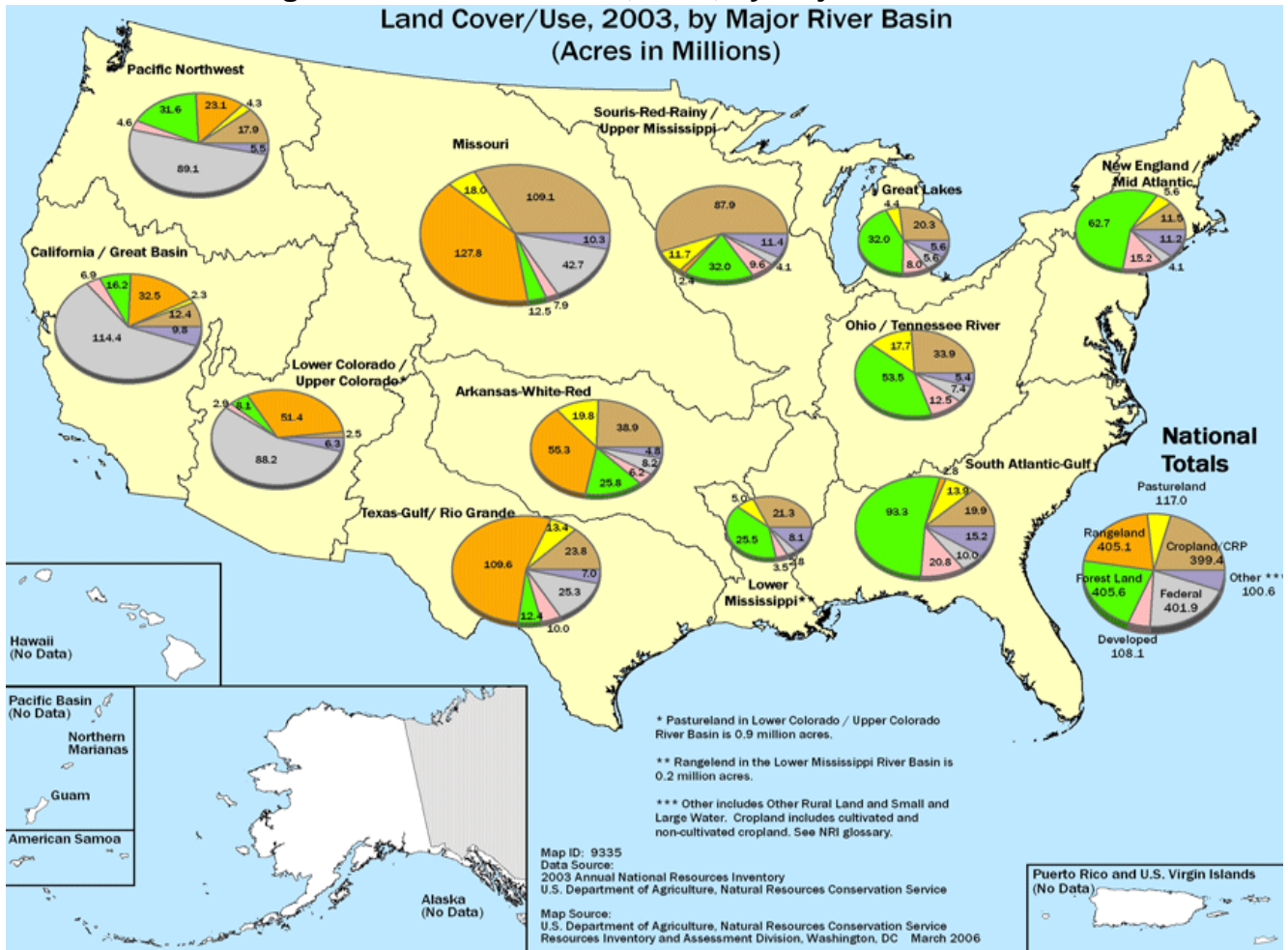
<sup>5</sup> A fourth possible data source, compiled by the National Agricultural Statistics Service (NASS), is not discussed in this report because of difficulties accounting for CRP acres.

