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## Farm and Ranch Irrigation Survey (2008)

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United States Department of Agriculture  
**Tom Vilsack**, Secretary  
National Agricultural Statistics Service  
**Cynthia Z.F. Clark**, Administrator



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# Introduction

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## HISTORY

Selected irrigation data for on-farm irrigation operations have been collected in the census of agriculture since 1890. A census of farms which reported irrigation in the 1900 Census of Agriculture was authorized by Congress. Surveys of irrigation in humid areas were taken in connection with the 1954 and 1959 censuses.

The 2008 Farm and Ranch Irrigation Survey (FRIS) is the seventh survey devoted entirely to collecting on-farm irrigation data for the United States. For the first time, horticultural specialty operations with sales of \$10,000 or greater were included in the survey. The 1979, 1984, 1988, and 1994 Farm and Ranch Irrigation Surveys were conducted by the U.S. Department of Commerce, Bureau of Census. Responsibility for the survey was transferred from the Bureau of Census to the U.S. Department of Agriculture (USDA), National Agricultural Statistics Service (NASS) in 1997. The 1998 survey utilized the resources of the 45 NASS field offices which expanded opportunities for telephone follow-up or personal enumeration of nonresponse cases. The 1998 Farm and Ranch Irrigation Survey was the first survey to collect and publish data for each of the 50 States. Previous farm and ranch irrigation surveys published data only for leading irrigation States, with a U.S. total, excluding Alaska and Hawaii.

## USES OF SURVEY DATA

The 2008 Farm and Ranch Irrigation Survey provides data that supplement the basic irrigation data collected from all farm and ranch operators in the 2007 Census of Agriculture. Irrigation data from this survey combined with 2007 census data provide one of the most complete and detailed profiles of irrigation in the United States.

Survey data are used by producers, farm

organizations, businesses, State departments of agriculture, elected representatives and legislative bodies at all levels of government, public and private sector analysts, the news media, and colleges and universities. The data are used to:

- Compare water use by application method;
- Develop improved technologies;
- Develop Federal programs;
- Appraise water use trends;
- Assess impact of congressional legislation; and
- Evaluate the impact of irrigated crops by State.

## AUTHORITY

The census of agriculture is required by law under the "Census of Agriculture Act of 1997," Public Law 105-113 (Title 7, United States Code, Section 2204g). The law authorizes the Secretary of Agriculture to conduct surveys deemed necessary to furnish annual or other data on the subjects covered by the census. The 2008 Farm and Ranch Irrigation Survey was conducted under the provisions of this section.

## FARM DEFINITION

A farm is any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census or survey year.

## DATA COMPARABILITY

State level general FRIS data are not comparable between the 2008 and 2003 surveys. In the 2003 survey, the data included operations that reported horticultural production with sales less than \$10,000 during the previous census year. In 2008 data for these operations are included with data for horticultural specialty operations that reported \$10,000 or more of horticulture sales in the previous

census year in a separate set of data tables.

To provide a measure of comparability, the published 2003 U.S. level data were adjusted. Data for operations that reported horticultural production with sales less than \$10,000 were removed. See Appendix A, Statistical Methodology for a detailed discussion of data comparability.

## **WATER RESOURCES REGIONS MAP**

The map on page 1 shows Water Resources Regions delineated to approximate actual basin boundaries based on topographic drainage characteristics. Data are tabulated separately for each of the 20 Water Resources Regions shown on the map.

## **PERCENT OF NORMAL PRECIPITATION MAP**

The map on page 2 shows the areas of the United States with deviations from normal precipitation during 2008. The map is included for reference purposes only.

## **TABLES AND APPENDICES**

**Chapter 1, General Data.** Table 1 shows farms and acres irrigated for the 1992 through 2007 Censuses of Agriculture for each State. Tables 2 through 42 present detailed irrigation data collected in the farm and ranch irrigation survey from operations that reported irrigated land in the 2007 census and also in the 2008 survey. Excluded from these data are institutional, research, and experimental operations and all operations reporting horticultural sales in the previous census year. Table 43 presents data for farm operations that irrigated in 2007 but discontinued irrigation either temporarily or permanently in 2008 while continuing to operate a farm or ranch. Comparable adjusted 2003 U.S. level survey data are also presented. Data are reported at the national level, for each State, and for the 20 Water Resources Regions.

**Chapter 2, Horticultural Operations Data.** Tables 1 through 9 present detailed 2008 irrigation data

collected on the horticulture version of the irrigation survey. Data are from horticultural operations that reported irrigating in the 2007 census and also in the 2008 survey. Data are reported at the national level and for each State.

**Appendix A.** Provides information about data collection and data processing activities and discusses the statistical methodology used in conducting and evaluating the survey. Table A provides the general 2008 FRIS sample counts and the sample's corresponding 2007 census irrigated acreage. It also provides the general 2008 FRIS unexpanded and expanded acres irrigated and 2007 census acres irrigated. Table B provides a comparison of the irrigated acres published in the 2007 Census of Agriculture and expanded 2008 FRIS acres irrigated by size group. Table C provides the standard error for selected data in the 2008 general FRIS sample. Table D provides the standard error for selected data in the 2008 horticultural operations sample.

**Appendix B.** Provides information about the development of the report forms and definitions of specific terms and phrases used in this publication, including items in the publication tables that carry the note "see text." It also provides facsimiles of the report forms and instruction sheets used to collect general FRIS data. Table A provides irrigated acreage and rank for the previous three censuses. Table B combines the quantity of water applied published in Chapter 1, general FRIS, and the quantity of water applied for horticultural operations data, Chapter 2.

## **RESPONDENT CONFIDENTIALITY**

In keeping with the provisions of Title 7 of the United States Code, no data are published that would disclose information about the operations of an individual farm or ranch. All tabulated data are subjected to an extensive disclosure review prior to publication. Any tabulated item that identifies data reported by a respondent or allows a respondent's data to be accurately estimated or derived, was suppressed and coded with a 'D'. However, the number of farms reporting an item is not considered confidential information and is provided even though other information is withheld.

## DATA PRODUCTS AND CUSTOM TABULATIONS

The 2008 Farm and Ranch Irrigation Survey data, as well as the 2007 Census of Agriculture Volume 1 Geographic Area Series and related reports, are available on the NASS website at [www.nass.usda.gov](http://www.nass.usda.gov).

Custom-designed tabulations may be developed when data are not published elsewhere. These tabulations are developed to individual user specifications on a cost-reimbursable basis and shared with the public. The census Volume 1 on CD-ROM and the census *Quick Stats* are alternative data sources that should be investigated before requesting a custom tabulation.

All custom tabulations are subject to a thorough disclosure review prior to release to prevent the disclosure of any individual respondent data. Requests for custom tabulations can be submitted via the internet from the NASS home page, by mail, or by e-mail to:

DataLab  
National Agricultural Statistics Service

Room 6436A, Stop 2054  
1400 Independence Ave, S.W.  
Washington, D.C. 20250-2054  
or  
[Datalab@nass.usda.gov](mailto:Datalab@nass.usda.gov)

## ABBREVIATIONS AND SYMBOLS

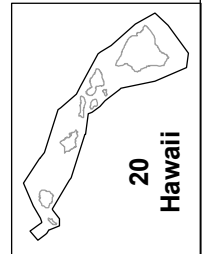
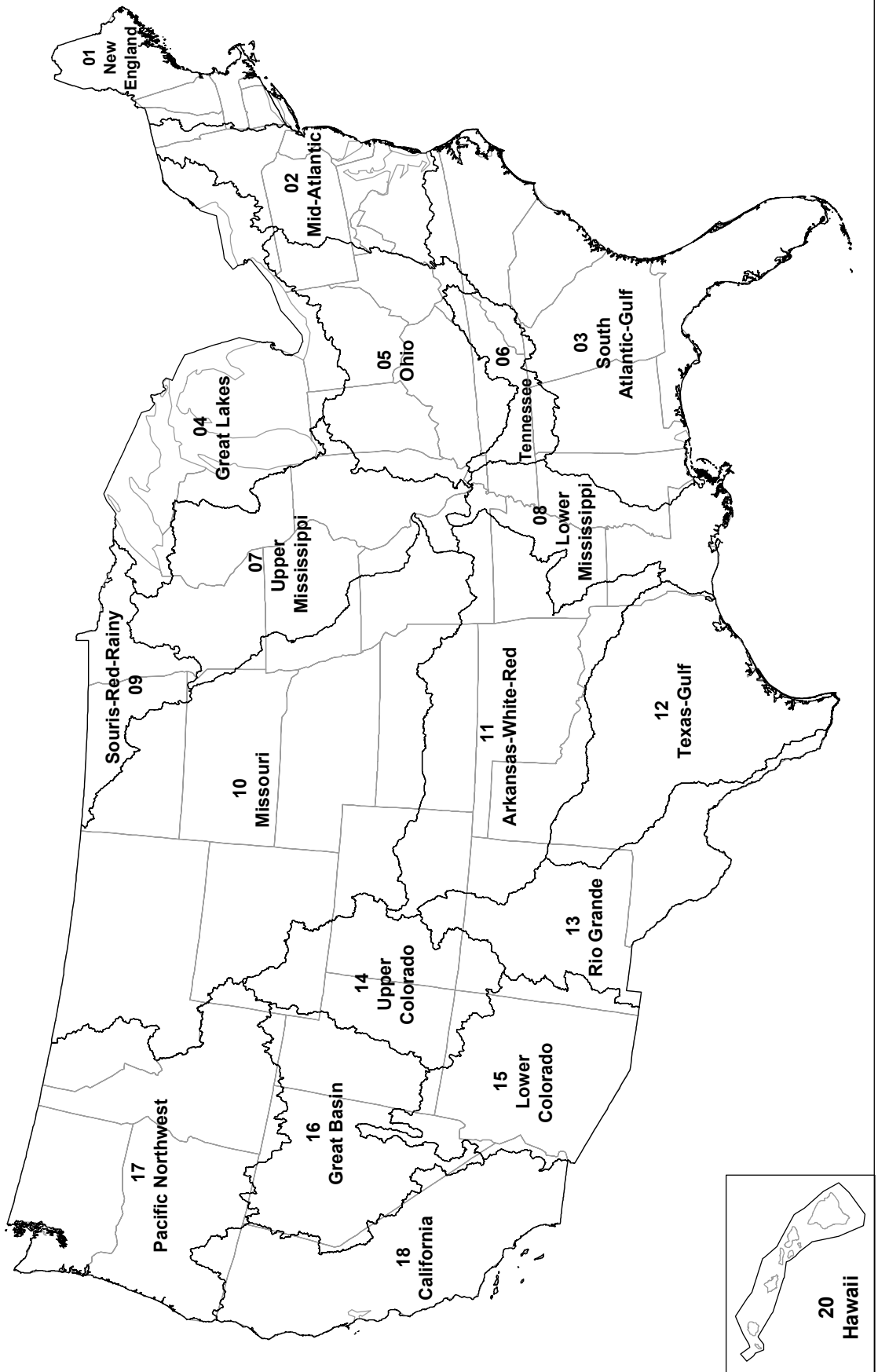
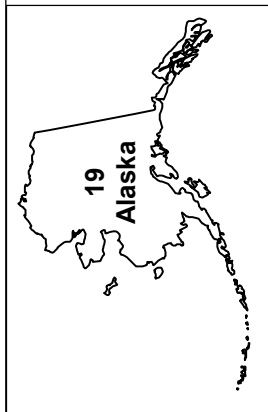
The following abbreviations and symbols are used throughout the tables:

