

United States Department of Agriculture Natural Resources Conservation Service Little Rock, Ark.



Arkansas Natural Resources Inventory

A look at the status, condition, and trends of land, soil, water, and related resources on Arkansas's non-federal lands from 1982-2007 from the National Resources Inventory (NRI).





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Foreword

Dear Arkansan,

We are pleased to present to you this Summary Report of the Arkansas Natural Resources Inventory (ANRI). It is the latest in a series of natural resource inventories conducted by the United States Department of Agriculture's Natural Resource Conservation Service (NRCS) and provides state consistent data for the 25-year period from 1982 through 2007.

This document presents estimates for basic state natural resources inventory data themes including the most recent trends and changes in soil erosion, irrigation, prime farmland, wetlands, land use, land cover, and land capability class and sub class in Arkansas.

It provides updated information on the trends, status and condition of water, soil, land and related resources on Arkansas's non-Federal land. Non-Federal lands include privately owned lands, Tribal and trust lands, and lands controlled by state and local governments. It also provides information on natural resource and environmental conditions for these lands with the specific goal of supporting agricultural and environmental policy development and program implementation.

We hope this information will be useful to our conservation partners as well as others including natural resource managers, policy makers, analysts, consultants, other Federal agencies, state governments, colleges and universities, farm groups and the general public.

This ANRI Summary Report is derived from information collected from the 2007 National Resources Inventory (NRI) Summary Report. The NRI was conducted by NRCS in cooperation with Iowa State University's Center for Survey Statistics and Methodology, which serves as the NRI Statistical



Unit providing statiscal and survey methods support for the NRI survey program.

We'd also like to acknowledge USDA's Farm Service Agency for their assistance by providing NRCS with data and information for this publication on Arkansas's crop history.

As NRCS celebrates 75 years of Helping People Help the Land, our agency will continue to promote every avenue and opportunity to provide our partners and customers the products and services they need to be good stewards of their soil, water and other natural resources.

Sincerely,

MICHAEL E. SULLIVAN State Conservationist

AN OVERVIEW OF THE NRI

The National Resources Inventory (NRI) is a scientifically credible statistical survey designed to help gauge natural resource status, conditions, and trends on the Nation's non-Federal land. Non-Federal land, which includes privately owned lands, tribal and trust lands, and lands controlled by State and local governments, represents nearly 75 percent of the nation's total land area.

The NRI is conducted by the Natural Resources Conservation Service (NRCS) in cooperation with Iowa State University's Center for Survey



NRI data are designed to be part of the core components of USDA's conservation strategic planning and accountability efforts, and to help assess consequences of existing legislative mandates, such as the appraisals required by the Soil and Water Resources Conservation Act (RCA) and the periodic Farm Bills. The 2007 NRI is providing the analytical foundation for the RCA Appraisal that USDA will deliver to Congress by January 2011 and the subsequent update of the National Conservation Program, which together provide guidance to USDA on

Statistics and Methodology (ISU-CSSM). This partnership ensures that the NRI is science based, employing well established scientific survey principles.

The NRI is carried out under the authority of a number of legislative acts, including the Rural Development Act of 1972, the Soil and Water Resources Conservation Act of 1977, the Federal Agriculture Improvement and Reform Act of 1996, and the Farm Security and Rural Investment Act of 2002.

Information derived from the NRI is used by natural resource managers; policy makers: analysts; consultants; the media; other Federal agencies; State governments; universities; environmental, commodity and farm groups; and the public. These constituents use NRI information to formulate effective public policies, fashion agricultural and natural resources legislation, develop State and National conservation programs, allocate USDA financial and technical assistance in addressing natural resource concerns, and enhances the public's understanding of natural resources and environmental issues. conservation activities needed to meet the Nation's long-term resource needs. The NRI will provide a statistical framework to evaluate proposed programs and policies relative to environmental considerations and various climate change scenarios, and relative to short- and long-term productivity and economic considerations.

A Unique Assessment Tool

The NRI provides nationally consistent statistical data that supports analysis of resource trends on rural and developed land over all regions of the United States since 1982.

This trending capability is possible because -

- the same sample sites have been studied since 1982;
- a number of key data elements have been collected in a consistent manner since 1982;
- the inventory accounts for 100 percent of the surface area of the United States;
- quality assurance and statistical procedures are

- designed to ensure that trend data are scientifically
- legitimate and unambiguous; and
- the NRI facilitates the tracking of lands as they go from one land use category to another.

The NRI can address a broad range of natural resource issues, enabling it to fulfill its primary purpose of supporting agricultural and environmental policy development and program implementation.

Interpretations and analyses are made from a natural resources perspective rather than from a purely land use or vegetative cover or ownership basis because the NRI is soils-based. The NRI has evolved over time. It has adapted to broader and more sophisticated goals, changing technologies, and the need for more costeffectiveness.

Progressing to Annual Inventory

The NRI was conducted every 5 years during the period of 1977 to 1997, but is now conducted annually. This shift helps align the NRI with the need for timely information to support agricultural and conservation policy development and the assessment of the impacts of policy choices and conservation program implementation.

For the annual NRI, data is gathered for a scientifically selected subset of the 800,000 sample sites that were established for previous NRIs. This subsample includes a set of "core" sample sites, which are sampled each year, and "rotation" (or "supplemental") sample sites that vary by inventory year and allow an inventory to focus on emerging issues. Data collection relies upon high-quality, high-resolution aerial photography, field office records, historical records and data, ancillary materials, and on-site visits.

NRI data release procedures are affected by implementation of an annual data collection approach because the scale of NRI estimates is affected by reduced sample sizes. Estimates are released on a 5-year cycle, when they meet statistical standards and are scientifi-



cally credible in accordance with NRCS policy and with OMB and USDA Quality of Information Guide-lines.

Interpretation of the data

The NRI provides not only overall estimates of changes in resource conditions but also the dynamics of those changes. For example gross losses and gains in cropland can be examined, and it can be determined why cropland was lost, how much had been classified as prime farmland, and where these losses occurred.

NRI survey results are based upon a particular set of definitions, protocols, and instructions. These have been developed to support NRCS programs and USDA analytical needs, so they differ in some cases from those used by other agencies. These differences need to be considered when analyzing and interpreting the data.

Non-Federal Land: Most NRI estimates pertain only to non-Federal rural lands; non-Federal lands include privately owned lands, tribal and trustlands, and lands controlled by State and local governments. Some estimates, such as those for wetlands and deepwater habitats, cover water areas and all non-Federal lands including developed land.