<sup>6</sup> The Conservation Reserve Program (CRP) was not implemented until 1985. The CRP, which pays participating farmers to retire cropland from production, had 31.5 million acres enrolled in 2003. This explains a large portion of the declining cropland acres between 1985 and 2003.

<sup>7</sup> USDA, Natural Resources Conservation Service, “National Resources Inventory 2003 Annual NRI: Land Use,” February 2007, at [<http://www.nrcs.usda.gov/technical/land/nri03/nri03landuse-mrb.html>]. The information depicted here represents national totals based on statistical sampling around the contiguous United States.

<sup>8</sup> NRCS NRI defines grazing land as a combination of pasture, range, and grazed forest land.

**Figure 1. Land Cover/Use, 2003, by Major River Basin**



**Source:** USDA, Natural Resources Conservation Service, “National Resources Inventory 2003 Annual NRI: Land Use, February 2007 at [http://www.nrcs.usda.gov/technical/land/nri03/nri03landuse-mrb.html].

However, the most recent NRI data are four years old (information beyond 2003 has not been released). Considering the recent emergence of accelerated grassland conversion concerns, especially during the past year, the NRI data provide a relevant historical base for comparison at a national (and river basin) scale, but are not very helpful for either the time period or the scale of this topic.

### Farm Service Agency (FSA) New Breakings

Recent statistics have been obtained through a newly created database maintained by three states within USDA’s Farm Service Agency (FSA). FSA administers the federal farm commodity support programs. As part of that responsibility, it collects data about land use and land use changes for the purpose of tracking commodity planting trends. FSA recently began recording new cropland acres broken from pasture and rangeland in a “new breakings” spreadsheet in three states. In South Dakota and North Dakota, FSA began collecting this information in 2002, and in Montana, it began collecting similar information in 2005. **Table 2** presents statewide acreage totals in these three states in 2005 and 2006. Due to the inconsistency of information reported, the table only highlights the years in which confirmable data are available.

**Table 2. Newly Broken Land Acres, 2005-2006**

(acres of native grassland converted to cropland)

<b>Fiscal Year</b>	<b>South Dakota</b>	<b>North Dakota</b>	<b>Montana</b>
<b>2005</b>	55,404	NA	10,373
<b>2006</b>	47,167	20,592	6,245

**Source:** Data obtained through CRS communications with FSA staff, March 2007.

Although participation rates in FSA programs are relatively high,<sup>9</sup> it should be noted that FSA collects information on the past use of land only where program payments are being made for the first time. Therefore, this information could potentially under-represent the total of converted grassland, assuming not all acres converted would necessarily enroll in commodity payment programs with FSA. Because the data are so limited and span only two consecutive years, speculations on the future rate of conversion using this data could be inconclusive. Some who have raised concerns about land conversion fear that the amount of land converted in 2007, as identified in this survey, may be much greater. Others contend that additional plantings will come from other crops and idled land rather than conversion of grassland. Neither view can be substantiated with the current data limitations.

### **Ducks Unlimited<sup>10</sup>**

Ducks Unlimited, a private advocacy group supporting the protection and restoration of wetlands and waterfowl habitat, in conjunction with the Nature Conservancy, the U.S. Fish and Wildlife Service, South Dakota Game, Fish, and Parks, and the University of Montana conducted research on land conversions in the Missouri Coteau region of central North and South Dakota (see **Figure 2**). The Missouri Coteau region is known for its unique mix of native grasslands and shallow wetlands (known as prairie potholes) that create a significant breeding area for ground-nesting waterfowl and shorebird species. The Missouri Coteau region is part of a much larger 300,000 square mile region known as the prairie pothole region (PPR). The PPR contains many small glacially formed wetlands that retain standing water for only a portion of the year in a relatively dry climate that supports grassland vegetation.<sup>11</sup>

