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Appendix Table B-1 Rice Harvested Area, 1990-2005

State and Crop	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	<i>1,000 Hectares</i>															
Arkansas	486	510	558	498	575	542	473	563	601	658	571	656	608	589	629	662
Primary	486	510	558	498	575	542	473	563	601	658	571	656	608	589	629	662
Ratoon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
California	160	144	159	177	196	188	202	209	185	204	222	191	214	205	239	213
Florida	7	13	14	14	15	15	13	12	12	12	11	7	8	5	8	7
Primary	5	9	9	9	10	10	9	8	8	7	8	5	5	2	5	4
Ratoon	2	4	5	5	5	5	4	4	4	5	3	3	3	2	3	3
Louisiana	287	268	326	279	326	300	280	307	326	324	272	287	249	246	280	240
Primary	221	206	251	214	251	231	216	236	251	249	194	221	217	182	216	212
Ratoon	66	62	75	64	75	69	65	71	75	75	78	66	32	64	65	28
Mississippi	101	89	111	99	127	117	84	96	108	131	88	102	102	95	95	106
Missouri	32	37	45	38	50	45	38	47	58	74	68	84	74	69	79	87
Texas	200	194	199	169	201	180	169	147	160	147	130	122	114	101	119	103
Primary	143	139	142	121	143	129	121	105	115	105	87	87	83	73	88	81
Ratoon	57	56	57	48	57	51	48	42	46	42	43	35	31	28	31	22
Total	1,273	1,256	1,414	1,273	1,489	1,387	1,261	1,380	1,452	1,550	1,362	1,450	1,369	1,309	1,449	1,418

Appendix Table B-2 Total U.S. Production of Crops Managed with Burning, 1990-2005

Crop	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	<i>Million Metric tons</i>															
Wheat	74.3	53.9	67.1	65.2	63.2	59.4	62.0	67.5	69.3	62.6	60.8	53.3	43.7	63.9	58.8	57.3
Rice	7.1	7.3	8.2	7.1	9.0	7.9	7.8	8.3	8.6	9.4	8.7	9.7	9.6	9.1	10.5	10.1
Sugarcane	25.5	27.4	27.5	28.2	28.1	27.9	26.7	28.8	30.9	32.0	32.8	31.6	32.3	30.7	26.3	22.5
Corn	201.5	189.9	240.7	161.0	255.3	188.0	234.5	233.9	247.9	239.5	251.9	241.5	228.0	256.5	300.2	282.6
Barley	9.2	10.1	9.9	8.7	8.2	7.8	8.5	7.8	7.7	6.1	6.9	5.4	4.9	6.1	6.1	4.6
Soybeans	52.4	54.1	59.6	50.9	68.4	59.2	64.8	73.2	74.6	72.2	75.1	78.7	75.1	66.8	85.1	83.4
Peanuts	1.6	2.2	1.9	1.5	1.9	1.6	1.7	1.6	1.8	1.7	1.5	1.9	1.5	1.9	1.9	2.2
Total	371.7	344.9	415.1	322.6	434.1	351.8	406.0	421.1	440.7	423.6	437.5	422.0	395.1	435.0	489.0	462.8