Soil Erosion: NRI erosion estimates are based upon erosion prediction models rather than on-site measuring of soil detachment, transport, and deposition. The erosion prediction models provide estimated average annual (or expected) rates based upon the



cropping practices, management practices, and inherent resource conditions that occur at each NRI sample site. Climatic factors used in the erosion prediction equations (models) are based upon long-term average conditions and not upon one year's actual events. NRI estimates of sheet and rill erosion utilize standard Universal Soil Loss Equation (USLE) technology rather than revised USLE (RUSLE) methodology so that it is possible to make comparisons back to the year 1982. Erosion estimates are currently made only for cropland, CRP land, and pastureland. Erosion prediction models for rangeland are currently under development and evaluation.

Developed Land: The NRI category of developed land differs from that used by some other data collection entities. For the NRI, the intent is to identify which lands have been permanently removed from the rural land base, while other studies are interested in human populations (e.g., Census of Population) and housing units (e.g., American Housing Survey). The NRI developed land category includes (a) large tracts of urban and built-up land; (b) small tracts of built-up land of less than 10 acres; and (c) land outside of these builtup areas that is in a rural transportation corridor (roads, railroads, and associated rights-of-way).

CRP Land: For the NRI, CRP land is classified separately from cropland because it provides different resource and conservation issues than hayland, horticultural cropland, and cultivated cropland. Acres in CRP can be added to NRI cropland acres for analyses and reporting.

Irrigation: For the NRI, land is considered irrigated if irrigation occurs during the year of inventory, or during 2 or more of the 4 years prior to the inventory.



Other entities typically consider land irrigated only if irrigation water is applied for the year of interest.

Wetlands: NRI classification of wetlands is slightly different than that used by the Fish & Wildlife Service (FWS) in their statistically based Wetlands Status and Trends study. The NRI and the FWS inventory have different legislative mandates; sampling methodology, inventory protocols, data handling, and analysis routines have evolved independently over the past two decades, even though both survey programs use the hierarchical Cowardin classification system. Recent collaborative efforts have resulted in enhanced classifications for both programs, but wetlands data collected by the two agencies are currently neither comparable nor interchangeable. The NRI multi-resource approach is beneficial to USDA analysts and others who examine conservation and agrienvironmental issues. Results from the FWS study are beneficial to analysts in the Department of the Interior and others.

Further information regarding NRI and additional national reports can be obtained from the national NRI Web site at http://www.nrcs.usda.gov/technical/NRI/.

Overview of Survey Findings for Arkansas



Arkansas covers approximately 34,036,900 acres of land and water; of which, 85.6 percent of this area is non-Federal rural land or about 29,123,400 acres. Non-federal rural lands are predominantly forest land (15,095,900 acres), cropland (7,379,500 acres), and pastureland (5,167,500 acres) along with minor components of water (902,100 acres), Conservation Reserve



Fig.1

Program land and (156,300 acres), other rural land (384,500 acres), and rangeland (37,600 acres). The broad land cover use of federal lands (3,104,200 acres) and developed land (1,809,300 acres) make up the last 14.4 percent of the surface area. (Figure 1)

During the 1982-2007 time period, other broad cover types gained in acreage; but cropland and pastureland had net losses in acreage. (Figure 2)



Fig.2

Key Findings of the 2007 NRI in Arkansas

Cropland

Total Cropland (cultivated and noncultivated) acreage declined from 8,063,200 acres in 1982 to 7,379,500 acres in 2007, a loss of 683,700 acres equaling an 9 percent decrease (Figure 3). The largest loss in a 5-year period occurred between 1987 and 1992 with a loss of 252,100 acres (Figure 4). Cropland was converted to other categories of land use with the majority of conversion to forest, pasture or CRP during this period of time as shown in Figure 5.













Pastureland

Total pastureland acreage declined from 5,634,500 acres in 1982 to 5,167,500 acres in 2007, a loss of 467,000 acres equaling an 8 percent decrease (Figure 6). The largest loss in a 5-year period occurred during 1992-1997 with a loss of 204,700 acres (Figure 7). Pastureland was converted to other land use categories, primarily forest and developed lands shown in Figure 8.







Fig. 8



8

July 2010



Developed Land

About 577,100 acres of land were newly developed between 1982 and 2007, bringing the state total to about 1,809,300 acres (Figure 9). Land that was newly developed between 1982 and 2007 (577,100 acres) could almost cover an area the size of Jefferson County, Ark. The largest increase in development was 252,100 acres between 1987 and 1992. For the NRI, developed land includes rural transportation corridors such as roads and railroads as well as urban and built-up areas which include residential, industrial, commercial and other land uses. The findings on development are important because development isolates tracts of former farmland, which makes agricultural production inefficient and also degrades wildlife habitat. As shown in Figure 10, developed land acres increased as cropland and pastureland decreased.





Fig. 10

July 2010

Cropland Erosion

Total cropland sheet and rill erosion declined by 16 percent from 3.8 tons/acre/year in 1982 to 3.2 tons/ acre/year in 2007 (Figure 11). The reduction reflects NRCS's emphasis on working with producers and landowners to reduce erosion. This effort can be related to the implementation of the 1985 Farm Bill



which required conservation compliance plans to be developed on highly erodible lands (HEL). The highest level of soil erosion reduction (8 percent) occurred during the five-year period of reporting between 1987 and 1992 which coincides with the time the 1985 Farm Bill began to be implemented.





Prime Farmland

There were 12,914,700 acres of prime farmland in 2007, compared to 13,214,400 acres in 1982; a net decrease of about 299,700 acres or 2.3%. (Figure 12) Of these prime farmland losses, 59% of the loss was cropland and 10% of the loss was pasture. This acreage of prime farmland converted to other uses (such as developed land) during the 25-year period was around 3/4 of the size of Lee County, Arkansas. Prime farmland broad cover/use included: cultivated and noncultivated cropland, pastureland, forest land, other rural land, CRP land and rangeland.







Conservation Reserve Program (CRP)

The Conservation Reserve Program encourages farmers to convert highly erodible cropland or other environmentally sensitive acreage to vegetative cover, such as tame or native grasses, wildlife plantings, trees, filterstrips, or riparian buffers and is administered by the Farm Service Agency (FSA). The 2007 report of CRP indicated a reduction in grass and legume practices while maintaining tree establishment levels as shown in Figure 13. Total acres of CRP was shown to increase over the 20-year time period from 1987 (99,400 acres) to 2007 (156,300 acres). A closer look indicates that CRP only increased from 1987 to 1992, the time period within the last fifteen years (1992-2007) CRP has seen a decline of 77,600 acres (Figure 14).







Irrigation

Irrigation within Arkansas primarily occurs on cultivated cropland acres. The 2007 report shows that within cultivated cropland, irrigation increased while conversely nonirrigated cultivated cropland decreased.

While Arkansas has an abundance of good quality ground water in most parts of the state, ground water is being depleted faster than the rate of recharge in the primary agricultural area for cultivated crops.

Though there is a critical decline of ground water in the aquifer beneath these increasingly irrigated acres, NRCS uses its programs and technical expertise to install systems that convert from ground water use to surface water use utilizing the state's abundant annual rainfall (40-50").