- Represents zero.
- (cwt) Hundredweight.
- (D) Withheld to avoid disclosing data for individual farms.
- gpm Gallons per minute.
- (NA) Not available.
- psi Pounds per square inch.
- WRR Water Resources Regions.
- (X) Not applicable.
- (Z) Less than half of the unit shown.

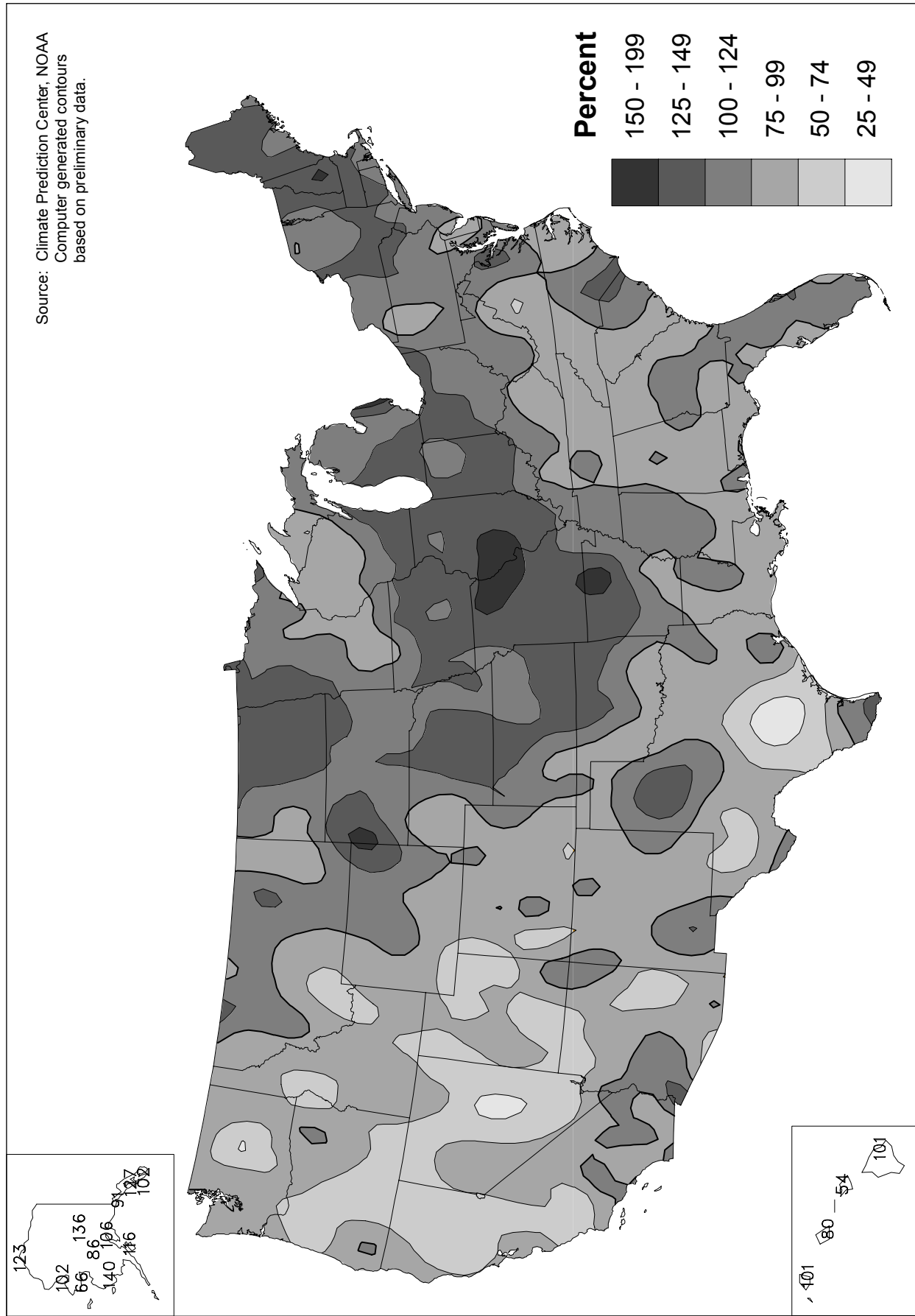


# Water Resources Areas Map of the United States

Note: Water resources regions outline the major drainage areas of the United States. These boundaries which often split county lines are defined by the U.S. Geological Survey.



**Percent of Normal Precipitation, January - December 2008**



**Table 1. Irrigated Farms in the Censuses of Agriculture: 2007 and Earlier Censuses**

[For meaning of abbreviations and symbols, see introductory text]

Geographic area	2007		2002		1997		Not adjusted for coverage			
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	1997		1992	
							Farms	Acres irrigated	Farms	Acres irrigated
United States .....	301,028	56,599,305	299,583	55,311,236	308,818	56,289,172	279,442	55,058,128	279,357	49,404,030
Alabama .....	2,035	112,819	1,698	108,783	1,503	79,647	1,301	76,871	1,380	82,015
Alaska .....	184	3,730	150	2,742	114	2,667	114	2,667	93	1,566
Arizona .....	5,094	876,158	4,172	931,735	4,233	1,075,336	3,426	1,013,902	3,965	956,454
Arkansas .....	5,393	4,460,682	5,847	4,149,766	6,887	3,785,338	6,593	3,717,217	6,682	2,701,651
California .....	53,400	8,016,159	55,596	8,709,353	63,226	8,886,693	55,920	8,712,893	56,546	7,571,313
Colorado .....	15,774	2,867,957	13,623	2,590,654	15,747	3,374,233	15,470	3,430,129	15,193	3,169,839
Connecticut .....	789	9,901	801	10,139	809	7,689	674	7,366	524	5,893
Delaware .....	560	104,562	439	97,167	430	75,024	415	72,635	352	61,774
Florida .....	12,868	1,552,118	13,456	1,815,174	14,573	1,873,823	12,673	1,862,404	13,500	1,782,680
Georgia .....	5,716	1,017,773	5,369	870,810	4,752	773,066	4,372	748,520	4,701	724,792
Hawaii .....	2,810	58,635	2,231	69,194	2,241	76,971	2,241	76,971	2,220	134,338
Idaho .....	16,124	3,299,889	15,901	3,288,522	16,683	3,543,805	15,191	3,493,542	15,487	3,260,006
Illinois .....	2,388	474,454	2,031	390,843	2,072	351,676	2,021	349,799	2,061	328,316
Indiana .....	2,391	397,113	2,212	313,130	1,918	255,917	1,753	250,500	1,742	240,898
Iowa .....	1,287	189,518	976	142,109	1,006	133,149	957	124,983	1,063	115,724
Kansas .....	5,957	2,762,748	5,915	2,678,277	6,109	2,695,816	6,135	2,707,489	6,543	2,680,343
Kentucky .....	2,980	58,730	3,606	36,751	4,233	60,027	4,104	58,490	2,120	27,647
Louisiana .....	3,218	954,353	3,496	938,841	3,784	960,831	3,400	942,528	4,064	897,641
Maine .....	901	20,994	1,031	19,703	805	22,229	671	21,791	523	10,241
Maryland .....	1,326	92,805	1,265	80,828	1,198	68,663	1,154	68,588	1,063	56,913
Massachusetts .....	1,630	23,133	1,580	23,720	2,021	26,820	1,630	24,564	1,336	19,909
Michigan .....	5,078	500,428	4,413	456,278	4,123	407,071	3,752	393,485	3,823	366,465
Minnesota .....	2,918	506,357	2,433	454,850	2,265	403,289	2,193	380,394	2,368	370,404
Mississippi .....	2,284	1,368,661	2,235	1,175,530	1,912	1,110,145	1,769	1,076,231	2,127	882,976
Missouri .....	3,613	1,199,981	3,304	1,032,973	3,108	921,113	2,891	881,924	2,914	708,864
Montana .....	10,457	2,013,167	10,150	1,976,111	10,098	2,101,548	9,059	1,994,484	8,883	1,978,167
Nebraska .....	17,128	8,558,559	17,970	7,625,170	19,297	7,065,556	18,804	6,939,036	19,328	6,311,633
Nevada .....	2,054	691,030	1,981	746,653	2,296	763,742	2,159	764,738	2,151	556,172
New Hampshire .....	505	2,482	451	2,292	506	2,838	429	2,691	308	1,746
New Jersey .....	2,055	95,277	2,124	96,893	2,222	94,380	2,089	92,965	1,911	80,409
New Mexico .....	10,167	830,048	8,282	844,799	8,953	851,735	7,444	804,616	7,331	738,272
New York .....	3,036	68,010	3,307	74,663	2,835	73,791	2,501	69,197	2,020	46,600
North Carolina .....	5,788	232,075	6,721	264,057	5,059	156,315	4,695	156,250	4,337	112,630
North Dakota .....	795	236,138	659	202,817	730	183,004	710	180,362	816	187,212
Ohio .....	2,402	37,959	2,623	40,685	1,967	35,073	1,778	33,997	1,755	29,479
Oklahoma .....	3,026	534,768	2,942	517,553	2,860	509,109	2,710	506,459	2,581	512,487
Oregon .....	16,792	1,845,194	17,776	1,907,627	17,016	1,963,478	15,348	1,948,739	15,002	1,622,235
Pennsylvania .....	3,958	37,786	4,108	42,516	3,554	40,089	2,814	36,150	2,121	23,096
Rhode Island .....	313	4,306	264	3,963	211	3,333	180	3,265	132	2,979
South Carolina .....	2,030	132,439	1,918	95,642	1,435	88,898	1,248	86,477	1,219	75,681
South Dakota .....	1,627	373,842	1,755	401,083	1,555	367,195	1,439	343,742	1,674	371,263
Tennessee .....	2,453	81,405	2,592	61,217	1,985	47,010	1,768	45,581	1,544	36,974
Texas .....	19,713	5,010,416	21,164	5,074,638	21,106	5,764,295	18,756	5,484,663	18,784	4,912,308
Utah .....	12,492	1,134,144	11,587	1,091,011	12,230	1,218,474	11,291	1,212,201	10,901	1,142,514
Vermont .....	523	2,295	508	2,335	409	2,845	333	2,570	255	2,123
Virginia .....	2,347	82,187	3,331	98,913	2,509	86,388	2,337	84,926	2,312	61,759
Washington .....	15,492	1,735,917	15,534	1,823,155	16,261	1,787,120	13,131	1,705,025	14,068	1,641,437
West Virginia .....	457	2,189	408	1,981	319	3,543	268	3,285	312	2,769
Wisconsin .....	2,907	377,291	2,457	385,902	2,269	358,467	2,025	341,813	2,146	330,838
Wyoming .....	5,793	1,550,723	5,191	1,541,688	5,384	1,749,908	5,306	1,719,463	5,076	1,464,585