Appendix Table B-3 State Production of Crops Managed with Burning in 2005

State	Corn	Soybeans	Barley	Wheat	Peanuts	Rice	Sugarcane
		<i>1,000 bushels</i>			<i>1,000 lbs.</i>	<i>1,000 cwt</i>	<i>1,000 tons</i>
Alabama	23,800	4,785	-	2,250	613,250	-	-
Alaska	ND ¹	ND	208,000	ND	ND	ND	ND
Arizona	4,290	-	3,000	8,060	-	-	-
Arkansas	30,130	102,000	-	8,320	-	108,792	-
California	22,360	-	3,780	28,155	-	38,836	-
Colorado	140,600	-	7,670	54,035	-	-	-
Connecticut	-	-	-	-	-	-	-
Delaware	22,022	4,732	2,187	3,570	-	-	-
Florida	2,632	256	-	360	410,400	-	11,806
Georgia	29,670	4,550	-	7,280	2,130,000	-	-
Hawaii	-	-	-	-	-	-	1,753
Idaho	10,200	-	52,200	100,590	-	-	-
Illinois	1,708,850	439,425	-	36,600	-	-	-
Indiana	888,580	263,620	-	24,480	-	-	-
Iowa	2,162,500	525,000	-	750	-	-	-
Kansas	465,750	105,450	588	380,000	-	-	-
Kentucky	155,760	53,320	747	20,400	-	-	-
Louisiana	44,880	28,900	-	4,800	-	30,983	9,618
Maine	-	-	1,320	-	-	-	-
Maryland	54,000	15,980	3,526	9,240	-	-	-
Massachusetts	-	-	-	-	-	-	-
Michigan	287,430	76,615	517	38,940	-	-	-
Minnesota	1,191,900	306,000	3,870	71,470	-	-	-
Mississippi	47,085	58,035	-	3,250	44,800	16,832	-
Missouri	329,670	181,670	-	29,160	-	14,124	-
Montana	2,516	-	39,200	192,480	-	-	-
Nebraska	1,270,500	235,330	-	68,640	-	-	-
Nevada	-	-	170	805	-	-	-
New Hampshire	-	-	-	-	-	-	-
New Jersey	7,564	2,548	142	1,219	-	-	-
New Mexico	9,625	-	-	9,720	66,500	-	-
New York	57,040	7,896	735	5,130	-	-	-
North Carolina	84,000	39,420	1,482	24,795	288,000	-	-
North Dakota	154,800	104,400	57,240	303,765	-	-	-
Ohio	464,750	201,600	300	58,930	-	-	-
Oklahoma	28,750	7,930	-	128,000	107,910	-	-
Oregon	4,000	-	2,025	53,560	-	-	-
Pennsylvania	117,120	17,220	3,384	7,830	-	-	-
Rhode Island	-	-	-	-	-	-	-
South Carolina	33,060	8,610	-	8,580	168,000	-	-
South Dakota	470,050	134,750	2,303	133,420	-	-	-
Tennessee	77,350	41,800	-	8,400	-	-	-
Texas	210,900	5,980	-	96,000	975,000	13,668	1,551
Utah	1,956	-	1,920	7,099	-	-	-
Vermont	-	-	-	-	-	-	-
Virginia	42,480	15,300	3,915	10,080	66,000	-	-
Washington	16,400	-	12,505	139,300	-	-	-
West Virginia	3,052	595	-	300	-	-	-
Wisconsin	429,200	69,520	1,590	10,262	-	-	-
Wyoming	6,860	-	5,580	4,665	-	-	-
Total	11,114,082	3,063,237	419,896	2,104,690	4,869,860	223,235	24,728

¹(ND) No data available.

(-) Indicates not applicable.

Appendix Table B-4 Information used in Estimating Methane and Nitrous Oxide Emissions from Crop Residue Burning

B-4(a) Crop Assumptions and Coefficients

Assumption/Coefficient	Corn	Peanuts	Soybeans	Barley	Wheat	Rice	Sugarcane
Residue/Crop Ratio	1	1	2.1	1.2	1.3	1.4	0.8
Fraction Residue Burned	0.03	0.03	0.03	0.03	0.03	Variable	0.03
Fraction Dry Matter	0.91	0.86	0.87	0.93	0.93	0.91	0.62
Burning Efficiency	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Combustion Efficiency	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Fraction Carbon	0.4478	0.45	0.45	0.4485	0.4428	0.3806	0.4235
Fraction Nitrogen	0.0058	0.0106	0.023	0.0077	0.0062	0.0072	0.004

B-4(b) Emissions Factors and Global Warming Potentials

GHG	Factor & GWP
Emissions Factor	
Methane	0.005
Nitrous Oxide	0.007
Global Warming Potential	
Methane	21
Nitrous Oxide	310

B-4(c) Rice Area Burned by State

State	% Burned
Arkansas	22%
California	12%
Florida ¹	0%
Louisiana	3%
Mississippi	23%
Missouri	18%
Texas	0%

¹Crop residue burning is illegal in Florida.