Along with the U.S. Army Corps of Engineers, Arkansas Natural Resources Commission (ANRC), and Irrigation District partners, NRCS is planning and implementing several irrigation water conservation/management projects within Arkansas in our most productive agricultural areas (Figure 15).













Surface Water

Arkansas has an abundance of surface water which is not always evenly distributed across the state. Surface water is divided into two categories: large water or small water. Large water includes water greater than or equal to 40 acres in size and perennial streams at least one-eighth mile in width. Arkansas had about 546,700 acres of large water in 2007. Small water is less than 40 acres in size or perennial streams less than one-eight mile in width. In 2007, Arkansas had 355,400 acres of small water. Over the last 20 years from 1987 to 2007, large water acres have been fairly steady with a minor increase of around 5.000 acres while small water acres have shown a more steady increase of 44,200 acres. In part, some of this increase can be attributed to the work of NRCS' water conservation/management projects within the state utilizing the capture of surface water as opposed to using groundwater.







Wetlands

Wetlands increased by 28,600 acres in the period of time from 1997 to 2007 and occurred across several broad cover types with most falling within the forest category. In 2007 Arkansas had 3,084,000 acres of wetlands with the Wetland Reserve Program (WRP) accounting for 204,304 of the acres. WRP is a voluntary program offering landowners opportunity to protect, restore, and enhance wetlands on their property. Specifically, the focus is narrowed in Arkansas to restoring bottomland hardwood forest ecosystems and improvement of water quality in the Lower Mississippi River Valley, the Arkansas River Valley and the Red River Valley, through reforestation and hydrology restoration. Arkansas is currently ranked second in the nation in enrolled Wetlands Reserve Program acres (Figures 17 and 18).









Fig. 18

STATE: ARKANSAS

DATE: 22APR2010

Table A. Total surface area in thousands of acres, by broad cover/use and year *

Broad Cover/Use	1982	1987	1992	1997	2002	2007
Cultivated Cropland	7,794.0	7,679.1	7,427.0	7,348.4	7,243.3	7,090.1
	(218.8)	(214.4)	(215.7)	(211.6)	(235.6)	(249.4)
Noncultivated Cropland	269.2	290.4	297.5	260.3	277.6	289.4
	(27.2)	(26.7)	(27.8)	(25.8)	(36.9)	(42.6)
CRP Land	n/a	99.4	233.9	230.2	148.1	156.3
		n/a	n/a	n/a	n/a	n/a
Pastureland	5,634.5	5,569.8	5,505.7	5,301.0	5,278.1	5,167.5
	(166.3)	(164.2)	(165.4)	(150.7)	(169.6)	(214.4)
Rangeland	41.5	41.5	37.6	37.6	37.6	37.6
	(29.2)	(29.2)	(26.6)	(26.6)	(26.6)	(0.0)
Forest Land	14,887.0	14,851.6	14,892.1	14,977.3	14,985.1	15,095.9
	(232.0)	(233.8)	(233.5)	(236.9)	(235.7)	(217.4)
Other Rural Land	318.0	330.3	342.7	366.0	378.1	384.5
	(22.8)	(21.6)	(22.3)	(26.7)	(30.4)	(43.4)
Urban/Built-Up Land	769.3	804.7	868.2	1,050.9	1,199.1	1,323.7
•	(49.5)	(20.8)	(53.6)	(55.9)	(64.7)	(73.7)
Rural Transportation	462.9	468.1	470.5	477.5	488.1	485.6
	(9.5)	(10.2)	(10.8)	(10.7)	(11.1)	(11.2)
Small Water	306.0	311.2	314.5	338.2	350.9	355.4
	(13.6)	(13.7)	(13.9)	(15.4)	(15.7)	(15.7)
Large Water	512.8	541.7	544.7	546.7	546.7	546.7
	n/a	n/a	n/a	n/a	n/a	n/a
Federal Land	3,041.7	3,049.1	3,102.5	3,102.8	3,104.2	3,104.2
	n/a	n/a	n/a	n/a	n/a	n/a
Total	34.036.9	34 036 9	34 036 9	34.036.9	34.036.9	34 036 9

STATE: ARKANSAS

DATE: 22APR2010

* Table B-1. Changes in broad cover/use in thousands of acres between 1997 and 2002

From 1997	cuircip	Imanout	CK	Pasure	Kange	FUICSU				SIIIall Wat	Largewat	reuei ai	199/ 10131
CultCrop	7,162.1	25.7	22.3	49.3		56.1	12.3	13.9	1.1	4.9		0.7	7,348.4
	(223.3)	(7.2)	n/a	(16.3)		(25.8)	(6.7)	(4.8)	(9.0)	(2.1)		n/a	
Noncult	12.0	195.0		42.2		6.7	0.1	4.2		0.1			260.3
	(10.0)	(24.7)	12	(16.8)		(4.0)	(0.2)	(2.2)		(0.2)			
CRP	32.5	10.4	123.5	44.4		19.4							230.2
	n/a	n/a	n/a	n/a		n/a						12	20
Pasture	22.6	46.5		5,067.8		83.8	15.6	52.1	8.6	4.0			5,301.0
	(9.5)	(16.5)		(157.7)		(28.5)	(9.9)	(13.1)	(3.1)	(1.7)			
Range					37.6								37.6
					(26.6)								
Forest	8.9		2.3	66.2		14,803.5	7.6	69.7	8.8	9.6		0.7	14,977.3
	(9.9)		n/a	(25.4)		(232.2)	(2.8)	(18.1)	(2.2)	(5.4)		n/a	
OthRural	5.1			5.7		7.8	341.3	6.1					366.0
	(3.5)			(3.9)		(6.2)	(27.0)	(1.6)					
Urban/BU	0.1			0.4		0.6		1,049.8					1,050.9
	(0.2)			(0.4)		(0.4)		(6:53)					p
RuralTrn				1.7		2.9		3.3	469.6				477.5
				(8.0)		(I.1)		(1.1)	(10.3)				
SmallWat				0.4		4.3	1.2			332.3			338.2
				(0.4)		(3.0)	(11)			(15.6)			
LargeWat											546.7		546.7
											n/a		
Federal												3,102.8	3,102.8
			18									n/a	
2002 Total	7,243.3	277.6	1 10 1	5,278.1	37.6	14,985.1	378.1	1,199.1	488.1	350.9	546.7	3,104.2	34,036.9

* Estimated standard errors are shown in parentheses below the estimated standard errors of less than 0.05 are shown in the table as 0.0. n/a = not applicable.

The number at the intersection of rows and columns with the same land cover/use designation represents area that did not change from 1997 to 2002. Reading to the right or left of this number is the area that was lost to another broad cover/use by 2002; reading up or down from this number is the area that was gained from another broad cover/use by 2002.