---

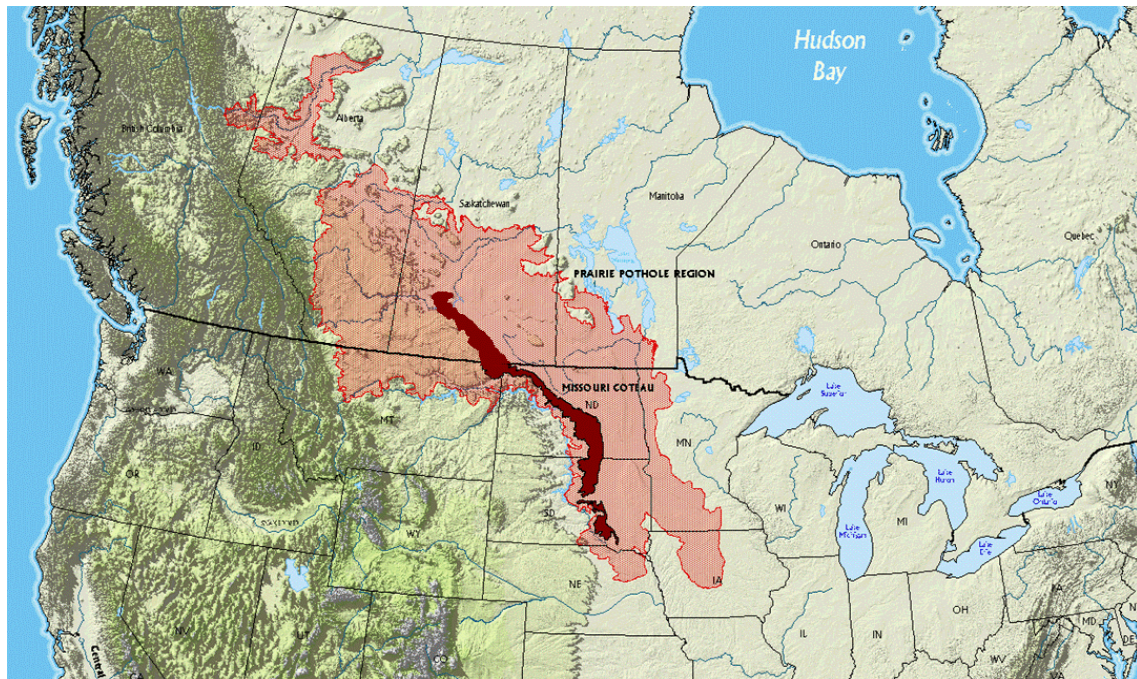
<sup>9</sup> Roughly one-third of approximately 2 million farms in the United States receive subsidy payments through farm commodity programs administered by FSA. The participation rate is highest in North Dakota and Iowa, at 72% and 70%, respectively. For additional information, see CRS Report RS21493, *Payment Limits for Farm Commodity Programs: Issues and Proposals*, by Jim Monke.

<sup>10</sup> This report has not been finalized and published. However, a preliminary version was made available upon request. Scott Stephens, Johanna Walker, Darin Blunck, Aneetha Jayaraman, and Dave Naugle, *Grassland Conversion in the Missouri Coteau of North and South Dakota 1984-2003*, Ducks Unlimited, Preliminary Report, September 2006.

<sup>11</sup> Carter Johnson, Bruce Millett, Tagir Gilmanov, Richard Voldseth, Glenn Guntenspergen, and David Naugle, "Vulnerability of Northern Prairie Wetlands to Climate Change," *BioScience*, vol. 55, no. 10, October 2005.