Table B-5 State Methane Emission Estimates for Cropland Burning by Crop Type in 2005

State	Corn	Peanuts	Soybeans	Barley	Wheat	Rice	Sugarcane	Total
	<i>Tg CO₂ eq.</i>							
Alabama	0.0008	0.0004	0.0004	-	0.0001	-	-	0.0017
Alaska	ND	ND	ND	ND	ND	ND	ND	ND
Arizona	0.0002	-	-	0.0001	0.0004	-	-	0.0007
Arkansas	0.0011	-	0.0078	-	0.0004	0.0273	-	0.0367
California	0.0008	-	-	-	0.0014	0.0222	-	0.0244
Colorado	0.0050	-	-	-	0.0027	-	-	0.0077
Connecticut	ND	-	-	-	-	-	-	0.0000
Delaware	0.0008	-	0.0004	-	0.0002	-	-	0.0013
Florida	0.0001	0.0002	0.0000	-	0.0000	-	0.0077	0.0081
Georgia	0.0011	0.0013	0.0003	-	0.0004	-	-	0.0030
Hawaii	-	-	-	-	-	-	0.0011	0.0011
Idaho	0.0004	-	-	0.0020	0.0050	-	-	0.0073
Illinois	0.0606	-	0.0337	-	0.0018	-	-	0.0962
Indiana	0.0315	-	0.0202	-	0.0012	-	-	0.0530
Iowa	0.0767	-	0.0403	-	0.0000	-	-	0.1171
Kansas	0.0165	-	0.0081	0.0000	0.0190	-	-	0.0436
Kentucky	0.0055	-	0.0041	0.0000	0.0010	-	-	0.0107
Louisiana	0.0016	-	0.0022	-	0.0002	0.0031	0.0063	0.0134
Maine	-	-	-	0.0000	-	-	-	0.0000
Maryland	0.0019	-	0.0012	0.0001	0.0005	-	-	0.0037
Massachusetts	-	-	-	-	-	-	-	0.0000
Michigan	0.0102	-	0.0059	0.0000	0.0019	-	-	0.0180
Minnesota	0.0423	-	0.0235	0.0001	0.0036	-	-	0.0695
Mississippi	0.0017	0.0000	0.0045	-	0.0002	0.0169	-	0.0232
Missouri	0.0117	-	0.0139	-	0.0015	0.0018	-	0.0289
Montana	0.0001	-	-	0.0015	0.0096	-	-	0.0112
Nebraska	0.0451	-	0.0181	-	0.0034	-	-	0.0666
Nevada	-	-	-	0.0000	0.0000	-	-	0.0000
New Hampshire	-	-	-	-	-	-	-	0.0000
New Jersey	0.0003	-	0.0002	0.0000	0.0001	-	-	0.0005
New Mexico	0.0003	0.0000	-	-	0.0005	-	-	0.0009
New York	0.0020	-	0.0006	0.0000	0.0003	-	-	0.0029
North Carolina	0.0030	0.0002	0.0030	0.0001	0.0012	-	-	0.0075
North Dakota	0.0055	-	0.0080	0.0021	0.0152	-	-	0.0308
Ohio	0.0165	-	0.0155	0.0000	0.0029	-	-	0.0349
Oklahoma	0.0010	0.0001	0.0006	-	0.0064	-	-	0.0081
Oregon	0.0001	-	-	0.0001	0.0027	-	-	0.0029
Pennsylvania	0.0042	-	0.0013	0.0001	0.0004	-	-	0.0060
Rhode Island	-	-	-	-	-	-	-	0.0000
South Carolina	0.0012	0.0001	0.0007	-	0.0004	-	-	0.0024
South Dakota	0.0167	-	0.0103	0.0001	0.0067	-	-	0.0338
Tennessee	0.0027	-	0.0032	-	0.0004	-	-	0.0064
Texas	0.0075	0.0006	0.0005	-	0.0048	-	0.0010	0.0143
Utah	0.0001	-	-	0.0001	0.0004	0.0000	-	0.0005
Vermont	-	-	-	-	-	-	-	0.0000
Virginia	0.0015	0.0000	0.0012	0.0001	0.0005	-	-	0.0034
Washington	0.0006	-	-	0.0005	0.0070	-	-	0.0080
West Virginia	0.0001	-	0.0000	-	0.0000	-	-	0.0002
Wisconsin	0.0152	-	0.0053	0.0001	0.0005	-	-	0.0211
Wyoming	0.0002	-	-	0.0002	0.0002	-	-	0.0007
Total	0.3944	0.0029	0.2350	0.0074	0.1051	0.0714	0.0162	0.8324