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STATE: ARKANSAS

DATE: 22APR2010

* Changes in broad cover/use in thousands of acres between 2002 and 2007 Table B-2.

2002 Total	7,243.3		277.6		148.1		5,278.1	_	37.6		14,985.1		378.1		1,199.1		488.1		350.9		546.7		3,104.2		34,036.9
Federal																							3,104.2	n/a	3,104.2
LargeWat																		_			546.7	n/a			546.7
SmallWat	1.4	(0.7)	1.0	(0.2)			6.0	(0.8)			4.7	(2.8)							348.3	(14.9)					355.4
Kural Irn	2.8	(1.2)					3.3	(1.7)			4.4	(1.7)					475.1	(10.7)						_	485.6
Urban/BU	13.1	(5.1)	7.4	(3.6)		_	41.4	(6.7)			54.0	(11.3)	8.3	(1.5)	1,193.7	(65.2)	5.8	(1.4)							1,323.7
Othkural	16.3	(8.4)					3.5	(2.6)			8.2	(4.3)	356.1	(41.6)	0.1	(0.2)	-		0.3	(0.3)					384.5
Forest	36.7	(62.7)			12.2	n/a	135.2	(40.9)			14,898.4	(229.1)	4.6	(1.1)	3.2	(1.2)	3.5	(8.0)	2.1	(1.1)					15,095.9
Kange									37.6	(0.0)										-					37.6
Pasture	58.5	(24.2)	2.8	(1.5)	5.7	n/a	5,075.2	(213.7)			15.4	(6.5)	6.6	(4.4)	1.0	(0.7)	2.3	(9.0)		_					5,167.5
ER.	17.9	n/a		_	130.2	n/a	8.2	n/a																	156.3
Noncult	23.6	(21.5)	265.2	(33.4)									0.2	(0.2)	0.4	(0.4)									289.4
CultCrop	7,073.0	(251.5)	2.1	(0.1)		_	10.4	(8.3)					2.3	(0.1)	0.7	(0.4)	1.4	(0.6)	0.2	(0.3)			_	_	7,090.1
I o 2007 -> From 2002	CultCrop		Noncult		CRP		Pasture		Range		Forest		OthRural		Urban/BU		RuralTrn		SmallWat		LargeWat		Federal		2007 Total

Estimated standard errors are shown in parentheses below the estimated. Estimated standard errors of less than 0.0.5 are shown in the table as 0.0. n/a = not applicable.

The number at the intersection of rows and columns with the same land cover/use designation represents area that did not change from 2002 to 2007. Reading to the right or left of this number is the area that was gained from another broad cover/use by 2007, reading up or down from this number is the area that was gained from another broad cover/use by 2007.

STATE: ARKANSAS

DATE: 22APR2010

* Table B-3. Changes in broad cover/use in thousands of acres between 1982 and 2007

1982 10131	7,794.0		269.2		5,634.5		41.5		14,887.0		318.0		769.3		462.9		306.0		512.8		3,041.7		34,036.9
mpport.	27.4	n/a	1.6	n/a	15.4	n/a			34.3	n/a							0.2	n/a			3,025.3	n/a	3,104.2
	7.0	n/a			19.9	n/a			7.0	n/a									512.8	n/a			546.7
	28.0	(6.4)	1.7	(1.2)	15.9	(3.0)			28.3	(6.7)						_	281.5	(13.5)					355.4
	8.1	(2.0)	0.2	(0.2)	19.3	(4.9)			27.5	(4.2)	0.2	(0.4)			430.3	(8.6)							485.6
	6.69	(13.1)	10.2	(2.6)	188.5	(28.6)			263.3	(36.3)	16.2	(2.1)	765.4	(49.1)	10.1	(2.1)	0.1	(0.1)		_			1,323.7
Vuitvui ai	48.3	(11.7)	0.4	(0.5)	53.1	(30.5)			42.5	(20.1)	236.7	(47.8)	0.1	(0.2)	0.1	(0.2)	3.3	(2.0)					384.5
LUICSL	195.9	(122.9)	12.1	(12.4)	730.9	(100.7)	1.3	(0.0)	14,083.8	(265.4)	32.6	(43.9)	2.5	(1.0)	13.1	(2.0)	11.2	(3.1)			12.5	n/a	15,095.9
,Simvi							37.6	(0.0)										-					37.6
o Imrea 1	293.3	(66.2)	49.7	(34.5)	4,447.4	(182.8)	2.6	(0.0)	343.6	(103.0)	16.3	(2.3)	1.0	(0.7)	5.3	(1.0)	5.8	(1.0)		_	2.5	n/a	5,167.5
2	145.8	n/a			8.2	n/a			2.3	n/a													156.3
manort	51.8	(20.2)	157.7	(22.5)	73.9	(34.9)			4.3	(10.6)	0.7	(9.0)					0.2	(0.3)			0.8	n/a	289.4
curcup	6,918.5	(238.5)	35.6	(17.5)	62.0	(36.6)			50.1	(17.1)	15.3	(12.0)	0.3	(0.3)	4.0	(1.1)	3.7	(1.3)			9.0	n/a	7,090.1
From 1982	CultCrop		Noncult		Pasture		Range		Forest		OthRural		Urban/BU		RuralTrn		SmallWat		LargeWat		Federal		2007 Total

Estimated standard errors are shown in parentheses below the estimates. Estimated standard errors of less than 0.05 are shown in the table as 0.0. n/a = not applicable.

The number at the intersection of rows and columns with the same land cover/use designation represents area that did not change from 1982 to 2007. Reading to the right or left of this number is the area that was lost to another broad cover/use by 2007; reading up or down from this number is the area that was gained from another broad cover/use by 2007. There was no CRP Land in 1982.

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Table C-1. Average annual sheet and rill erosion in tons/acre/year, by broad cover/use and year *

Ind 3.810 3.810 3.534 $91and$ (0.062) (0.079) (0.50) 0.672 0.580 0.559 $0.176)$ (0.108) (0.153) n/a 0.592 0.614 n/a (0.118) (0.197) 1.142 1.168 1.243	Rroad Cover/II se	1987	1987	1997	1997	2002	2007
Cropland 3.80 3.810 3.534 (0.062) (0.079) (0.050) (0.051) (0.050) (0.050) (0.176) (0.18) (0.153) (0.176) (0.108) (0.153) (0.176) (0.118) (0.197) (1.142) 1.168 1.243	DIVIN CONTON	70/1	Incr	TIT	1001	7007	1007
(0.062) (0.079) (0.050) (0.050 (0.051) (0.050) (0.176) (0.108) (0.153) (0.176) (0.108) (0.153) (0.170) (0.118) (0.197) (1.142) (1.168) (1.973)	Cultivated Cropland	3.880	3.810	3.534	3.471	3.303	3.355
ed Cropland 0.672 0.580 0.559 (0.176) (0.108) (0.153) n/a 0.592 (0.153) (0.118) (0.197) 1 1.142 1.168		(0.062)	(6.07)	(0:020)	(0.049)	(0.086)	(0.105)
(0.176) (0.108) (0.153) n/a 0.592 0.614 (0.118) (0.197) 1 1.142 1.168	Noncultivated Cropland	0.672	0.580	0.559	0.593	0.612	0.580
n/a 0.592 0.614 0.118) (0.197) (0.197) 1.142 1.168 1.243		(0.176)	(0.108)	(0.153)	(0.131)	(0.170)	(0.260)
)) (0.118) (0.197) (0.	CRP Land	n/a	0.592	0.614	0.581	0.665	0.478
1.142 1.168 1.243			(0.118)	(0.197)	(0.211)	(0.163)	(0.446)
	Pastureland	1.142	1.168	1.243	1.155	1.160	1.132
		(0.046)	(0.045)	(0.053)	(0.047)	(0.075)	(0.119)