**Figure 2. Geographic Extent of the Prairie Pothole Region and Missouri Coteau**

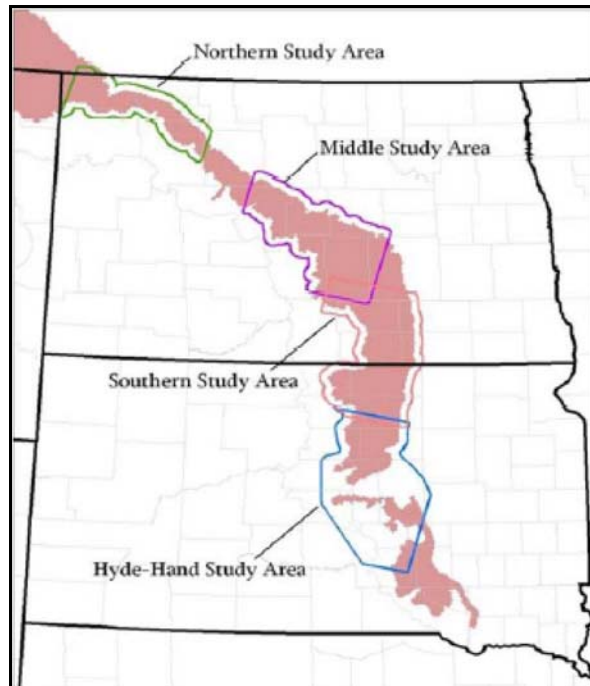


**Note:** Prairie pothole region shaded light, Missouri Coteau shaded dark.

**Source:** Ducks Unlimited, Presentation at the North and South Dakota EPA Wetlands Meeting, February 2007.

The study observed and measured the noticeable land use changes over time using Landsat satellite imagery. The satellite imagery included photos of more than 65,000 forty-acre tracts of native grassland, from 1984 to 2002, in the area depicted in **Figure 3**. The study concludes that 144,000 acres of native grassland were lost to cropland conversion between 1984 and 2002 in this region. Most of the conversion identified took place in the Hyde-Hand region of central South Dakota, where 56,960 acres were converted over this 20-year period. Though this information appears sound, the analysis area is concentrated within a narrow band running between northwest North Dakota and southeast South Dakota (see **Figure 3**) and therefore is limited in scope. Also, the Ducks Unlimited study, like the NRI data, concludes in 2002, excluding the time period of current interest.

**Figure 3. Analysis Area Covered by Ducks Unlimited Research**



**Note:** Missouri Coteau shaded light, study areas outlined.

**Source:** Scott Stephens, Johanna Walker, Darin Blunck, Aneetha Jayaraman, and Dave Naugle, *Grassland Conversion in the Missouri Coteau of North and South Dakota 1984-2003*, Ducks Unlimited, Preliminary Report, September 2006.

## Issues for Congress

This section discusses three policy issues and their potential impact on land conversion rates and patterns: (1) the influence of commodity programs; (2) expiring Conservation Reserve Program contracts; and (3) the effect of conservation compliance (Sodbuster and the Administration's proposed Sodsaver).

### Commodity Program Impact

Evidence exists of the conversion of lands that have no previous cropping history. What is unclear is the role commodity programs play in individual decisions to convert land. Much of the attention brought to this issue has come from cattle associations and wildlife organizations (South Dakota Cattleman's Association and Ducks Unlimited in particular), which report grazing land and grassland losses in large numbers. Though the area of concern stretches across both North and South Dakota, the focus of concern has been for the central South Dakota region.

Two witnesses commented on the influence of commodity programs in testimony offered at the July 31, 2006, House Agriculture Committee field hearing

in Wall, South Dakota.<sup>12</sup> Wendi Rinehart, a beef cattle and equestrian operation owner in central South Dakota, stated that commodity programs promoted the conversion of land, and more recently at an alarming rate. Judge Jessop, a grassland producer from south-central South Dakota, testified that commodity programs were to blame for “sod busting” in parts of South Dakota.