- = Zero.

ND = No data.

Table B-6 State Estimates of Nitrous Oxide Emissions from Cropland Burning by Crop

State	Corn	Peanuts	Soybeans	Barley	Wheat	Rice	Sugarcane	Total
	<i>Tg CO₂ eq.</i>							
Alabama	0.0003	0.0002	0.0005	-	0.0000	-	-	0.0010
Alaska	ND	ND	ND	0.0033	ND	ND	ND	ND
Arizona	0.0000	-	-	0.0000	0.0001	-	-	0.0002
Arkansas	0.0003	-	0.0098	-	0.0001	0.0215	-	0.0317
California	0.0003	-	-	0.0001	0.0005	0.0049	-	0.0057
Colorado	0.0016	-	-	0.0001	0.0009	-	-	0.0026
Connecticut	-	-	-	-	-	-	-	0.0000
Delaware	0.0002	-	0.0005	0.0000	0.0001	-	-	0.0008
Florida	0.0000	0.0001	0.0000	-	0.0000	-	0.0018	0.0020
Georgia	0.0003	0.0007	0.0004	-	0.0001	-	-	0.0016
Hawaii	-	-	-	-	-	-	0.0003	0.0003
Idaho	0.0001	-	-	0.0008	0.0017	-	-	0.0026
Illinois	0.0192	-	0.0420	-	0.0006	-	-	0.0618
Indiana	0.0100	-	0.0252	-	0.0004	-	-	0.0356
Iowa	0.0243	-	0.0502	-	0.0000	-	-	0.0745
Kansas	0.0052	-	0.0101	0.0000	0.0065	-	-	0.0218
Kentucky	0.0017	-	0.0051	0.0000	0.0003	-	-	0.0072
Louisiana	0.0005	-	0.0028	-	0.0001	0.0011	0.0014	0.0059
Maine	-	-	-	0.0000	-	-	-	0.0000
Maryland	0.0006	-	0.0015	0.0001	0.0002	-	-	0.0023
Massachusetts	-	-	-	-	-	-	-	0.0000
Michigan	0.0032	-	0.0073	0.0000	0.0007	-	-	0.0112
Minnesota	0.0134	-	0.0293	0.0001	0.0012	-	-	0.0439
Mississippi	0.0005	0.0000	0.0056	-	0.0001	0.0055	-	0.0116
Missouri	0.0037	-	0.0174	-	0.0005	0.0007	-	0.0222
Montana	0.0000	-	-	0.0006	0.0033	-	-	0.0039
Nebraska	0.0142	-	0.0225	-	0.0012	-	-	0.0379
Nevada	-	-	-	0.0000	0.0000	-	-	0.0000
New Hampshire	-	-	-	-	-	-	-	0.0000
New Jersey	0.0001	-	0.0002	0.0000	0.0000	-	-	0.0004
New Mexico	0.0001	0.0000	-	-	0.0002	-	-	0.0003
New York	0.0006	-	0.0008	0.0000	0.0001	-	-	0.0015
North Carolina	0.0009	0.0001	0.0038	0.0000	0.0004	-	-	0.0053
North Dakota	0.0017	-	0.0100	0.0009	0.0052	-	-	0.0178
Ohio	0.0052	-	0.0193	0.0000	0.0010	-	-	0.0255
Oklahoma	0.0003	0.0000	0.0008	-	0.0022	-	-	0.0033
Oregon	0.0000	-	-	0.0000	0.0009	-	-	0.0010
Pennsylvania	0.0013	-	0.0016	0.0001	0.0001	-	-	0.0031
Rhode Island	-	-	-	-	-	-	-	0.0000
South Carolina	0.0004	0.0001	0.0008	-	0.0001	-	-	0.0014
South Dakota	0.0053	-	0.0129	0.0000	0.0023	-	-	0.0205
Tennessee	0.0009	-	0.0040	-	0.0001	-	-	0.0050
Texas	0.0024	0.0003	0.0006	-	0.0016	0.0000	0.0002	0.0051
Utah	0.0000	-	-	0.0000	0.0001	-	-	0.0002
Vermont	-	-	-	-	-	-	-	0.0000
Virginia	0.0005	0.0000	0.0015	0.0001	0.0002	-	-	0.0022
Washington	0.0002	-	-	0.0002	0.0024	-	-	0.0028
West Virginia	0.0000	-	0.0001	-	0.0000	-	-	0.0001
Wisconsin	0.0048	-	0.0067	0.0000	0.0002	-	-	0.0117
Wyoming	0.0001	-	-	0.0001	0.0001	-	-	0.0002
Total	0.1246	0.0017	0.2930	0.0066	0.0359	0.0336	0.0037	0.4991