* Estimated standard errors are shown in parentheses below the estimates. Estimates and estimated standard errors of less than 0.05 are shown in the table as 0.0. n/a = not applicable.

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Table D. Prime farmland area in thousands of acres, by broad cover/use and year *

Broad Cover/Use	1982	1987	1992	1997	2002	2007
Cultivated Cropland	6,474.7	6,374.6	6,230.7	6,169.1	6,131.5	6,013.7
	(197.5)	(195.0)	(196.8)	(192.8)	(215.6)	(231.5)
Noncultivated Cropland	137.2	133.2	138.6	137.6	157.7	163.2
	(21.9)	(18.7)	(19.3)	(18.2)	(25.8)	(41.9)
CRP Land	n/a	72.2	126.1	134.2	81.7	87.0
		(10.8)	(15.0)	(15.3)	(19.5)	(22.9)
Pastureland	2,188.4	2,196.3	2,192.9	2,133.2	2,099.4	2,109.5
	(91.5)	(87.8)	(92.0)	()3.7)	(131.4)	(150.4)
Rangeland	6.3	6.3	6.3	6.3	6.3	6.3
	(6.1)	(6.1)	(6.1)	(6.1)	(32.8)	(0.0)
Forest Land	4,277.5	4,270.8	4,298.5	4,292.1	4,320.1	4,362.1
	(135.9)	(134.7)	(135.5)	(141.4)	(8.161)	(194.8)
Other Rural Land	130.3	132.5	138.4	154.7	165.1	172.9
	(8.0)	$(\mathcal{T},\mathcal{T})$	(9.7)	(10.1)	(20.4)	(31.2)
Total	13,214.4	13,185.9	13,131.5	13,027.2	12,961.8	12,914.7
	(216.4)	(215.8)	(215.1)	(208.6)	(213.9)	(221.8)

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Table E. Conservation Reserve Program contracted practices in thousands of acres, by year *

	50 D			5 A
CRP Practice	1992	1997	2002	2007
Grasses and Legumes	85.8	87.9	25.7	18.2
	(19.6)	(19.3)	(15.1)	(23.2)
Trees	140.5	137.7	118.9	131.3
	(18.1)	(19.4)	(17.3)	(22.6)
Wildlife and Components	9.7	4.6	3.5	6.5
	(4.2)	(2.0)	(0.0)	(6.8)
Shallow Water Cover	n/a	n/a		
Native Grasses Established	n/a	n/a		0.3
				(6.0)
Total	233.9	230.2	148.1	156.3

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Table F-2. Noncultivated cropland in thousands of acres, by specific land cover/use and year *

Specific Cover/Use	1982	1987	1992	1997	2002	2007
001 Fruit - Orchards	6.5	7.9	7.9	5.8	1.0	
	(4.8)	(4.8)	(4.8)	(3.6)	(1.1)	
002 Nut	10.0	13.3	13.3	10.3	7.0	7.0
	(7.1)	(6.7)	(6.7)	(7.4)	(0.0)	(0.0)
003 Vineyard	2.6	0.7	10.4	10.4	7.1	0.7
	(2.1)	(0.8)	(3.8)	(3.8)	(0.2)	(0.0)
004 Bush Fruit	3.2					
	(3.3)					
005 Berries						
006 Other Horticulture	3.0	1.0	1.0	1.0	1.0	1.0
	(2.4)	(1.2)	(1.2)	(1.2)	(2.6)	(3.8)
140 Hayland	243.9	267.5	264.9	232.8	261.5	280.7
	(27.0)	(25.9)	(27.7)	(27.7)	(36.6)	(42.3)
Total	269.2	290.4	297.5	260.3	277.6	289.4

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Table G. Use of the land in thousands of acres for 2007, by broad cover/use *

Use of the Land	CultCrop	Noncult	CRP	Pasture	Range	Forest	OthRural	Urban/BU
Agricultural Business							49.2	15.5
							(35.0)	(9.5)
Agricultural Facilities							80.6	
							(32.1)	
Aquaculture	10.2						0.8	
	(n·n)	_	_	_			(c.+)	
Agricultural Waste								
Biomass						6.96		
						(0.0)		
Concentrated Development								654.6 (46.1)
Commercial/Industrial								148.3
								(23.2)
Food, Feed, Fiber, & Seed	7,016.4	30.8		156.4				
	(247.8)	(6.01)		(62.8)				
Hay	24.1	219.0	8.2	2,068.7				
	(4.3)	(47.1)	(8.0)	(244.5)	12			
Institutions							N (36.0
								(11.1)
Livestock Grazing	10.4			4,103.0	4.7	1,937.8		0.1
	(0.0)	(32.0)	(8.0)	(208.9)	(0.0)	(203.0)		(0.1)
Land-based Recreation	61.7			124.0		9,304.2		43.9
	(0.0)	(0.0)	(22.7)	(39.3)		(305.5)	(6.5)	(15.0)
Mineral Extraction				1.4		12.9	17 V	
			, 	(0.0)		(0:0)	(5.51)	, il
Non-agricultural Waste								33.3
								(12.8)
Reserved/Agricultural	6.6		132.5					
	(0.0)		(0.7)					
Rural Estates							20.9	175.5
							(2.9)	(20.4)

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Table G. Use of the land in thousands of acres for 2007, by broad cover/use * (continued)

Use of the Land	CultCrop	Noncult	CRP	Pasture	Range	Forest	OthRural Urban/BU	Urban/BU
Reserved/Forestry						316.2		
				_	_	(13.3)	<u> </u>	
Reserved/Research & Military	4.0							
5	(3.1)							
Reserved/Natural or Environmental		-		5.8		61.0	7.4	
				(6.8)		(91.7)	(6.2)	
Reserved/Wildlife	1.9		2.3	29.6		404.4	2.7	
	(0.0)		(6.3)	(0.0)		(45.8)	(0.0)	
Undeveloped Rural Sites								
		2		_	_			
Wood, Harvested						5,535.0		
						(350.9)		