**Table 3. Land Use on Farms with Irrigation: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Other cropland			Total woodland		Other pastureland and rangeland			All other land	
	Farms	Acres	Acres irrigated	Farms	Acres	Farms	Acres	Acres irrigated	Farms	Acres
United States .....	29,934	8,551,664	348,379	36,602	10,797,044	45,319	73,238,008	1,045,313	117,218	5,704,460
2003 ..	33,193	9,546,603	322,343	38,339	9,397,022	46,476	76,503,032	957,038	103,827	8,332,956
<b>2008 DATA</b>										
Alabama .....	141	8,914	264	361	67,279	89	9,973	15	377	11,083
Alaska .....	6	(D)	-	12	1,361	-	-	-	17	298
Arizona .....	413	84,110	18,078	147	9,236	780	3,355,368	9,164	1,596	81,405
Arkansas .....	584	101,448	19,590	1,186	160,362	374	269,785	1,557	1,556	121,264
California .....	3,402	355,917	12,745	3,646	848,200	4,813	2,090,187	71,731	22,878	679,357
Colorado .....	1,489	735,468	30,462	1,609	581,950	4,050	4,042,486	115,579	8,540	397,746
Connecticut .....	32	740	-	99	2,642	20	510	-	111	1,028
Delaware .....	35	2,420	-	183	18,484	9	206	(D)	176	3,969
Florida .....	784	128,618	4,843	1,329	308,307	362	309,327	23,863	2,620	184,392
Georgia .....	878	179,915	2,772	2,601	783,865	612	74,896	7,593	2,328	120,680
Hawaii .....	191	47,454	40,617	103	4,783	61	35,314	1,145	561	61,955
Idaho .....	913	265,378	3,686	242	31,906	3,143	1,961,091	102,838	9,125	223,137
Illinois .....	258	28,520	(D)	355	36,694	101	6,356	-	613	22,425
Indiana .....	218	21,770	(D)	512	32,785	103	4,037	59	691	23,061
Iowa .....	87	10,571	(D)	99	6,751	58	6,316	195	266	11,089
Kansas .....	2,104	1,256,000	2,456	327	85,100	1,360	942,869	1,700	2,884	272,043
Kentucky .....	228	9,567	28	522	48,366	173	14,632	14	559	9,393
Louisiana .....	549	267,412	13,216	370	49,802	154	58,445	-	918	94,784
Maine .....	85	11,859	(D)	128	48,392	32	292	-	123	3,903
Maryland .....	80	4,932	-	404	25,900	30	2,102	-	366	8,371
Massachusetts .....	51	623	(D)	302	16,171	14	637	-	532	15,650
Michigan .....	474	23,072	640	1,412	105,642	159	6,033	500	1,451	66,178
Minnesota .....	363	34,068	610	621	43,241	243	25,909	-	1,091	64,665
Mississippi .....	176	45,406	421	435	145,120	89	7,402	-	515	39,425
Missouri .....	263	47,425	(D)	551	47,184	340	44,007	1,704	985	46,358
Montana .....	1,052	577,394	5,040	1,707	554,109	3,111	13,069,723	136,217	5,085	395,311
Nebraska .....	3,529	452,523	15,371	2,580	127,904	4,938	7,281,895	26,107	8,330	301,056
Nevada .....	163	29,643	1,965	67	25,225	504	4,199,532	43,062	1,125	221,824
New Hampshire .....	17	111	-	68	4,864	2	(D)	-	60	(D)
New Jersey .....	140	3,688	(D)	346	27,368	51	593	(D)	434	9,895
New Mexico .....	948	955,355	12,387	496	2,928,026	1,474	6,933,209	37,664	4,500	268,534
New York .....	244	6,042	450	401	23,790	86	2,005	-	486	12,610
North Carolina .....	372	31,686	-	1,358	201,727	299	20,344	480	1,349	91,426
North Dakota .....	217	75,389	3,075	84	10,404	222	360,988	380	348	28,654
Ohio .....	111	2,566	-	249	11,729	80	1,691	-	276	5,847
Oklahoma .....	258	107,428	7,170	275	38,743	594	722,034	19,852	807	101,164
Oregon .....	1,403	217,887	1,457	3,076	525,235	4,406	2,918,075	107,764	7,724	241,707
Pennsylvania .....	207	5,702	159	598	25,927	160	1,654	(D)	779	6,891
Rhode Island .....	9	261	-	44	3,110	5	(D)	-	38	(D)
South Carolina .....	187	15,822	45	513	96,716	69	8,476	80	524	16,063
South Dakota .....	228	43,425	113	183	22,721	547	1,090,348	788	773	73,680
Tennessee .....	105	4,354	54	400	27,551	96	11,720	(D)	411	12,084
Texas .....	3,597	1,557,926	125,035	2,119	437,189	2,737	4,633,190	96,803	5,942	229,047
Utah .....	1,016	142,111	2,334	738	308,369	3,445	3,057,856	73,886	5,714	452,659
Vermont .....	22	165	-	48	4,946	7	105	-	51	1,128
Virginia .....	137	13,612	-	495	82,756	202	7,533	-	396	11,927
Washington .....	1,408	329,967	4,908	1,741	1,290,559	2,916	3,722,931	21,791	6,589	329,875
West Virginia .....	21	(D)	-	57	2,293	28	3,215	-	71	1,202
Wisconsin .....	351	32,109	(D)	811	120,901	115	11,051	(D)	963	118,345
Wyoming .....	388	274,374	5,414	592	385,359	2,056	11,911,495	141,964	3,564	208,805
<b>Water Resources Regions</b>										
Region 01 New England .....	194	13,594	(D)	654	77,937	73	1,604	-	881	22,284
Region 02 Mid-Atlantic .....	656	24,331	689	1,899	132,948	413	10,922	48	2,151	43,042
Region 03 South Atlantic-Gulf .....	2,400	372,184	7,924	6,435	1,586,763	1,560	429,391	32,031	7,334	427,069
Region 04 Great Lakes .....	774	38,180	(D)	2,070	142,359	317	9,328	(D)	2,251	82,964
Region 05 Ohio .....	520	36,250	322	1,290	104,994	332	25,811	14	1,368	32,678
Region 06 Tennessee .....	97	(D)	(D)	326	30,405	50	4,647	(D)	343	6,706
Region 07 Upper Mississippi .....	895	82,287	8,353	1,649	177,560	466	40,301	-	2,568	195,989
Region 08 Lower Mississippi .....	1,436	409,509	13,647	1,779	238,427	419	82,899	1,567	3,107	260,958
Region 09 Souris-Red-Rainy .....	139	37,945	1,054	137	15,210	120	31,673	-	286	28,959
Region 10 Missouri .....	6,984	2,343,169	24,799	4,315	1,030,784	11,572	33,592,404	238,622	20,146	1,249,078
Region 11 Arkansas-White-Red .....	2,729	1,575,683	67,249	1,226	2,867,391	3,336	6,817,055	44,989	6,096	514,961
Region 12 Texas-Gulf .....	2,801	1,116,663	101,389	2,100	384,943	2,017	2,024,954	97,439	4,849	254,945
Region 13 Rio Grande .....	787	946,969	6,390	372	139,240	1,106	5,363,906	58,600	3,827	99,871
Region 14 Upper Colorado .....	1,025	116,747	22,593	1,543	692,410	3,577	2,728,642	122,772	6,903	242,593
Region 15 Lower Colorado .....	439	99,026	18,078	239	9,070	990	3,536,727	11,086	1,916	88,218
Region 16 Great Basin .....	868	159,822	2,298	516	275,529	2,850	6,342,780	84,522	5,299	582,941
Region 17 Pacific Northwest .....	3,591	782,099	15,091	5,987	1,937,176	10,917	9,948,550	244,541	24,317	816,240
Region 18 California .....	3,402	345,688	12,745	3,950	947,754	5,143	2,211,100	106,618	22,998	692,711
Region 19 Alaska .....	6	(D)	-	12	1,361	-	-	-	17	298
Region 20 Hawaii .....	191	47,454	40,617	103	4,783	61	35,314	1,145	561	61,955