- = Zero.

ND = No data.

Appendix Table B-7 Soil Carbon Stocks by Climate Region and U.S. Soil Groupings¹

IPCC	USDA	CTD	CTM	WTD	WTM	STD	STM
Inventory Soil Categories	Taxonomic Soil Orders	<i>Tg C/ha</i>					
High Clay Activity Mineral Soils	Vertisols, Mollisols, Inceptisols, Aridisols, & High Base Status	42	65	37	51	42	57
Low Clay Activity Mineral Soils	Ultisols, Oxisols, Acidic Alfisols, & Many Entisols	45	52	25	40	39	47
Sandy Soils	>70% Sand, <8% Clay	24	40	16	30	33	50
Volcanic Soils	Andisols	124	114	124	124	124	128
Spodic Soils	Spodosols	86	74	86	107	86	86
Aquic Soils	Soils With Aquic Suborder	86	89	48	51	63	48
Organic Soils	Histosols ²	n/a	n/a	n/a	n/a	n/a	n/a

¹U.S. soil groupings are based on the IPCC Soil Inventory categories and the USDA taxonomic soil orders.

²Carbon stocks are not needed for organic soils.

Note: Carbon stocks are for the top 30 cm of the soil profile, and were estimated from pedon data available in the NSSC database (NRCS 1997); sample size provided in parentheses.

Climate regions: Cold temperate dry (CTD), cold temperate moist (CTM), warm temperate dry (WTD), warm temperate moist (WTM), subtropical temperate dry (STD), and subtropical temperate moist (STM).

Appendix Table B-8 Stock Change Factors for the U.S. and IPCC Default Values for Impacts on Mineral Soils

Factors	IPCC Default	Warm Moist Climate	Warm Dry Climate	Cool Moist Climate	Cool Dry Climate
Land Use Change					
Cultivated	1	1	1	1	1
General Uncultivated	1.4	1.42 ± 0.06	1.37 ± 0.05	1.24 ± 0.06	1.20 ± 0.06
Set Aside	1.25	1.31 ± 0.06	1.26 ± 0.04	1.14 ± 0.06	1.10 ± 0.05
Improved Grassland					
Medium Input	1.1	1.14 ± 0.06	1.14 ± 0.06	1.14 ± 0.06	1.14 ± 0.06
High Input	na	1.11 ± 0.04	1.11 ± 0.04	1.11 ± 0.04	1.11 ± 0.04
Wetland Rice Production	1.1	1.1	1.1	1.1	1.1
Tillage					
Conventional Till	1	1	1	1	1
Reduced Till	1.05	1.08 ± 0.03	1.01 ± 0.03	1.08 ± 0.03	1.01 ± 0.03
No-till	1.1	1.13 ± 0.02	1.05 ± 0.03	1.13 ± 0.02	1.05 ± 0.03
Cropland Input					
Low	0.9	0.94 ± 0.01	0.94 ± 0.01	0.94 ± 0.01	0.94 ± 0.01
Medium	1	1	1	1	1