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Table H. Irrigated cropland and pastureland in thousands of acres, by year *

Broad Cover/Use	Cultivated Cropland	Cropland	Noncultivated Cropland	d Cropland	Pastureland	eland	Totals	als
	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated
1982	3,980.6	3,813.4	7.1	262.1	18.1	5,616.4	4,005.8	9,691.9
	(176.0)	(102.3)	(3.6)	(27.2)	(13.9)	(166.3)	(171.6)	(184.8)
1987	4,229.7	3,449.4	3.5	286.9	19.0	5,550.8	4,252.2	9,287.1
	(189.4)	(86.8)	(2.4)	(26.8)	(13.9)	(164.6)	(184.6)	(172.6)
1992	4,651.4	2,775.6	23.3	274.2	20.5	5,485.2	4,695.2	8,535.0
	(194.6)	(86.0)	(7.5)	(28.8)	(13.9)	(165.3)	(9.161)	(170.2)
1997	4,934.8	2,413.6	20.7	239.6	22.1	5,278.9	4,977.6	7,932.1
	(183.7)	(82.7)	(2.3)	(26.9)	(14.1)	(148.6)	(180.4)	(139.0)
2002	5,090.3	2,153.0	25.1	252.5	24.9	5,253.2	5,140.3	7,658.7
	(204.5)	(122.9)	(8.2)	(34.8)	(36.7)	(174.9)	(6.791)	(175.5)
2007	5,154.4	1,935.7	18.7	270.7	18.8	5,148.7	5,191.9	7,355.1
	(279.2)	(137.1)	(6.2)	(42.4)	(0.0)	(214.4)	(279.9)	(235.2)

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Table I. Irrigated cropland and pastureland in thousands of acres, by type of irrigation and year *

Fressure Gravity & Pressure Gravity & Pressure Gravity & Pressure Gravity & Pressure Pressure Gravity & Pressure Pressure Fressure Pressure 1982 2,384.5 334.3 1,261.8 3.3 1,9 2,387.8 354.3 1,261.8 354.3 1,263.3 354.3 1,363.3 354.3 1,363.3 354.3 1,363.3 354.3 1,363.3 354.3 1,363.3 354.3 1,363.3 354.3 1,363.3	Broad Cover/Use	Cult	Cultivated Cropland	and	Nonci	Noncultivated Cropland	pland		Pastureland			Totals	
2,384.5 334.3 $1,261.8$ 3.3 1.9 1.9 1.81 $2,387.8$ 354.3 <t< th=""><th></th><th>Gravity</th><th>Pressure</th><th>Gravity & Pressure</th><th>Gravity</th><th>Pressure</th><th>Gravity & Pressure</th><th>Gravity</th><th>Pressure</th><th>Gravity & Pressure</th><th>Gravity</th><th>Pressure</th><th>Gravity & Pressure</th></t<>		Gravity	Pressure	Gravity & Pressure	Gravity	Pressure	Gravity & Pressure	Gravity	Pressure	Gravity & Pressure	Gravity	Pressure	Gravity & Pressure
	1982	2,384.5	334.3	1,261.8	3.3	1.9	1.9		18.1		2,387.8	354.3	1,263.7
2,460.9 430.8 $1,338.0$ 1.6 1.9 1.9 19.0 $2,462.5$ 451.7 (138.8) (54.9) (82.6) (1.9) (1.5) (1.5) (1.5) (1.3) (13.9) (138.8) (54.6) $2,552.2$ 581.2 $1,518.0$ 4.9 16.5 1.9 (1.5) (1.3) (1.3) (13.9) (13.8) (54.6) $2,552.2$ 581.2 $1,518.0$ 4.9 16.5 1.9 (1.5) (1.9) (7.0) (7.0) (7.0) (7.0) (128.0) (76.8) (95.9) (3.0) (7.0) (7.0) (2.1) (13.9) (13.9) (76.0) 971.8 527.2 $3,435.8$ 2.1 17.0 1.6 1.6 1.6 (7.1) (1.9) (1.41) (1.4) (88.3) (56.0) 971.8 527.2 $3,435.8$ 2.1 1.70 1.6 1.6 1.6 1.6 1.6 1.6 8.5 (57.3) (131.8) (1.9) (7.1) (1.9) (7.1) (1.9) (7.0) 56.2 55.79 8.5 526.7 $3,016.1$ 6.6 $1.3.7$ 4.8 6.1 17.5 1.3 $1,560.2$ 557.9 $1,547.5$ 516.7 $3,365.2$ 6.6 7.3 4.8 6.1 17.5 1.3 $1,560.2$ 557.9 $1,64.6$ (101.2) (186.9) (6.2) (6.0) (0.0) (0.0) (0.0) (1.0) (1.0)		(129.4)	(50.0)	(6.67)	(2.8)	(1.5)	(2.1)		(13.9)		(129.8)	(51.1)	(80.2)
(138.8) (54.9) (82.6) (1.9) (1.5) (1.5) (1.5) (1.5) (1.5) (1.5) $(1.3.9)$ (13.8) (54.6) $2,552.2$ 581.2 $1,518.0$ 4.9 16.5 1.6 1.6 1.9 20.5 $2,557.1$ 618.2 $2,552.2$ 581.2 $1,518.0$ (95.9) (3.0) (7.0) (7.0) (2.1) (1.9) (13.9) (129.0) (76.0) 971.8 527.2 $3,435.8$ 2.1 17.0 1.6 1.6 20.8 1.3 973.9 555.0 971.8 577.3 (131.8) (1.9) (7.1) (1.9) (1.9) $(1.4.1)$ (1.4) (88.3) 555.0 88.5 (57.3) (131.8) (1.9) (7.1) (1.9) (1.9) (14.1) (1.4) (88.3) 555.0 88.5 575.7 $3,016.1$ 6.6 13.7 4.8 6.1 17.5 1.3 $1.560.2$ 557.9 $1.547.5$ 526.7 $3,016.1$ 6.6 13.7 4.8 6.1 17.5 1.8 555.9 $1.547.5$ 526.7 $3,016.1$ 66.2 5.0 5.0 5.0 557.9 557.9 $1.64.6)$ (101.2) (186.9) (6.2) 5.0 (5.0) (5.8) 56.9 57.9 577.9 $1.557.5$ 516.7 $3,385.2$ 6.6 7.3 4.8 6.1 17.5 1.2 58.1 57.9 $1.575.5$	1987	2,460.9	430.8	1,338.0	1.6	1.9			19.0		2,462.5	451.7	1,338.0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		(138.8)	(54.9)	(82.6)	(1.9)	(1.5)			(13.9)		(138.8)	(54.6)	(82.6)
	1992	2,552.2	581.2	1,518.0	4.9	16.5	1.9		20.5		2,557.1	618.2	1,519.9
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		(128.0)	(76.8)		(3.0)	(0.7)	(2.1)		(13.9)		(129.0)	(16.0)	(96.1)
	1997	971.8	527.2	3,435.8	2.1	17.0	1.6		20.8	1.3	973.9	565.0	3,438.7
		(88.5)	(57.3)		(6.1)	(7.1)	(6.1)		(14.1)	(1.4)	(88.3)	(5.65)	(131.1)
	2002	1,547.5	526.7	3,016.1	6.6	13.7	4.8	6.1	17.5	1.3	1,560.2	557.9	3,022.2
1,252.5 516.7 3,385.2 6.6 7.3 4.8 17.5 1.3 1,259.1 541.5 (167.8) (111.9) (286.0) (0.0) (6.2) (0.0) (167.8) (111.9) (167.8) (111.9)<		(164.6)	(101.2)	(186.9)	(6.2)	(5.0)	(2.5)	(5.8)	(36.9)	(3.4)	(164.6)	(102.7)	(186.7)
(111.9) (286.0) (0.0) (0.0) (6.2) (6.2) (0.0) (0.0) (167.8) (111.9)	2007	1,252.5	516.7	3,385.2	6.6	7.3	4.8		17.5	1.3	1,259.1	541.5	3,391.3
		(167.8)	(111.9)	(286.0)	(0.0)	(0.0)	(6.2)		(0.0)	(0.0)	(167.8)	(111.9)	(287.3)