**Table 4. Land Irrigated by Method of Water Distribution: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Acres irrigated	Gravity systems		Sprinkler systems		Drip, trickle, or low-flow micro sprinklers		Subirrigation	
		Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States .....	54,929,915	89,646	22,017,757	114,348	30,877,057	43,368	3,756,134	1,292	199,993
.....2008 ..	52,492,687	100,626	23,106,280	103,154	26,888,528	41,802	2,963,742	614	279,522
.....2003 ..									
<b>2008 DATA</b>									
Alabama .....	75,023	91	2,542	353	69,642	239	2,843	4	4
Alaska .....	1,589	1	(D)	16	1,707	7	22	-	-
Arizona .....	861,496	2,064	764,655	729	178,184	391	54,087	-	-
Arkansas .....	4,493,435	3,714	3,747,542	1,013	814,449	345	6,800	-	-
California .....	7,329,245	15,530	4,189,852	18,369	1,367,179	21,253	2,336,130	104	66,282
Colorado .....	2,865,840	10,252	1,547,072	4,337	1,402,688	524	23,061	13	2,495
Connecticut .....	2,337	-	-	76	1,397	89	959	-	-
Delaware .....	104,620	-	-	287	103,887	48	886	-	-
Florida .....	1,222,797	907	473,527	1,374	184,965	3,355	549,324	38	55,776
Georgia .....	1,007,763	447	52,599	2,892	943,612	1,051	97,930	52	520
Hawaii .....	99,577	248	3,635	313	6,152	663	94,908	-	-
Idaho .....	3,319,827	7,853	797,221	7,990	2,599,343	401	22,829	432	44,598
Illinois .....	457,078	32	3,602	991	457,236	96	1,146	-	-
Indiana .....	404,399	22	6,779	1,021	404,593	105	1,749	-	-
Iowa .....	162,838	57	4,744	470	163,147	38	262	-	-
Kansas .....	2,570,003	1,475	184,624	3,811	2,435,812	153	9,268	-	-
Kentucky .....	32,380	110	2,564	549	29,384	186	1,089	-	-
Louisiana .....	932,712	1,391	823,257	402	142,165	72	200	-	-
Maine .....	18,151	-	-	140	27,314	61	312	-	-
Maryland .....	85,552	69	236	458	82,099	160	3,301	-	-
Massachusetts .....	17,421	52	648	611	16,492	117	1,218	-	-
Michigan .....	531,927	51	1,124	1,517	503,738	739	30,927	4	684
Minnesota .....	504,330	51	19,487	1,433	489,573	83	660	-	-
Mississippi .....	1,451,652	957	1,070,945	529	405,151	208	3,568	-	-
Missouri .....	1,232,354	867	755,671	1,306	485,659	119	2,366	-	-
Montana .....	1,947,159	6,064	1,102,878	3,920	881,591	290	1,740	114	13,332
Nebraska .....	8,365,545	6,506	1,669,351	14,018	6,724,262	54	4,189	-	-
Nevada .....	685,261	1,308	459,182	580	232,281	55	832	-	-
New Hampshire .....	720	11	54	41	494	46	196	-	-
New Jersey .....	59,412	52	3,069	458	42,905	260	15,935	-	-
New Mexico .....	835,639	6,742	460,112	2,574	459,082	654	30,308	186	3,968
New York .....	20,158	56	926	324	13,708	407	8,116	3	120
North Carolina .....	148,999	70	2,710	1,632	144,913	578	8,605	-	-
North Dakota .....	248,070	141	51,001	505	208,796	7	105	-	-
Ohio .....	18,548	53	899	202	14,712	202	3,830	1	(D)
Oklahoma .....	461,235	329	67,707	1,114	398,666	217	11,239	-	-
Oregon .....	1,758,602	4,096	668,883	9,389	1,080,500	1,602	81,109	-	-
Pennsylvania .....	17,359	84	384	394	10,710	770	6,761	-	-
Rhode Island .....	681	4	4	39	502	31	206	-	-
South Carolina .....	104,091	79	3,995	508	97,983	379	8,148	-	-
South Dakota .....	360,071	437	66,857	833	296,997	18	1,506	2	(D)
Tennessee .....	72,862	89	4,550	324	68,061	247	3,756	-	-
Texas .....	5,356,876	4,567	1,032,043	7,744	4,191,588	2,623	173,272	10	500
Utah .....	1,068,929	6,278	605,133	6,186	521,732	211	3,298	246	9,194
Vermont .....	488	5	15	28	235	39	247	-	-
Virginia .....	44,818	67	1,076	398	41,343	311	3,602	-	-
Washington .....	1,675,898	2,042	199,917	8,892	1,378,576	3,609	138,308	-	-
West Virginia .....	906	13	(D)	56	592	35	183	-	-
Wisconsin .....	396,123	115	7,683	1,137	399,029	184	1,538	-	-
Wyoming .....	1,497,119	4,197	1,156,819	2,065	352,231	36	3,260	83	2,270
<b>Water Resources Regions</b>									
Region 01 New England .....	39,468	67	706	918	46,313	358	2,935	-	-
Region 02 Mid-Atlantic .....	309,972	302	5,650	1,990	277,701	1,516	32,142	3	120
Region 03 South Atlantic-Gulf .....	2,554,462	1,599	536,569	6,839	1,434,045	5,769	668,693	94	56,300
Region 04 Great Lakes .....	721,586	163	5,158	2,267	686,994	1,114	39,417	5	814
Region 05 Ohio .....	304,963	184	7,857	1,422	300,370	629	5,196	-	-
Region 06 Tennessee .....	41,141	67	(D)	261	36,615	246	4,860	-	-
Region 07 Upper Mississippi .....	1,339,287	211	31,229	3,520	1,325,395	314	2,693	-	-
Region 08 Lower Mississippi .....	7,346,743	6,180	5,799,090	2,553	1,653,311	406	7,997	-	-
Region 09 Souris-Red-Rainy .....	158,617	12	14,163	390	151,774	-	-	-	-
Region 10 Missouri .....	13,825,255	18,564	4,117,142	23,594	9,856,566	260	26,876	133	14,212
Region 11 Arkansas-White-Red .....	5,412,670	4,775	1,232,853	6,063	4,270,847	979	32,019	62	744
Region 12 Texas-Gulf .....	3,499,153	3,377	820,850	6,041	2,594,470	2,512	155,805	10	500
Region 13 Rio Grande .....	1,079,145	6,429	660,575	2,280	441,640	319	38,728	124	3,224
Region 14 Upper Colorado .....	1,359,888	7,854	1,036,243	4,429	380,010	438	3,156	67	3,705
Region 15 Lower Colorado .....	936,248	2,613	826,066	893	196,301	393	54,371	-	-
Region 16 Great Basin .....	1,599,757	6,254	932,543	5,383	724,114	322	3,437	246	9,194
Region 17 Pacific Northwest .....	6,855,656	14,700	1,767,379	26,616	5,031,101	5,867	242,849	444	44,898
Region 18 California .....	7,444,738	16,046	4,219,623	18,560	1,461,631	21,256	2,340,030	104	66,282
Region 19 Alaska .....	1,589	1	(D)	16	1,707	7	22	-	-
Region 20 Hawaii .....	99,577	248	3,635	313	6,152	663	94,908	-	-