The commodity programs that concerned both witnesses are the marketing loan program and crop insurance program, which do not require a crop base to qualify for participation. Newly converted or broken land, such as that being broken in the Northern Plains, does not have crop base acres or payment yields.<sup>13</sup> The lack of base acres or payment yields makes this land ineligible for some commodity programs (e.g., direct payments and counter-cyclical payments),<sup>14</sup> though not all. Newly converted land would still remain eligible for marketing loans and crop insurance.<sup>15</sup> Those concerned about the high rate of conversion have argued that this “safety net” provides farmers with the incentive to place grassland (range and pasture land) into production because the programs for which the land is eligible place a floor on farmers’ financial risks.

## Expiring Conservation Reserve Program (CRP) Contracts

The CRP is a land retirement program that allows farmers to enter into long-term contracts (usually 10 years) to retire from production and restore environmentally sensitive or highly erodible land. As these contracts expire, landowners can decide whether they want to try to re-enroll back into the CRP or do something else with the land, such as convert it back to crop production. The high number of CRP acres scheduled to expire in the next four years in South Dakota, North Dakota, and Montana heightens concerns about potential conversions. As of February 2007, roughly 23% of the 36.77 million acres enrolled in the CRP nationwide were in these three states (see **Table 3**).

---

<sup>12</sup> Hearings before the Subcommittee on General Farm Commodities and Risk Management of the Committee on Agriculture. House of Representatives. Serial No. 109-28. July 31, 2006. Wall, SD.

<sup>13</sup> Base acres and payment yields are average historical planting (or yield) of a covered commodity on a particular farm. These numbers are updated infrequently and usually through legislation.

<sup>14</sup> Direct payments are made directly to producers participating in commodity support programs. One form of direct payments, fixed decoupled payments, can go only to producers of specified crops (wheat, corn, grain sorghum, barley, oats, upland cotton, rice, soybeans and other oilseeds) and peanuts. A second form of direct payment, counter-cyclical payments, are payments made to producers when the marketing year average price for a covered crop is less than a set target price. The total counter-cyclical payment is based on base acres. For additional information on commodity program policy, see CRS Report RL33271, *Farm Commodity Programs: Direct Payments, Counter-Cyclical Payments, and Marketing Loans*, by Jim Monke.

<sup>15</sup> Marketing loans provide interim financing on actual production if market prices fall below an established price. Crop insurance payments are made to participating producers when natural hazards result in crop losses.

**Table 3. CRP Enrollment and Re-enrollment by State**

	South Dakota	North Dakota	Montana	National
Contracts Currently Enrolled (as of February 2007) <sup>a</sup>	30,220	37,819	18,422	773,573
Acres Currently Enrolled (as of February 2007) <sup>a</sup>	1,556,853	3,385,311	3,472,548	36,777,086
Expiring 2007 Acres: Eligible to re-enroll or extend <sup>b</sup>	683,628	1,652,565	1,545,542	15,686,311
Expiring 2007 Acres: Actually re-enrolled or extended <sup>b</sup>	433,521	1,391,354	1,448,813	13,887,280
Share of Expiring 2007 Acres re-enrolled or extended <sup>b</sup>	63.4%	84.2%	93.7%	88.5%
Expiring 2008-2010 Acres: Eligible to re-enroll or extend <sup>c</sup>	458,659	1,119,033	1,475,235	12,089,445
Expiring 2008-2010 Acres: Actually re-enrolled or extended <sup>c</sup>	236,001	848,519	1,375,083	10,067,644
Share of Expiring 2008-2010 Acres re-enrolled or extended <sup>c</sup>	51.5%	75.8%	93.2%	83.3%