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Table K. Cowardin system in thousands of acres for 2007, by broad cover/use \ast

Cowardin System	CultCrop	Noncult	CRP	Pasture	Range	Forest	OthRural	OthRural Urban/BU	RuralTrn	SmallWat	LargeWat	Total
Total Marine												
Estuarine-None/Other Vegetation												5 K
Estuarine-Emergent Vegetation												
Estuarine-Scrub-Shrub Vegetation												
Estuarine-Forested Veoetation												
Total Estuarine												
Diverine None/Other	13						86			153.7	00.3	0 696
	(0.0)						(15.0)			(8.3)	n/a	(17.6)
Riverine-Emergent Nonversistent Vessetation										0.2		0.2
										(0.2)		(0.2)
Total Riverine	1.3						8.6			153.9	99.3	263.1
	(0.0)						(15.0)			(8.3)	n/a	(17.7)
Lacustrine-None/Other										133.7	445.8	579.5
										(12.5)	n/a	(12.5)
Lacustrine-Emergent Nonpersistent Vegetation												
Total Lacustrine										133.7	445.8	579.5
										(12.5)	n/a	(12.5)

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Table K. Cowardin system in thousands of acres for 2007, by broad cover/use * (continued)

Broad Cover/Use	CultCrop	Noncult	CRP	Pasture	Range	Forest	OthRural	Urban/BU	RuralTrn	SmallWat	LargeWat	Total
Palustrine-None/Other	184.9	11.4	8.6	85.1		0.1	4.8	3.5		62.3		360.7
	(26.4)	(2.7)	n/a	(28.9)		(0.2)	(3.7)	(1.3)		(6.4)		(43.9)
Palustrine-Emergent Vegetation				14.5			6.7			2.1	0.1	26.4
				(17.1)			(14.2)			(9.0)	n/a	(22.4)
Palustrine-Scrub-Shrub Vegetation						4.7	2.9					7.6
						(0.0)	(6.2)					(6.2)
Palustrine-Forested Vegetation			18.4			2,641.5	2.6	14.0	6.7	3.4	1.5	2,689.3
			n/a			(156.3)	(0.0)	(9.5)	(1.6)	(1.2)	n/a	(156.5)
Total Palustrine	184.9	11.4	27.0	9.66		2,646.3	20.0	17.5	67	67.8	1.6	3,084.0
	(26.4)	(5.7)	n/a	(35.9)		(156.3)	(17.2)	(9.5)	(1.6)	(6.5)	n/a	(144.5)
Cowardin System Total	186.2	11.4	27.0	9.66		2,646.3	28.6	17.5	1.9	355.4	546.7	3,926.6
	(26.4)	(5.7)	n/a	(35.9)		(156.3)	(23.5)	(5.6)	(1.6)	(15.7)	n/a	(149.4)

Glossary of Selected Terms

Conservation Reserve

Program (CRP). A federal program established under the Food Security Act of 1985 to assist private landowners to convert highly erodible cropland to vegetative cover for 10 years.

Cowardin system. A classification system of wetlands and deepwater habitats of the United States, officially adopted by the U.S. Fish and Wildlife Service used to develop wetland data bases. The five major systems are Estuarine, Lacustrine, Marine, Palustrine and Riverine. (Cowardin, L.M., V. Carter, F.C. Golet, E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. FWS/OBS-79/31. U.S. Department of the Interior, Fish and Wildlife Service.

Cropland. A land cover/use category that includes areas used for the production of adapted crops for harvest. Two subcategories of cropland are recognized: cultivated and noncultivated. Cultivated cropland comprises land in row crops or close-grown crops and also other cultivated cropland, for example, hayland or pastureland that is in a rotation with row or close-grown crops. Noncultivated cropland includes permanent hayland and horticultural cropland.

Developed land. A combination of land cover/use categories, large urban and built-up areas, Small builtup areas, and rural transportation land.

Erosion. The wearing away of the land surface by running water, waves, or moving ice and wind, or by such processes as mass wasting and corrosion (solution and other chemical

processes). The term "geologic erosion" refers to natural erosion processes occurring over long (geologic) time spans. "accelerated erosion" refers to erosion that exceeds what is presumed or estimated to be naturally occurring levels, and which is a direct result of human activities.

Estuarine Wetland. Wetlands occurring in the estuarine system, one of five systems in the classification of wetlands and deepwater habitats. Estuarine wetlands are tidal wetlands that are usually semi enclosed by land but have open, partly obstructed or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The most common example is where a river flows into the ocean.

Farmsteads and ranch headquarters. A land cover/use category that includes dwellings, outbuildings, barns, pens, corrals and feedlots next to buildings, farmstead or feedlot windbreaks, and family gardens associated with operating farms and ranches. (Commercial feedlots, greenhouses, poultry facilities, overnight pastures for livestock, and field windbreaks are not considered part of farmsteads.)

Federal land. A land ownership category designating land that is owned by the federal government. It does not include, for example, trust lands administered by the Bureau of Indian Affairs or Tennessee Valley Authority land. No data are collected for any year that land is in this ownership.

Forest land. A land cover/ use category that is at least 10 percent stocked by singlestemmed woody species of any size that will be at least 4 meters (13 feet) tall at maturity. Also included is land bearing evidence of natural regeneration of tree cover (cut over forest or abandoned farmland) and not currently developed for nonforest use. Ten percent stocked, when viewed from a vertical direction, equates to an areal canopy cover of leaves and branches of 25 percent or greater. The minimum area for classification as forest land is 1 acre, and the area must be at least 100 feet wide.