**Table 5. Land Irrigated by Sprinkler Systems: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms	Acres irrigated	Center pivot system							
			Farms	Acres irrigated	Low pressure under 30 psi		Medium pressure 30 to 59 psi		High pressure 60 psi or more	
					Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States .....	114,348	30,877,057	53,395	25,620,477	26,970	13,142,448	23,556	10,890,479	6,484	1,587,550
2003 .....	103,154	26,888,528	47,072	21,278,147	21,619	9,692,867	21,689	9,652,334	7,308	1,932,946
<b>2008 DATA</b>										
Alabama .....	353	69,642	199	57,379	66	14,504	113	34,923	29	7,952
Alaska .....	16	1,707	5	1,245	4	(D)	1	(D)	-	-
Arizona .....	729	178,184	269	81,522	202	65,445	64	13,682	4	2,395
Arkansas .....	1,013	814,449	874	779,268	354	313,369	427	384,756	145	81,143
California .....	18,369	1,367,179	2,689	181,250	889	66,205	1,042	98,027	763	17,018
Colorado .....	4,337	1,402,688	2,690	1,294,396	1,380	521,930	1,339	739,909	69	32,557
Connecticut .....	76	1,397	24	92	-	-	13	81	11	11
Delaware .....	287	103,887	263	98,555	86	20,096	163	67,353	22	11,106
Florida .....	1,374	184,965	375	98,638	302	52,492	60	36,716	17	9,430
Georgia .....	2,892	943,612	1,915	814,777	526	235,493	1,122	461,075	484	118,209
Hawaii .....	313	6,152	87	725	30	(D)	33	(D)	24	48
Idaho .....	7,990	2,599,343	3,089	1,758,277	1,127	609,180	1,788	973,481	306	175,616
Illinois .....	991	457,236	934	446,943	415	211,734	508	214,596	95	20,613
Indiana .....	1,021	404,593	816	377,174	300	116,748	465	213,484	134	46,942
Iowa .....	470	163,147	456	157,151	217	74,630	199	67,272	69	15,249
Kansas .....	3,811	2,435,812	3,699	2,393,113	2,418	1,789,025	1,142	571,384	181	32,704
Kentucky .....	549	29,384	74	17,334	14	2,325	52	14,549	10	460
Louisiana .....	402	142,165	193	127,190	58	34,111	115	79,822	27	13,257
Maine .....	140	27,314	69	3,455	28	(D)	38	2,996	3	(D)
Maryland .....	458	82,099	286	75,504	140	33,595	144	36,052	23	5,857
Massachusetts .....	611	16,492	190	3,446	9	529	174	2,742	7	175
Michigan .....	1,517	503,738	762	412,894	230	81,514	382	233,921	278	97,459
Minnesota .....	1,433	489,573	1,261	470,116	608	209,539	536	206,664	281	53,913
Mississippi .....	529	405,151	500	379,019	138	121,913	304	205,598	82	51,508
Missouri .....	1,306	485,659	964	462,910	512	274,347	332	159,094	157	29,469
Montana .....	3,920	881,591	1,798	583,795	853	286,676	668	244,100	423	53,019
Nebraska .....	14,018	6,724,282	13,551	6,600,660	6,694	2,658,680	7,208	3,629,603	1,399	312,377
Nevada .....	580	232,281	309	184,263	143	83,772	157	90,642	25	9,849
New Hampshire .....	41	494	8	25	6	(D)	-	-	2	(D)
New Jersey .....	458	42,905	75	10,188	40	4,760	36	3,373	10	2,055
New Mexico .....	2,574	459,082	682	326,743	590	283,091	82	38,496	13	5,156
New York .....	324	13,708	17	2,164	11	418	3	1,260	4	486
North Carolina .....	1,632	144,913	341	48,068	170	22,990	96	19,328	170	5,750
North Dakota .....	505	208,796	466	198,574	201	81,827	238	105,165	38	11,582
Ohio .....	202	14,712	65	9,875	34	4,163	33	5,712	-	-
Oklahoma .....	1,114	398,666	922	378,446	590	297,127	254	72,430	95	8,889
Oregon .....	9,389	1,080,500	1,109	525,061	492	164,472	578	324,239	60	36,350
Pennsylvania .....	394	10,710	21	2,252	6	846	11	1,380	4	26
Rhode Island .....	39	502	4	8	-	-	4	8	-	-
South Carolina .....	508	97,983	272	81,691	93	32,109	152	39,829	49	9,753
South Dakota .....	833	296,997	792	289,814	353	114,562	364	147,981	153	27,271
Tennessee .....	324	68,061	109	59,711	48	28,196	56	26,000	17	5,515
Texas .....	7,744	4,191,588	6,006	4,095,434	4,829	3,545,209	1,161	496,041	97	54,184
Utah .....	6,186	521,732	1,052	222,644	452	100,632	428	112,751	200	9,261
Vermont .....	28	235	8	24	-	-	8	24	-	-
Virginia .....	398	41,343	115	21,018	31	8,968	75	10,335	16	1,715
Washington .....	8,892	1,378,576	1,232	866,116	482	360,129	664	412,799	138	93,188
West Virginia .....	56	592	-	-	-	-	-	-	-	-
Wisconsin .....	1,137	399,029	600	353,737	112	54,257	263	185,136	325	114,344
Wyoming .....	2,065	352,231	1,158	267,793	687	159,122	461	105,103	25	3,568
<b>Water Resources Regions</b>										
Region 01 New England .....	918	46,313	303	7,050	43	892	237	5,851	23	307
Region 02 Mid-Atlantic .....	1,990	277,701	742	205,058	299	67,116	421	117,193	69	20,749
Region 03 South Atlantic-Gulf .....	6,839	1,434,045	3,097	1,090,615	1,153	356,701	1,533	586,291	754	147,623
Region 04 Great Lakes .....	2,267	686,994	1,131	569,547	352	121,543	546	319,482	407	128,522
Region 05 Ohio .....	1,422	300,370	648	272,607	240	99,465	387	152,403	72	20,739
Region 06 Tennessee .....	261	36,615	68	25,444	17	4,878	41	14,277	23	6,289
Region 07 Upper Mississippi .....	3,520	1,325,395	2,827	1,253,241	1,131	459,997	1,330	595,657	697	197,587
Region 08 Lower Mississippi .....	2,553	1,653,311	2,102	1,572,831	928	685,434	1,028	742,689	250	144,708
Region 09 Souris-Red-Rainy .....	390	151,774	371	144,422	184	65,132	155	67,090	52	12,200
Region 10 Missouri .....	23,594	9,856,566	20,824	9,433,590	10,650	4,164,643	10,124	4,842,123	2,086	426,824
Region 11 Arkansas-White-Red .....	6,063	4,270,847	5,604	4,190,025	3,796	3,249,780	1,563	868,909	363	71,336
Region 12 Texas-Gulf .....	6,041	2,594,470	4,358	2,486,748	3,512	2,167,428	812	276,773	70	42,547
Region 13 Rio Grande .....	2,280	441,640	796	396,530	531	177,334	257	201,661	17	17,535
Region 14 Upper Colorado .....	4,429	380,010	647	124,795	303	44,786	294	68,472	73	11,537
Region 15 Lower Colorado .....	893	196,301	277	95,527	207	70,925	53	21,287	18	3,315
Region 16 Great Basin .....	5,383	724,114	1,229	411,951	557	184,145	537	217,439	158	10,367
Region 17 Pacific Northwest .....	26,616	5,031,101	5,537	3,130,726	2,114	1,139,473	3,136	1,682,954	565	308,299
Region 18 California .....	18,560	1,461,631	2,742	207,800	919	81,421	1,068	109,361	763	17,018
Region 19 Alaska .....	16	1,707	5	1,245	4	(D)	1	(D)	-	-
Region 20 Hawaii .....	313	6,152	87	725	30	(D)	33	(D)	24	48

--continued

**Table 5. Land Irrigated by Sprinkler Systems: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Linear move tower sprinklers						Solid set and permanent sprinklers					
	Farms	Acres irrigated	Low pressure under 30 psi		Medium to high pressure 30 psi or more		Farms	Acres irrigated	Low pressure under 30 psi		Medium to high pressure 30 psi or more	
			Farms	Acres irrigated	Farms	Acres irrigated			Farms	Acres irrigated	Farms	Acres irrigated
United States .....2008 ..	2,583	395,380	1,475	239,724	1,129	155,656	23,323	1,184,953	6,534	195,255	17,226	989,698
.....2003 ..	2,311	344,100	791	149,566	1,523	194,534	19,812	1,174,210	5,048	277,730	14,831	896,480
<b>2008 DATA</b>												
Alabama .....	12	238	7	203	5	35	31	531	12	144	19	387
Alaska .....	2	(D)	-	-	2	(D)	3	12	-	-	3	12
Arizona .....	4	6,560	4	6,560	-	-	240	28,315	223	3,309	17	25,006
Arkansas .....	62	1,620	61	(D)	1	(D)	27	2,825	-	-	27	2,825
California .....	74	22,891	63	13,866	11	9,025	9,428	575,216	3,653	84,419	6,180	490,797
Colorado .....	589	15,914	491	7,738	98	8,176	231	17,638	38	17,252	193	386
Connecticut .....	2	(D)	-	-	2	(D)	6	598	-	-	6	598
Delaware .....	6	1,857	4	(D)	2	(D)	14	273	-	-	14	273
Florida .....	3	6,650	2	(D)	1	(D)	812	33,728	375	13,855	437	19,873
Georgia .....	12	762	-	-	12	762	544	45,297	94	8,350	450	36,947
Hawaii .....	3	980	-	-	3	980	97	1,643	27	(D)	70	(D)
Idaho .....	214	87,502	47	40,847	167	46,655	1,577	59,036	363	20,872	1,222	38,164
Illinois .....	4	708	2	(D)	2	(D)	18	1,157	1	(D)	17	(D)
Indiana .....	32	4,630	20	1,625	25	3,005	58	1,907	15	613	45	1,294
Iowa .....	4	453	2	(D)	2	(D)	5	60	-	-	5	60
Kansas .....	14	1,190	-	-	14	1,190	-	-	-	-	-	-
Kentucky .....	3	560	3	(D)	2	(D)	6	24	-	-	6	24
Louisiana .....	2	(D)	1	(D)	1	(D)	79	5,986	5	2,270	74	3,716
Maine .....	2	(D)	-	-	2	(D)	15	(D)	2	(D)	13	(D)
Maryland .....	7	1,276	5	(D)	2	(D)	6	210	-	-	6	210
Massachusetts .....	-	-	-	-	-	-	351	(D)	8	330	343	(D)
Michigan .....	18	2,977	-	-	18	2,977	260	17,208	13	1,032	247	16,176
Minnesota .....	15	1,876	-	-	15	1,876	40	3,310	6	1,200	40	2,110
Mississippi .....	8	8,380	1	(D)	7	(D)	3	7,000	2	(D)	3	(D)
Missouri .....	14	1,526	4	346	10	1,180	37	37	-	-	37	37
Montana .....	172	7,903	148	1,715	27	6,188	45	771	20	600	25	171
Nebraska .....	55	29,225	29	25,120	26	4,105	-	-	-	-	-	-
Nevada .....	23	2,357	15	279	8	2,078	14	2,233	2	(D)	12	(D)
New Hampshire .....	-	-	-	-	-	-	7	39	-	-	7	39
New Jersey .....	13	965	5	741	8	224	116	8,329	8	228	108	8,101
New Mexico .....	82	85,528	80	(D)	2	(D)	660	2,043	330	1,247	330	796
New York .....	9	988	2	(D)	7	(D)	56	1,390	31	217	25	1,173
North Carolina .....	138	2,713	85	85	53	2,628	305	13,843	47	1,720	258	12,123
North Dakota .....	4	444	1	(D)	3	(D)	2	(D)	2	(D)	-	-
Ohio .....	4	160	-	-	4	160	28	212	4	28	26	184
Oklahoma .....	20	2,040	2	(D)	18	(D)	54	5,532	2	(D)	52	(D)
Oregon .....	127	29,700	46	12,602	81	17,098	1,725	44,799	14	3,655	1,715	41,144
Pennsylvania .....	8	454	-	-	8	454	52	775	5	98	47	677
Rhode Island .....	-	-	-	-	-	-	12	129	5	(D)	7	(D)
South Carolina .....	15	1,072	2	(D)	13	(D)	59	1,175	5	810	54	365
South Dakota .....	2	(D)	-	-	2	(D)	-	-	-	-	-	-
Tennessee .....	18	941	12	607	6	334	15	975	-	-	15	975
Texas .....	384	28,634	28	17,330	356	11,304	409	18,631	279	2,511	130	16,120
Utah .....	234	18,879	200	9,910	37	8,969	393	6,724	85	670	308	6,054
Vermont .....	-	-	-	-	-	-	8	105	-	-	8	105
Virginia .....	4	480	-	-	4	480	4	(D)	-	-	4	(D)
Washington .....	112	5,234	82	1,834	30	3,400	5,195	231,733	845	23,210	4,358	208,523
West Virginia .....	2	(D)	-	-	2	(D)	1	(D)	-	-	1	(D)
Wisconsin .....	31	2,212	19	1,058	12	1,154	261	20,153	13	156	248	19,997
Wyoming .....	20	1,934	2	(D)	18	(D)	14	140	-	-	14	140
<b>Water Resources Regions</b>												
Region 01 New England .....	4	240	-	-	4	240	394	21,618	15	344	379	21,274
Region 02 Mid-Atlantic .....	42	5,361	14	3,631	28	1,730	239	10,689	44	543	195	10,146
Region 03 South Atlantic-Gulf .....	180	11,435	96	(D)	84	(D)	1,747	96,124	530	24,759	1,217	71,365
Region 04 Great Lakes .....	64	5,765	36	1,263	41	4,502	316	19,375	17	1,060	301	18,315
Region 05 Ohio .....	19	2,407	11	197	10	2,210	60	2,242	16	733	46	1,509
Region 06 Tennessee .....	3	(D)	1	(D)	2	(D)	17	1,025	3	(D)	14	(D)
Region 07 Upper Mississippi .....	42	5,651	8	1,751	34	3,900	310	22,848	19	1,356	297	21,492
Region 08 Lower Mississippi .....	83	14,652	68	4,111	15	10,541	126	13,057	7	4,470	121	8,587
Region 09 Souris-Red-Rainy .....	3	412	-	-	3	412	-	-	-	-	-	-
Region 10 Missouri .....	427	55,442	241	31,927	189	23,515	61	1,595	22	1,284	39	311
Region 11 Arkansas-White-Red .....	22	2,368	4	728	18	1,640	119	25,609	40	19,672	79	5,937
Region 12 Texas-Gulf .....	394	42,674	38	31,370	356	11,304	409	18,631	279	2,511	130	16,120
Region 13 Rio Grande .....	8	9,269	6	(D)	2	(D)	657	1,679	329	1,023	328	656
Region 14 Upper Colorado .....	478	70,560	462	67,040	16	3,520	280	1,170	85	644	195	526
Region 15 Lower Colorado .....	66	7,800	66	7,800	-	-	240	28,315	223	3,309	17	25,006
Region 16 Great Basin .....	130	23,017	41	6,109	92	16,908	384	9,391	3	630	381	8,761
Region 17 Pacific Northwest .....	534	112,140	317	54,288	217	57,852	8,401	330,837	1,220	47,577	7,199	283,260
Region 18 California .....	79	24,811	66	15,586	13	9,225	9,463	579,093	3,655	84,579	6,215	494,514
Region 19 Alaska .....	2	(D)	-	-	2	(D)	3	12	-	-	3	12
Region 20 Hawaii .....	3	980	-	-	3	980	97	1,643	27	(D)	70	(D)