**Notes:**

- a. Source: USDA, Farm Service Agency, "Conservation Reserve Program Monthly Summary — February 2007," March 2007, at [[http://www.fsa.usda.gov/Internet/FSA\\_File/feb2007.pdf](http://www.fsa.usda.gov/Internet/FSA_File/feb2007.pdf)].
- b. Source: USDA, Farm Service Agency, "Re-enrollment and Extensions of 2007 Expiring CRP Contracts: State Summary," February 2007, at [[http://www.fsa.usda.gov/Internet/FSA\\_File/rex07compliancepaid020707st.pdf](http://www.fsa.usda.gov/Internet/FSA_File/rex07compliancepaid020707st.pdf)]. Data represent the number of acres with paid compliance fees as of February 7, 2007.
- c. Source: USDA, Farm Service Agency, "Re-enrollment and Extensions of 2008-2010 Expiring CRP Contracts: State Summary," February 2007, at [[http://www.fsa.usda.gov/Internet/FSA\\_File/rex0810compliancepaid020707st.pdf](http://www.fsa.usda.gov/Internet/FSA_File/rex0810compliancepaid020707st.pdf)]. Data represent the number of acres with paid compliance fees as of February 7, 2007.

Nationwide, almost 16 million CRP acres were set to expire in 2007; however, following a re-enrollment and general sign-up period during the summer of 2006, only approximately 2.9 million acres will actually leave the program in 2007.<sup>16</sup> There are no data on how landowners plan to use the land leaving the CRP after contracts expire, but it is widely assumed that much of it will be returned to production. **Figure 4** illustrates the degree to which expiring 2007 contracts are concentrated in the three states of interest. Of the three states, South Dakota has the lowest percentage of re-enrollment or contract extensions; of the acres eligible to re-enroll, only 63% paid the compliance fee to re-enroll or extend their contract (see **Table 3**), compared with the national average of 89%.<sup>17</sup>

<sup>16</sup> According to the Farm Service Agency (FSA), 1.1 million acres will expire in 2008, 3.4 million acres in 2009, and 4.1 million acres in 2010. For additional information on CRP, see CRS Report RS21613, *Conservation Reserve Program: Status and Current Issues*, by Tadlock Cowan.

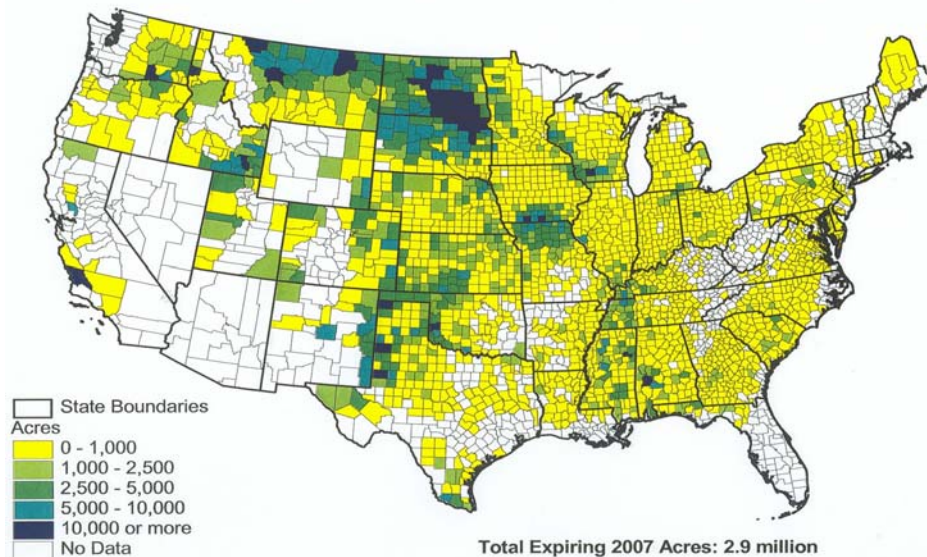
<sup>17</sup> During the 2006 CRP re-enrollment period, contract holders who qualified and chose to re-enroll or extend their contract, were required to schedule, pay for, and pass a compliance (continued...)



The higher concentration of CRP acres where contracts will expire in the Northern Plains adds to the intensity of the controversy over grassland conversion. Land that had been enrolled in commodity programs prior to enrollment in CRP maintains its base acres and payment yield throughout the CRP contract. After CRP contracts expire, these lands again become eligible to receive direct payments and counter-cyclical payments if they are returned to production.

#### Figure 4. Expiring CRP Acres, 2007

(Note: Additional slippage may occur on land with paid fees. Data on approvals is just starting to be received.)