Appendix Table B-9 Cultivated Histosol (Organic Soils) Area

Year	Temperate	Sub-Tropical
	<i>1,000 ha</i>	
1990	432	192
1991	431	193
1992	429	194
1993	431	194
1994	433	195
1995	435	195
1996	437	196
1997	439	196
1998	441	197
1999	443	197
2000	445	197
2001	447	198
2002	449	198
2003	451	199
2004	453	199
2005	455	199

Appendix Table B-10 Carbon Loss Rates from Organic Soils Under Agricultural Management in the United States

Climate Regions	Cropland	Pasture/Forest ¹
	<i>Tg C/ha-yr</i>	
CTD & CTM	11.2 ± 2.5	2.8 ± 0.51
WTD & WTM	14.0 ± 2.5	3.5 ± 0.81
STD & STM	14.0 ± 3.3	3.5 ± 0.81

¹There is not enough data available to estimate values for C losses from managed pastures and forests. Estimates are 25% of the values for cropland (the IPCC default organic soil C losses on pasture/forest lands).

Climate regions: Cold temperate dry (CTD), cold temperate moist (CTM), warm temperate dry (WTD), warm temperate moist (WTM), subtropical temperate dry (STD), and subtropical temperate moist (STM).

**Appendix Table B-11 Areas in Each Land-Use and Management System,
for all U.S. Land Areas Categorized as in Agricultural Use**

	1982	1992	1997
IPCC Land Use/Management Categories	<i>million hectares</i>		
Medium Input Cropping	87.49	77.17	78.27
High Input Cropping (Hay or Legumes in Rotation, Winter Cover Crop, Irrigated)	22.21	22.02	21.74
Low Input Cropping (Fallow, Low Residue Crops)	30.96	28.92	25.13
Rice	2.71	2.13	2.22
Uncultivated Land (Hay land, Rangeland, Pasture, Forest, Federal)	210.04	207.77	210.26
Improved Land (Pasture or Hayland with legumes or irrigation, Continuous Perennial Crops)	31.19	33.65	31.43
CRP (Set-Aside)	0	13.78	13.23
Urban, Water, Miscellaneous Non-Cropland	1.78	0.96	4.11
Total	386.39	386.39	386.39

Note: Based on analysis of the Revised 1997 NRI data (NRCS 2000).

Appendix Table B-12 State-Level Estimates of Annual Soil Carbon Stock Changes by Major Land Use and Management Type, 1997