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**Table 5. Land Irrigated by Sprinkler Systems: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Side roll, wheel move, or other mechanical move		Big gun or traveler		Hand move	
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States .....	18,656	1,885,420	9,906	696,380	29,461	1,094,447
2003 .....	15,025	1,819,293	7,943	624,598	28,577	1,648,180
<b>2008 DATA</b>						
Alabama .....	12	1,734	72	8,718	53	1,042
Alaska .....	2	(D)	-	-	8	188
Arizona .....	16	3,537	38	2,692	213	55,558
Arkansas .....	76	22,637	76	7,317	58	782
California .....	1,584	140,516	990	29,936	7,420	417,370
Colorado .....	768	58,724	189	5,430	540	10,586
Connecticut .....	-	-	6	(D)	43	523
Delaware .....	6	585	50	2,617	-	-
Florida .....	43	5,736	176	38,235	34	1,978
Georgia .....	83	21,370	652	56,456	306	4,950
Hawaii .....	17	(D)	9	1,162	153	(D)
Idaho .....	2,818	486,182	127	3,575	3,993	204,771
Illinois .....	18	3,091	37	5,296	20	41
Indiana .....	56	6,914	197	13,267	43	701
Iowa .....	19	4,879	13	604	-	-
Kansas .....	54	18,677	134	22,832	-	-
Kentucky .....	43	2,222	210	7,158	228	2,086
Louisiana .....	6	766	23	4,837	108	(D)
Maine .....	1	(D)	56	(D)	42	620
Maryland .....	35	859	72	3,858	84	392
Massachusetts .....	7	735	26	(D)	56	239
Michigan .....	93	3,511	579	63,335	195	3,813
Minnesota .....	21	1,507	220	12,480	75	284
Mississippi .....	12	8,532	17	2,220	-	-
Missouri .....	63	11,603	215	9,507	76	76
Montana .....	2,415	234,472	471	6,544	1,120	48,106
Nebraska .....	341	41,067	553	42,454	350	10,856
Nevada .....	335	41,100	2	(D)	84	(D)
New Hampshire .....	4	(D)	9	332	21	(D)
New Jersey .....	9	(D)	178	18,793	154	(D)
New Mexico .....	697	31,750	95	533	569	12,485
New York .....	67	3,138	53	3,515	175	2,513
North Carolina .....	52	1,812	848	73,025	330	5,452
North Dakota .....	30	(D)	25	1,725	18	69
Ohio .....	6	378	45	2,456	98	1,631
Oklahoma .....	69	4,133	67	2,870	112	5,645
Oregon .....	2,128	265,480	1,154	93,557	5,544	121,903
Pennsylvania .....	4	309	108	4,572	268	2,348
Rhode Island .....	1	(D)	3	(D)	24	(D)
South Carolina .....	60	1,194	126	11,656	124	1,195
South Dakota .....	34	4,265	3	(D)	51	(D)
Tennessee .....	13	1,365	96	4,526	90	543
Texas .....	376	35,478	303	7,254	587	6,157
Utah .....	3,668	214,995	138	1,916	2,930	56,574
Vermont .....	-	-	2	(D)	10	(D)
Virginia .....	7	(D)	198	15,134	103	1,751
Washington .....	1,669	127,919	687	62,563	2,258	85,011
West Virginia .....	-	-	5	301	49	(D)
Wisconsin .....	35	3,024	233	18,238	208	1,665
Wyoming .....	783	58,827	320	8,072	436	15,465
<b>Water Resources Regions</b>						
Region 01 New England .....	13	785	100	14,978	186	1,642
Region 02 Mid-Atlantic .....	121	6,158	553	42,534	593	7,901
Region 03 South Atlantic-Gulf .....	250	31,006	1,942	189,399	877	15,466
Region 04 Great Lakes .....	115	5,971	804	80,225	387	6,111
Region 05 Ohio .....	54	6,683	307	12,725	454	3,706
Region 06 Tennessee .....	18	(D)	88	6,926	85	(D)
Region 07 Upper Mississippi .....	95	10,015	436	31,882	264	1,758
Region 08 Lower Mississippi .....	118	41,832	133	10,381	172	558
Region 09 Souris-Red-Rainy .....	20	6,560	18	366	7	14
Region 10 Missouri .....	2,690	239,864	1,394	85,296	1,201	40,779
Region 11 Arkansas-White-Red .....	207	33,060	179	10,930	184	8,855
Region 12 Texas-Gulf .....	334	33,250	304	7,257	583	5,910
Region 13 Rio Grande .....	597	27,432	42	126	380	6,604
Region 14 Upper Colorado .....	2,539	153,612	256	6,575	1,412	23,298
Region 15 Lower Colorado .....	48	5,727	38	2,692	275	56,240
Region 16 Great Basin .....	2,877	213,732	96	1,094	2,751	64,929
Region 17 Pacific Northwest .....	6,789	866,672	2,199	160,785	12,007	429,941
Region 18 California .....	1,752	200,513	1,008	31,047	7,482	418,367
Region 19 Alaska .....	2	(D)	-	-	8	188
Region 20 Hawaii .....	17	(D)	9	1,162	153	(D)

**Table 6. Land Irrigated by Drip, Trickle, or Low-flow Micro Sprinklers: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms	Acres irrigated	Surface drip		Sub-surface drip		Low-flow micro sprinklers	
			Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States .....	43,368	3,756,134	25,716	1,714,859	4,694	641,370	15,871	1,399,905
2008 ..								
2003 ..	41,802	2,963,742	24,739	1,398,324	4,744	403,302	14,418	1,162,116
<b>2008 DATA</b>								
Alabama .....	239	2,843	170	1,691	53	856	26	296
Alaska .....	7	22	4	19	3	3	-	-
Arizona .....	391	54,087	183	14,620	24	28,086	193	11,381
Arkansas .....	345	6,800	225	6,500	20	60	140	240
California .....	21,253	2,336,130	12,781	1,246,243	648	242,235	9,344	847,652
Colorado .....	524	23,061	270	6,097	102	4,085	248	12,879
Connecticut .....	89	959	61	317	26	(D)	2	(D)
Delaware .....	48	886	27	609	21	277	-	-
Florida .....	3,355	549,324	942	83,540	159	48,376	2,377	417,408
Georgia .....	1,051	97,930	700	53,618	271	27,999	240	16,313
Hawaii .....	663	94,908	525	83,766	44	(D)	134	(D)
Idaho .....	401	22,829	85	5,044	21	4,076	295	13,709
Illinois .....	96	1,146	57	951	26	65	13	130
Indiana .....	105	1,749	67	691	27	1,039	15	19
Iowa .....	38	262	33	136	5	126	-	-
Kansas .....	153	9,268	86	468	67	8,800	-	-
Kentucky .....	186	1,089	173	1,049	6	12	7	28
Louisiana .....	72	200	72	188	2	(D)	2	(D)
Maine .....	61	312	58	297	5	15	-	-
Maryland .....	160	3,301	108	2,093	45	705	7	503
Massachusetts .....	117	1,218	63	551	44	(D)	10	(D)
Michigan .....	739	30,927	594	22,228	104	7,691	53	1,008
Minnesota .....	83	660	66	576	1	(D)	18	(D)
Mississippi .....	208	3,568	196	718	65	1,950	12	900
Missouri .....	119	2,366	119	390	38	1,976	-	-
Montana .....	290	1,740	145	290	-	-	145	1,450
Nebraska .....	54	4,189	-	-	54	4,189	-	-
Nevada .....	55	832	53	(D)	3	(D)	3	(D)
New Hampshire .....	46	196	30	151	15	39	3	6
New Jersey .....	260	15,935	181	9,567	60	5,557	25	811
New Mexico .....	654	30,308	495	7,834	66	18,477	159	3,997
New York .....	407	8,116	333	5,347	31	881	54	1,888
North Carolina .....	578	8,605	278	3,080	266	3,133	34	2,392
North Dakota .....	7	105	-	-	-	-	7	105
Ohio .....	202	3,830	152	2,422	56	1,227	12	181
Oklahoma .....	217	11,239	192	654	21	9,163	45	1,422
Oregon .....	1,602	81,109	1,049	12,174	464	58,781	172	10,154
Pennsylvania .....	770	6,761	621	5,462	140	1,060	31	239
Rhode Island .....	31	206	27	168	8	(D)	2	(D)
South Carolina .....	379	8,148	189	4,379	83	3,013	109	756
South Dakota .....	18	1,506	7	21	-	-	11	1,485
Tennessee .....	247	3,756	218	2,467	28	966	21	323
Texas .....	2,623	173,272	1,240	24,988	1,296	133,792	380	14,492
Utah .....	211	3,298	3	120	-	-	208	3,178
Vermont .....	39	247	33	204	7	(D)	2	(D)
Virginia .....	311	3,602	272	2,815	27	547	12	240
Washington .....	3,609	138,308	2,316	95,854	212	10,646	1,287	31,808
West Virginia .....	35	183	23	(D)	17	(D)	-	-
Wisconsin .....	184	1,538	158	1,005	13	26	13	507
Wyoming .....	36	3,260	36	3,260	-	-	-	-
<b>Water Resources Regions</b>								
Region 01 New England .....	358	2,935	249	1,524	102	538	17	873
Region 02 Mid-Atlantic .....	1,516	32,142	1,161	20,914	277	8,174	115	3,054
Region 03 South Atlantic-Gulf .....	5,769	668,693	2,465	147,189	878	84,339	2,786	437,165
Region 04 Great Lakes .....	1,114	39,417	911	28,332	146	9,289	74	1,796
Region 05 Ohio .....	629	5,196	512	3,521	115	1,578	29	97
Region 06 Tennessee .....	246	4,860	201	2,578	46	1,979	19	303
Region 07 Upper Mississippi .....	314	2,693	227	1,755	45	(D)	44	(D)
Region 08 Lower Mississippi .....	406	7,997	332	6,825	22	66	96	1,106
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-
Region 10 Missouri .....	260	26,876	154	6,426	110	7,389	54	13,061
Region 11 Arkansas-White-Red .....	979	32,019	717	3,175	173	23,582	168	5,262
Region 12 Texas-Gulf .....	2,512	155,805	1,236	24,456	1,253	120,634	318	10,715
Region 13 Rio Grande .....	319	38,728	141	6,219	84	28,515	158	3,994
Region 14 Upper Colorado .....	438	3,156	240	670	22	78	214	2,408
Region 15 Lower Colorado .....	393	54,371	183	14,620	26	28,370	193	11,381
Region 16 Great Basin .....	322	3,437	114	502	3	(D)	209	(D)
Region 17 Pacific Northwest .....	5,867	242,849	3,560	112,225	697	73,503	1,899	57,121
Region 18 California .....	21,256	2,340,030	12,784	1,250,143	648	242,235	9,344	847,652
Region 19 Alaska .....	7	22	4	19	3	3	-	-
Region 20 Hawaii .....	663	94,908	525	83,766	44	(D)	134	(D)