**Source:** USDA, Farm Service Agency, House of Representatives staff briefing by USDA, February 16, 2007.

Speculation about the future of lands enrolled in CRP grew over the last few months after the Secretary of Agriculture, Mike Johanns, stated that he was considering allowing CRP participants early release from their contracts in order to meet the demand for corn for ethanol. However, on March 30, 2007, the Secretary reported that based upon 2007 planting intentions for corn, the USDA will not offer penalty-free early releases from the CRP contracts at this time. Currently, if a CRP contract is terminated, the participant must forfeit all rights to further payments under the contract, refund all payments received plus interest, and pay liquidated damages to the Commodity Credit Corporation (CCC) as specified in the contract.<sup>18</sup> USDA also announced that there would be no general sign-up for CRP in 2007.<sup>19</sup>

<sup>17</sup> (...continued)

review of their CRP land. The fee was between \$45 and \$500 per contract, depending on the number of acres under contract, and was used to cover the cost of conducting the compliance review. Of the 16 million acres eligible to expire nationally in 2007 (before the re-enrollment period), 15.7 million acres were eligible for re-enrollment or extension, and FSA has approved re-enrollment and extensions for 13.1 million acres. Of the 2.9 million acres remaining that will actually expire in 2007, 2.6 million acres declined re-enrollment or extension (by not paying the fee) and 300,000 acres were ineligible.

<sup>18</sup> 7 C.F.R. 1410.52.

<sup>19</sup> USDA Press Release, "Statement by Agriculture Secretary Mike Johanns Regarding the (continued...)"

## Conservation Compliance

Landowner decisions about conversion also may be influenced by conservation compliance requirements. The Food Security Act of 1985 (P.L. 99-198) contained provisions that prohibited participation in numerous specified USDA programs when annually tilled commodity crops were produced on highly erodible land (HEL) without adequate erosion protection. HEL cropland broken out of native vegetation must provide no substantial increase<sup>20</sup> in soil erosion after the implementation of a federally approved conservation plan, in order to be considered compliant with the HEL conservation provisions. This provision is referred to as Sodbuster. Following the implementation of a conservation plan on HELs and a finding of compliance with the Sodbuster provision, a farmer is allowed to participate in and receive USDA program benefits. Native grassland being converted to cropland in the Northern Plains could potentially fall under the Sodbuster provision if the land is determined to be highly erodible. Most land coming out of the CRP in this region likely falls under Sodbuster requirements because high levels of wind erosion are widespread in this region and acceptance into CRP is based on providing environmental benefits, one of the most important of which is limiting erosion.

The Administration's 2007 farm bill proposal would address this conversion issue by augmenting Sodbuster with a new "Sodsaver" provision. The Sodsaver recommendation broadens the Sodbuster provision to include all grassland (rangeland and native grassland not previously in crop production) converted into cropland as permanently ineligible for specified USDA program benefits. Unlike the Sodbuster provision, Sodsaver would make producers ineligible for many USDA programs, including conservation programs, even if they implement an approved conservation plan. In its current form, the proposal would still allow for participation in the crop insurance program on newly converted cropland. The Sodsaver provision has been endorsed by most farm and environmental organizations who have commented specifically on it. The South Dakota Cattlemen's Association has stated that it supports the proposal only if crop insurance is added as an ineligible program.<sup>21</sup> As stated earlier, the availability of subsidized crop insurance is viewed by some as a major catalyst for land conversion.

---

<sup>19</sup> (...continued)

Conservation Reserve Program," March 30, 2007, at [[http://www.usda.gov/wps/portal/!ut/p/\\_s.7\\_0\\_A/7\\_0\\_1OB?contentidonly=true&contentid=2007/03/0085.xml](http://www.usda.gov/wps/portal/!ut/p/_s.7_0_A/7_0_1OB?contentidonly=true&contentid=2007/03/0085.xml)].