State	Net Change,	Net Change,	CRP	Manure	Total, Non-	Ag. Land on	<i>Total</i> ²
	Cropland ¹	Hay/Grazing Land		Application	Organic Soils	Organic Soils	
	<i>Tg CO₂ eq.</i>						
Alabama	(0.22)	0.88	0.29	0.53	1.49	(0.04)	1.45
Alaska	ND	ND	ND	ND	ND	ND	ND
Arizona	(0.18)	0.18	0.04	0.19	0.23	0.00	0.23
Arkansas	0.22	0.55	0.15	0.88	1.80	0.00	1.80
California	(0.62)	0.99	0.11	1.72	2.20	(2.35)	(0.15)
Colorado	(0.62)	0.84	1.25	0.53	2.00	0.00	2.00
Connecticut	(0.04)	0.07	0.00	0.04	0.07	(0.04)	0.04
Delaware	0.00	0.00	0.00	0.15	0.15	0.00	0.15
Florida	(0.07)	0.44	0.07	0.23	0.67	(10.74)	(10.07)
Georgia	(0.18)	0.73	0.18	0.76	1.50	(0.07)	1.42
Hawaii	0.04	0.04	0.00	n.d.	0.07	(0.29)	(0.22)
Idaho	(1.03)	1.36	0.59	0.34	1.26	(0.07)	1.19
Illinois	(2.57)	2.05	0.59	0.53	0.61	(0.84)	(0.24)
Indiana	(1.03)	1.36	0.26	0.61	1.20	(1.98)	(0.78)
Iowa	(4.33)	2.46	0.77	1.49	0.39	(1.87)	(1.48)
Kansas	(1.06)	2.02	1.54	0.88	3.37	0.00	3.37
Kentucky	(0.77)	1.65	0.11	0.15	1.14	0.00	1.14
Louisiana	0.11	0.51	0.11	0.04	0.77	(0.07)	0.70
Maine	(0.11)	0.22	0.00	0.08	0.19	0.00	0.19
Maryland	(0.15)	0.22	0.00	0.08	0.15	0.00	0.15
Massachusetts	(0.07)	0.11	0.00	0.19	0.23	(0.07)	0.15
Michigan	(1.94)	2.31	0.15	0.46	0.97	(3.12)	(2.14)
Minnesota	(4.58)	3.63	0.95	1.18	1.18	(5.24)	(4.06)
Mississippi	0.00	0.84	0.40	0.42	1.67	(0.04)	1.63
Missouri	(1.21)	1.72	0.70	0.65	1.86	(0.04)	1.82
Montana	(1.32)	1.83	1.80	0.08	2.39	(0.11)	2.28
Nebraska	(2.42)	2.42	0.99	1.03	2.02	0.00	2.02
Nevada	(0.11)	0.26	0.00	0.04	0.18	0.00	0.18
New Hampshire	(0.04)	0.00	0.00	0.00	(0.04)	(0.04)	(0.07)
New Jersey	(0.07)	0.15	0.00	0.04	0.11	(0.04)	0.07
New Mexico	(0.26)	0.40	0.22	0.23	0.60	0.00	0.60
New York	(1.54)	2.60	0.00	0.61	1.67	(0.48)	1.20
North Carolina	(0.11)	0.55	0.11	1.26	1.81	(1.06)	0.75
North Dakota	(1.87)	2.57	2.71	0.11	3.52	(0.22)	3.30
Ohio	(1.43)	1.91	0.22	0.53	1.23	(1.25)	(0.02)
Oklahoma	(0.44)	1.47	0.77	0.46	2.26	0.00	2.26
Oregon	(0.26)	0.70	0.29	0.15	0.89	(0.18)	0.70
Pennsylvania	(1.10)	1.65	0.00	0.80	1.35	(0.07)	1.28
Rhode Island	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South Carolina	(0.11)	0.29	0.07	0.19	0.45	(0.62)	(0.18)
South Dakota	(3.89)	3.30	1.39	0.31	1.11	(0.07)	1.04
Tennessee	(0.44)	1.54	0.11	0.15	1.36	0.00	1.36
Texas	(2.05)	3.74	2.13	1.53	5.34	0.00	5.34
Utah	(0.29)	0.73	0.15	0.15	0.74	0.00	0.74
Vermont	(0.07)	0.15	0.00	0.11	0.19	0.00	0.19
Virginia	(0.29)	0.77	0.07	0.34	0.89	(0.40)	0.49
Washington	(0.26)	0.81	0.81	0.27	1.62	(0.22)	1.40
West Virginia	(0.26)	0.51	0.00	0.08	0.33	0.00	0.33
Wisconsin	(4.84)	4.36	0.15	1.30	0.97	(2.93)	(1.96)
Wyoming	(0.44)	0.95	0.37	0.04	0.92	0.00	0.92
Total	(44.33)	58.85	20.61	21.97	57.10	(34.58)	22.52

¹Annual cropping systems on mineral soils (e.g., corn, soybean, cotton, and wheat).