Table 7. Land Irrigated with Gravity Irrigation by Field Water Delivery System: 2008 and 2003

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Table with 15 columns: Geographic area, Farms, Acres irrigated, Farms, Acres irrigated, Above-ground pipe (except poly tubing), Poly tubing (or other single-year use, lay-flat tubing), Lined (Farms, Acres irrigated), Unlined (Farms, Acres irrigated), and Underground pipe (Farms, Acres irrigated). Rows include United States, 2008 and 2003, 2008 DATA by state, Water Resources Regions, and Region 01-20.

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**Table 7. Land Irrigated with Gravity Irrigation by Field Water Delivery System: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Controlled flooding (between borders or within rows)											
	Farms	Acres irrigated	Above-ground pipe (except poly tubing)		Poly tubing (or other single-year use, lay-flat tubing)		Open surface ditches				Underground pipe	
			Farms	Acres irrigated	Farms	Acres irrigated	Lined		Unlined		Farms	Acres irrigated
United States .....	37,893	8,697,854	3,439	443,737	2,588	520,887	6,176	1,481,482	22,840	4,657,921	6,450	1,593,827
2003 ..	42,343	8,842,580	4,283	1,005,041	2,260	502,197	7,412	1,097,577	23,252	4,391,107	8,890	1,846,658
<b>2008 DATA</b>												
Alabama .....	5	40	-	-	5	(D)	-	-	5	(D)	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	1,525	437,062	113	1,340	97	3,016	1,013	375,376	316	46,398	30	10,932
Arkansas .....	2,404	1,606,139	122	58,706	453	227,357	522	340,881	935	626,611	531	352,584
California .....	7,298	2,225,709	613	156,781	256	67,127	941	359,032	2,821	1,082,046	3,401	560,723
Colorado .....	3,572	495,348	371	43,022	-	-	567	38,633	3,080	411,508	38	2,185
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	55	336,969	-	-	6	480	-	-	49	336,489	-	-
Georgia .....	61	5,902	6	3,000	55	2,902	-	-	-	-	-	-
Hawaii .....	99	595	-	-	32	284	12	24	44	252	23	35
Idaho .....	2,496	184,383	8	7,120	282	5,917	298	19,615	2,183	151,431	11	300
Illinois .....	4	2,950	-	-	4	(D)	-	-	-	-	2	(D)
Indiana .....	1	(D)	-	-	-	-	-	-	1	(D)	-	-
Iowa .....	9	210	4	190	-	-	-	-	5	20	-	-
Kansas .....	193	13,041	114	5,565	-	-	-	-	4	1,340	75	6,136
Kentucky .....	24	746	2	(D)	15	(D)	7	140	7	420	-	-
Louisiana .....	851	408,498	58	878	40	8,724	11	9,125	69	31,931	718	357,840
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	22	22	22	22	-	-	-	-	-	-	-	-
Massachusetts .....	45	288	-	-	-	-	-	-	45	288	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	23	15,193	1	(D)	-	-	10	1,000	10	13,203	2	(D)
Mississippi .....	390	257,666	32	(D)	61	29,204	2	(D)	184	134,201	130	71,125
Missouri .....	206	127,429	2	(D)	162	100,447	-	-	46	(D)	-	-
Montana .....	4,289	656,793	576	44,154	82	13,527	182	28,506	3,741	562,207	112	8,399
Nebraska .....	134	39,180	55	3,200	1	(D)	25	24,875	51	8,505	2	(D)
Nevada .....	899	235,151	44	11,777	30	8,520	275	25,962	589	164,486	59	24,406
New Hampshire .....	3	30	3	30	-	-	-	-	-	-	-	-
New Jersey .....	10	696	-	-	-	-	-	-	10	696	-	-
New Mexico .....	4,199	255,915	7	3,160	14	7,555	1,207	103,450	2,965	100,995	217	40,755
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	16	480	-	-	-	-	-	-	-	-	16	480
North Dakota .....	102	22,301	40	5,980	1	(D)	2	(D)	67	15,913	-	-
Ohio .....	9	36	-	-	-	-	-	-	-	-	9	36
Oklahoma .....	64	4,563	7	2,730	53	1,033	2	(D)	-	-	2	(D)
Oregon .....	1,861	268,883	97	3,218	9	8,152	203	19,609	1,636	232,015	328	5,889
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	2	(D)	-	-	2	(D)	-	-	-	-	-	-
South Dakota .....	272	34,871	82	8,381	53	1,360	36	1,120	144	22,929	33	1,081
Tennessee .....	6	(D)	2	(D)	2	(D)	-	-	2	(D)	-	-
Texas .....	1,536	339,856	370	12,224	360	18,866	233	45,863	429	124,352	255	138,551
Utah .....	3,006	267,804	248	13,192	150	1,368	501	50,786	1,993	194,602	429	7,856
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Washington .....	384	22,104	4	4,130	247	2,982	11	3,931	131	11,061	-	-
West Virginia .....	2	(D)	-	-	-	-	-	-	-	-	2	(D)
Wisconsin .....	57	6,144	9	1,090	-	-	6	942	34	3,592	8	520
Wyoming .....	1,759	423,340	427	31,173	116	6,050	110	31,054	1,244	353,523	17	1,540
<b>Water Resources Regions</b>												
Region 01 New England .....	48	318	3	30	-	-	-	-	45	288	-	-
Region 02 Mid-Atlantic .....	34	822	22	(D)	-	-	-	-	10	696	2	(D)
Region 03 South Atlantic-Gulf .....	144	344,971	6	3,000	73	(D)	-	-	49	336,489	16	(D)
Region 04 Great Lakes .....	18	1,126	9	1,090	-	-	-	-	-	-	9	36
Region 05 Ohio .....	24	746	2	(D)	15	92	7	140	7	(D)	-	-
Region 06 Tennessee .....	9	80	2	(D)	5	(D)	-	-	7	35	-	-
Region 07 Upper Mississippi .....	78	14,528	1	(D)	13	(D)	16	1,942	40	8,066	10	920
Region 08 Lower Mississippi .....	3,344	2,130,884	206	76,620	567	283,033	436	326,299	1,068	722,295	1,265	722,637
Region 09 Souris-Red-Rainy .....	9	11,153	-	-	-	-	-	-	7	(D)	2	(D)
Region 10 Missouri .....	6,631	1,063,940	1,319	119,926	224	20,667	716	87,042	5,069	820,285	208	16,020
Region 11 Arkansas-White-Red .....	1,591	354,906	162	16,528	185	82,601	271	47,873	1,048	146,656	147	61,248
Region 12 Texas-Gulf .....	1,119	342,618	312	7,294	361	23,559	147	31,888	153	123,842	252	156,035
Region 13 Rio Grande .....	4,334	299,303	77	(D)	7	(D)	1,248	109,149	3,070	159,361	158	22,031
Region 14 Upper Colorado .....	1,933	393,000	17	7,930	173	4,774	27	24,412	1,697	353,699	38	2,185
Region 15 Lower Colorado .....	1,676	465,735	120	3,110	97	3,016	1,010	379,959	407	67,478	92	12,172
Region 16 Great Basin .....	3,676	470,488	287	24,599	42	8,784	773	68,250	2,494	336,899	486	31,956
Region 17 Pacific Northwest .....	5,483	547,137	278	18,663	535	11,651	572	50,445	4,463	460,163	327	6,215
Region 18 California .....	7,643	2,255,504	616	157,321	259	72,527	941	354,059	3,162	1,110,594	3,415	561,003
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	99	595	-	-	32	284	12	24	44	252	23	35