Hayland. A subcategory of cropland managed for the production of forage crops that are machine harvested. The crop may be grasses, legumes, or a combination of both. Hayland also includes land in setaside or other short-term agricultural programs.

Horticultural cropland. A subcategory of cropland used for growing fruit, nut, berry, vineyard, and other bush fruit and similar crops. Nurseries and other ornamental plantings are included.

Irrigated land. Land that shows evidence of being irrigated during the year of the inventory or of having been irrigated during 2 or more of the last 4 years. Water is supplied to crops by ditches, pipes, or other conduits. For the purposes of the NRI, water spreading is not considered irrigation.

Lacustrine System. Wetlands and deepwater habitats occurring in the lacustrine system, one of five systems in the classification of wetlands and deepwater habitats (see Wetlands, Cowardin et al. 1979). The Lacustrine System includes wetlands and deepwater habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergent plants, emergent mosses or lichens with greater than 30% areal coverage; and (3) total area exceeding 20 acres. Similar habitats totaling less than 20 acres are included if an active wave-formed or bedrock shoreline feature makes up all or part of the boundary, or if the water depth in the deepest part of the basin exceeds 6.6 feet at low water.

Land cover/use. A term that includes categories of land cover and categories of land use. Land cover is the vegetation or other kind of material that covers the land surface. Land use is the purpose of human activity on the land; it is usually, but not always, related to land cover. The NRI uses the term land cover/use to identify categories that account for all the surface area of the U.S.

Large urban and built-up areas. A land cover/use category composed of developed tracts of at least 10 acres, meeting the definition of urban and built-up areas.

Margins of Error. Margins of error are reported for each NRI estimate. The margin of error is used to construct the 95 percent confidence interval for the estimate. The lower bound of the interval is obtained by subtracting the margin of error from the estimate; the upper bound is obtained by adding the margin of error to the estimate. Confidence intervals can be created for various levels of significance which is a measure of how certain we are that the interval contains the

true value we are estimating. A 95 percent confidence interval means that in repeated samples from the same population, 95 percent of the time the true underlying population parameter will be contained within the lower and upper bounds of the interval.

Other aquatic habitats.

Includes wetlands and deepwater habitats occurring in the riverine, lacustrine, or marine systems, and deepwater habitats occurring in the estuarine system as defined by Cowardin et al. 1979.

Other rural land. A land cover/use category that includes farmsteads and other farm structures, field windbreaks, barren land, and marshland.

Palustrine Wetland. Wetlands occurring in the palustrine system, one of five systems in the classification of wetlands and deepwater habitats (see Wetlands, Cowardin et al. 1979). Palustrine wetlands include all nontidal wetlands dominated by trees, shrubs, persistent emergent plants, or emergent mosses or lichens, as well as small, shallow open water ponds or potholes. Palustrine wetlands are often called swamps, marshes, potholes, bogs, or fens.

Pastureland. A land cover/ use category of land managed primarily for the production of introduced forage plants for livestock grazing. Pastureland cover may consist of a single species in a pure stand, a grass mixture, or a grass-legume mixture. Management usually consists of cultural treatments: fertilization, weed control, reseeding or renovation, and control of grazing. For the NRI, includes land that has a vegetative cover of grasses, legumes, and/or forbs, regardless of whether or not it is being grazed by livestock.

Prime farmland. Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses.

Rangeland. A land cover/use category on which the climax or potential plant cover is composed principally of native grasses, grasslike plants, forbs or shrubs suitable for grazing and browsing, and introduced forage species that are managed like rangeland. This would include areas where introduced hardy and persistent grasses, such as crested wheatgrass, are planted and such practices as deferred grazing, burning, chaining, and rotational grazing are used, with little or no chemicals or fertilizer being applied. Grasslands, savannas, many wetlands, some deserts, and tundra are considered to be rangeland. Certain communities of low forbs and shrubs, such as mesquite, chaparral, mountain shrub, and pinyon-juniper, are also included as rangeland.

Riverine System. All wetland and deepwater habitats contained within a channel, with two exceptions (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens; and (2) habitats with water containing ocean derived salts. One of the five systems in the classification of wetlands and deepwater habitats.

Rural transportation land. A land cover/use category which consists of all highways, roads, railroads and associated right-of-ways outside urban and built-up areas; also includes private roads to farmsteads or

ranch headquarters, logging roads, and other private roads (field lanes are not included).

Sample point. The secondstage sample unit in the NRI two-stage sampling scheme.

Segment. An area of land, typically square to rectangular in shape, that is approximately 40, 100, 160, or 640 acres in size. Within the segment, sample points are assigned. Certain data elements are collected for the entire segment, while others are collected at the segment points. The size of the segment is based on the shape, size, and complexity of the resources being inventoried. In 34 States, segments are often 160-acre square parcels measuring 0.5 mile on each side. In the western United States, segments are often 40acre or 640-acre square areas; the 40-acre units are used in most irrigated areas, and the larger segments are used in relatively homogeneous areas containing large tracts of rangeland, forest land, or barren land. In the 13 northeastern States, segments are defined to be 20 seconds of latitude by 30 seconds of longitude, ranging from 97 acres in Maine to 114 acres in southern Virginia. In Louisiana and parts of northwestern Maine, segments are 0.5 kilometer squares (61.8 acres).

Sheet and rill erosion. The removal of layers of soil from the land surface by the action of rainfall and runoff. It is the first stage in water erosion.

Small built-up areas. A land cover/use category consisting of developed land units of 0.25 to 10 acres, meeting the definition of urban and built-up areas.

Urban and built-up areas.

A land cover/use category consisting of residential, industrial, commercial, and institutional land; construction sites; public administrative sites; railroad yards; cemeteries; airports; golf courses; sanitary landfills; sewage treatment plants; water control structures and spillways; other land used for such purposes; small parks (less than 10 acres) within urban and built-up areas; and highways, railroads, and other transportation facilities if they are surrounded by urban areas. Also included are tracts of less than 10 acres that do not meet the above definition but are completely surrounded by urban and built-up land. Two size categories are recognized in the NRI: areas of 0.25 acre to 10 acres, and areas of at least 10 acres.

Wetlands. Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year. (Cowardin, L.M., V. Carter, F.C. Golet, E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. FWS/OBS-79/31. U.S. Department of the Interior, Fish and Wildlife Service.)

Wetland losses. Wetland losses are described in terms of gross and net. Net change is defined as the gross gain minus the gross loss.



Helping People Help the Land

To learn more about the Natural Resources Conservation Service in Arkansas, visit our Web site at: www.ar.nrcs.usda.gov