²Total does not include change in SOC storage on federal lands, including those that were previously under private ownership, or carbon storage due to sewage sludge applications.

ND= No data.

Appendix Table B-13 State-Level Estimates of Soil Carbon Changes on Cropland, 1997

State	Grassland Converted to	Management Changes	Changes on Other	Net Total
	Annual Cropland ¹		Cropland ²	
	<i>Tg CO₂ Eq.</i>			
Alabama	(0.37)	0.11	0.04	(0.22)
Alaska	ND	ND	ND	ND
Arizona	(0.22)	0.00	0.04	(0.18)
Arkansas	(0.81)	0.22	0.81	0.22
California	(1.14)	0.04	0.48	(0.62)
Colorado	(0.77)	0.15	0.00	(0.62)
Connecticut	(0.04)	0.00	0.00	(0.04)
Delaware	(0.04)	0.04	0.00	0.00
Florida	(0.33)	0.04	0.22	(0.07)
Georgia	(0.29)	0.07	0.04	(0.18)
Hawaii	0.00	0.00	0.04	0.04
Idaho	(1.10)	0.07	0.00	(1.03)
Illinois	(3.08)	0.48	0.04	(2.57)
Indiana	(1.61)	0.55	0.04	(1.03)
Iowa	(4.44)	0.11	0.00	(4.33)
Kansas	(2.05)	0.99	0.00	(1.06)
Kentucky	(0.95)	0.11	0.07	(0.77)
Louisiana	(1.14)	0.22	1.03	0.11
Maine	(0.11)	0.00	0.00	(0.11)
Maryland	(0.18)	0.04	0.00	(0.15)
Massachusetts	(0.07)	0.00	0.00	(0.07)
Michigan	(2.09)	0.07	0.07	(1.94)
Minnesota	(4.62)	0.00	0.04	(4.58)
Mississippi	(0.88)	0.22	0.66	0.00
Missouri	(1.91)	0.44	0.26	(1.21)
Montana	(1.91)	0.59	0.00	(1.32)
Nebraska	(3.08)	0.66	0.00	(2.42)
Nevada	(0.11)	0.00	0.00	(0.11)
New Hampshire	(0.04)	0.00	0.00	(0.04)
New Jersey	(0.11)	0.04	0.00	(0.07)
New Mexico	(0.26)	0.00	0.00	(0.26)
New York	(1.61)	0.04	0.04	(1.54)
North Carolina	(0.22)	0.07	0.04	(0.11)
North Dakota	(3.15)	1.28	0.00	(1.87)
Ohio	(1.87)	0.40	0.04	(1.43)
Oklahoma	(0.88)	0.44	0.00	(0.44)
Oregon	(0.33)	0.04	0.04	(0.26)
Pennsylvania	(1.21)	0.07	0.04	(1.10)
Rhode Island	0.00	0.00	0.00	0.00
South Carolina	(0.15)	0.04	0.00	(0.11)
South Dakota	(4.07)	0.18	0.00	(3.89)
Tennessee	(0.70)	0.07	0.18	(0.44)
Texas	(3.01)	0.59	0.37	(2.05)
Utah	(0.29)	0.00	0.00	(0.29)
Vermont	(0.07)	0.00	0.00	(0.07)
Virginia	(0.37)	0.07	0.00	(0.29)
Washington	(0.51)	0.15	0.11	(0.26)
West Virginia	(0.26)	0.00	0.00	(0.26)
Wisconsin	(4.84)	0.00	0.00	(4.84)
Wyoming	(0.51)	0.07	0.00	(0.44)
Total	(57.82)	8.84	4.69	(44.29)

¹Losses from annual cropping systems due to plowing of pastures, rangeland, hayland, set-aside lands, and perennial cropland.

²Perennial/horticultural cropland and rice cultivation.

ND= No data.