<sup>20</sup> "Substantial increase" is defined as any rate of soil erosion that exceeds the sustainable level (often referred to as the T value) and thereby would compromise the long-term productive potential of the land. USDA, Natural Resources Conservation Service, "Highly Erodible Land Conservation Compliance — Soil Loss Protection Requirements for Compliance with HEL Provisions," March 2007, at [<http://www.nrcs.usda.gov/programs/compliance/helcindex.html>].

<sup>21</sup> Scott Jones, President, South Dakota Cattlemen's Association, letter to Chairman Collin Peterson, House Agricultural Committee, February 27, 2007. The South Dakota Cattlemen's Association supports a Sodsaver proposal that eliminates all federal subsidy supports, including commodity payments and crop insurance, on new cropland acres put into production by converting grassland with no previous cropping history.

## Remaining Questions

While several data sources point to continuing rates of growth in land conversion of grassland to cropland in the Northern Plains, these sources have limitations, leaving basic questions only partially answered. These questions include exactly where the conversions are occurring; why they are occurring; and at what rate they are occurring. Some are concerned about the future pattern of land conversion in this region, what environmental impact these changes will have, and what changes in public policy might slow, halt, or reverse this process. Speculation varies, based on assumptions about many factors, including future market prices for commodities (e.g., continued high commodity prices), technological advances (e.g., new processes for producing bioenergy and genetic modifications that allow high-value crops to be planted in new areas), and commodity policies (e.g., the availability of crop insurance). The following questions are intended to help shape and inform future discussions of conversion.

- **General Conversion Questions:** What types of land are being converted to cropland? Are conversions limited to the Northern Plains, or are they occurring elsewhere as well? Are the driving forces behind conversion generally the same by location, and how will those forces affect rates and locations of conversion in the future?
- **Other Agricultural Users:** Is land conversion raising grazing land rental prices? What changes are associated with conversion that can be distinguished from more general trends in land rental rates for the remaining grazing land and for cropland?
- **Wildlife and Hunting:** Is conversion having an adverse effect on wildlife and thereby diminishing hunting opportunities for upland game birds? Is the quantity or quality of hunting opportunities being reduced by conversion rates and patterns, or by rising rental rates? Would any adverse effects on wildlife be reversible if the cropland in the Northern Plains is returned to grasslands; if so, how rapidly?
- **Technology:** What roles are technological advances, including genetic modifications to plants and altered agronomic practices, playing in encouraging some of the conversion to cropland? Technological change continues to improve productivity from year to year; how does the potential for increased production affect rates and patterns of conversion, if at all?
- **Sustainability:** The Northern Plains have a history of frequent drought that increases as one moves from east to west. What are the effects of conversion on soil moisture? What sustainable production techniques, such as longer cropping cycles, are possible with grassland conversion in the region? How do concerns about dealing with dry conditions affect economic incentives to convert grassland to cropland?
- **Economics:** How would various farm bill proposals alter the marginal value of converting land from grass to crops? Can changes in policies and programs alter the point at which a landowner decides that it is more profitable, worth the effort, and worth the risk

to make the conversion economically feasible, given current market conditions? What are the fiscal implications of providing crop insurance and/or disaster payments to marginally cropped land? How would making converted grasslands ineligible for crop insurance or ineligible for all commodity program benefits affect landowner decisions? Will converted lands be more susceptible to catastrophic losses and lead to greater public pressure for disaster assistance?

- **Conservation Compliance and Proposed Changes:** Currently, Sodbuster allows landowners to convert grassland considered to be highly erodible to cropland without any loss of available benefits, if it is farmed following a conservation plan. Do the current conservation compliance requirements slow conversion? Are the current Sodbuster requirements being enforced, and if so, are they providing disincentives to convert land? The Administration's proposed Sodsaver would give some producers in the Northern Plains fewer options when making decisions, and the loss of those options could (theoretically) reduce the value of their land. What effect, if any, would this proposed policy change have on the rate or pattern of land converted, and on the land market, in this region?