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**Table 7. Land Irrigated with Gravity Irrigation by Field Water Delivery System: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Uncontrolled flooding											
	Farms	Acres irrigated	Above-ground pipe (except poly tubing)		Poly tubing (or other single-year use, lay-flat tubing)		Open surface ditches				Underground pipe	
			Farms	Acres irrigated	Farms	Acres irrigated	Lined		Unlined		Farms	Acres irrigated
							Farms	Acres irrigated	Farms	Acres irrigated		
United States .....	11,926	1,901,738	1,134	72,658	69	8,791	1,112	65,447	9,884	1,722,061	218	32,781
2003 ..	15,448	2,295,505	1,618	89,856	462	19,973	517	101,079	12,261	2,046,294	1,081	38,303
<b>2008 DATA</b>												
Alabama .....	-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	234	7,137	16	880	2	(D)	125	(D)	95	3,748	12	1,440
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	1,433	152,114	1	(D)	-	-	5	(D)	1,423	142,331	4	4,800
Colorado .....	1,965	373,552	291	22,860	18	3,888	100	16,200	1,756	326,064	11	4,540
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	222	13,962	1	(D)	6	600	209	(D)	6	12,710	-	-
Georgia .....	32	6,292	6	390	-	-	-	-	-	-	26	5,902
Hawaii .....	5	(D)	2	(D)	2	(D)	-	-	-	-	1	(D)
Idaho .....	1,300	155,400	299	5,188	-	-	379	14,018	634	136,194	-	-
Illinois .....	13	91	13	91	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Iowa .....	5	175	-	-	-	-	-	-	5	175	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	16	428	-	-	-	-	-	-	16	428	-	-
Louisiana .....	10	3,180	-	-	-	-	4	400	-	-	10	2,780
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	1	(D)	-	-	1	(D)	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....	3	1,789	-	-	-	-	-	-	1	(D)	2	(D)
Missouri .....	4	604	-	-	-	-	-	-	4	604	-	-
Montana .....	1,362	253,846	20	1,832	4	268	60	17,202	1,294	234,544	-	-
Nebraska .....	261	25,429	26	442	-	-	-	-	235	24,987	-	-
Nevada .....	374	190,166	4	(D)	-	-	2	(D)	368	182,366	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	1	(D)	1	(D)	-	-	-	-	-	-	-	-
New Mexico .....	543	47,923	-	-	1	(D)	92	7,006	424	35,157	26	(D)
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	16	160	16	160	-	-	-	-	-	-	-	-
North Dakota .....	7	77	-	-	-	-	-	-	7	77	-	-
Ohio .....	4	170	2	(D)	4	(D)	-	-	-	-	-	-
Oklahoma .....	23	2,217	3	(D)	-	-	17	867	3	(D)	-	-
Oregon .....	1,094	238,858	219	1,871	14	28	1	(D)	939	235,875	17	(D)
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....	90	8,635	39	2,374	3	(D)	1	(D)	61	5,361	3	510
Tennessee .....	9	(D)	2	(D)	1	(D)	-	-	4	42	3	(D)
Texas .....	294	10,496	15	3,800	-	-	-	-	279	6,696	-	-
Utah .....	1,418	117,448	25	4,925	-	-	43	1,035	1,300	106,791	103	4,697
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Washington .....	259	10,096	-	-	-	-	-	-	259	10,096	-	-
West Virginia .....	5	25	5	25	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	923	280,610	128	18,722	13	2,600	74	2,573	771	256,715	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	1	(D)	-	-	1	(D)	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	1	(D)	1	(D)	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....	270	20,414	23	575	6	600	209	627	6	12,710	26	5,902
Region 04 Great Lakes .....	2	(D)	-	-	2	(D)	-	-	-	-	-	-
Region 05 Ohio .....	23	563	7	(D)	2	(D)	-	-	16	(D)	-	-
Region 06 Tennessee .....	7	114	1	(D)	-	-	-	-	4	(D)	3	69
Region 07 Upper Mississippi .....	13	91	13	91	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi .....	15	5,064	1	(D)	1	(D)	4	(D)	1	(D)	12	4,069
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	2,360	479,780	206	17,070	38	7,096	210	27,425	2,017	427,679	3	510
Region 11 Arkansas-White-Red .....	325	36,243	7	950	-	-	19	1,667	263	26,406	36	7,220
Region 12 Texas-Gulf .....	298	13,676	15	3,800	-	-	-	-	283	9,876	-	-
Region 13 Rio Grande .....	439	101,010	4	(D)	1	(D)	91	8,706	342	87,624	1	(D)
Region 14 Upper Colorado .....	2,205	359,736	290	27,360	-	-	24	6,100	1,999	324,954	94	1,322
Region 15 Lower Colorado .....	342	13,477	16	880	2	(D)	125	(D)	203	10,088	12	1,440
Region 16 Great Basin .....	1,391	278,481	29	12,525	-	-	122	6,625	1,275	255,956	9	3,375
Region 17 Pacific Northwest .....	2,782	436,756	516	6,819	14	28	302	(D)	2,019	420,697	17	(D)
Region 18 California .....	1,467	155,624	3	(D)	-	-	6	(D)	1,456	145,101	4	4,800
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	5	(D)	2	(D)	2	(D)	-	-	-	-	1	(D)

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**Table 7. Land Irrigated with Gravity Irrigation by Field Water Delivery System: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Other gravity											
	Farms	Acres irrigated	Above-ground pipe (except poly tubing)		Poly tubing (or other single-year use, lay-flat tubing)		Open surface ditches				Underground pipe	
			Farms	Acres irrigated	Farms	Acres irrigated	Lined		Unlined		Farms	Acres irrigated
							Farms	Acres irrigated	Farms	Acres irrigated		
United States .....	6,874	488,030	617	71,210	1,367	33,316	597	24,018	1,296	209,652	3,711	149,834
2003 ..	3,600	255,592	395	29,577	1,349	(D)	57	(D)	942	141,309	968	28,546
<b>2008 DATA</b>												
Alabama .....	14	544	-	-	4	16	-	-	6	520	4	8
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	112	5,568	-	-	-	-	112	(D)	2	(D)	-	-
Arkansas .....	87	37,261	-	-	23	12,916	6	600	17	9,975	47	13,770
California .....	2,625	90,550	19	5,909	546	6,795	4	3,600	63	16,402	2,147	57,844
Colorado .....	323	18,713	107	1,474	-	-	-	-	226	17,239	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	442	27,581	-	-	209	2,090	-	-	20	20,621	213	4,870
Georgia .....	188	22,934	33	11,070	6	480	52	1,248	-	-	97	10,136
Hawaii .....	17	(D)	-	-	14	104	2	(D)	-	-	1	(D)
Idaho .....	317	53,974	91	12,212	13	(D)	4	2,800	195	(D)	18	7,200
Illinois .....	-	-	-	-	-	-	-	-	-	-	-	-
Indiana .....	7	(D)	-	-	-	-	-	-	-	-	7	(D)
Iowa .....	10	285	5	280	5	5	-	-	-	-	-	-
Kansas .....	20	16,500	5	9,000	-	-	15	7,500	-	-	-	-
Kentucky .....	13	44	-	-	13	44	-	-	-	-	-	-
Louisiana .....	5	7,650	3	(D)	-	-	-	-	2	(D)	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	6	(D)	-	-	-	-	-	-	-	-	6	(D)
Michigan .....	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	14	4,280	13	(D)	-	-	-	-	-	-	1	(D)
Mississippi .....	6	3,397	3	1,862	3	(D)	-	-	-	-	2	(D)
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	98	11,765	-	-	-	-	-	-	85	8,740	13	3,025
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	25	12,576	2	(D)	-	-	-	-	8	9,972	15	(D)
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	7	(D)	5	450	1	(D)	1	(D)	-	-	1	(D)
New Mexico .....	744	31,297	26	3,120	-	-	397	6,780	220	11,144	101	10,253
New York .....	11	706	7	26	2	(D)	-	-	2	(D)	-	-
North Carolina .....	8	120	8	120	-	-	-	-	-	-	-	-
North Dakota .....	3	3,800	-	-	-	-	-	-	-	-	3	3,800
Ohio .....	8	248	6	52	8	196	-	-	-	-	-	-
Oklahoma .....	48	6,130	2	(D)	44	5,520	-	-	-	-	2	(D)
Oregon .....	379	26,459	-	-	-	-	-	-	111	24,460	268	1,999
Pennsylvania .....	26	116	2	(D)	22	66	-	-	-	-	2	(D)
Rhode Island .....	4	4	4	4	-	-	-	-	-	-	-	-
South Carolina .....	3	(D)	-	-	-	-	2	(D)	-	-	1	(D)
South Dakota .....	34	3,735	18	(D)	-	-	1	(D)	15	1,908	-	-
Tennessee .....	21	281	10	42	9	(D)	1	(D)	-	-	1	(D)
Texas .....	279	558	-	-	-	-	-	-	-	-	279	558
Utah .....	431	52,455	194	10,083	92	2,146	-	-	207	29,949	86	10,277
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	5	660	5	660	-	-	-	-	-	-	-	-
Washington .....	356	5,714	-	-	352	(D)	-	-	2	(D)	354	3,948
West Virginia .....	2	(D)	-	-	1	(D)	-	-	-	-	1	(D)
Wisconsin .....	17	982	4	800	-	-	-	-	-	-	13	182
Wyoming .....	159	32,591	45	6,094	-	-	-	-	115	16,587	28	9,910
<b>Water Resources Regions</b>												
Region 01 New England .....	10	(D)	4	4	-	-	-	-	-	-	6	(D)
Region 02 Mid-Atlantic .....	48	(D)	16	1,086	26	388	1	(D)	2	(D)	4	72
Region 03 South Atlantic-Gulf .....	658	53,859	44	11,250	219	2,586	54	1,448	26	21,141	315	17,434
Region 04 Great Lakes .....	10	(D)	6	810	4	(D)	-	-	-	-	2	(D)
Region 05 Ohio .....	20	3,259	4	42	17	70	-	-	-	-	3	3,147
Region 06 Tennessee .....	18	108	8	24	9	(D)	-	-	-	-	1	(D)
Region 07 Upper Mississippi .....	35	2,762	15	2,130	5	5	-	-	-	-	15	627
Region 08 Lower Mississippi .....	66	37,245	8	4,730	9	7,214	7	755	19	14,775	31	9,771
Region 09 Souris-Red-Rainy .....	3	3,010	-	-	-	-	-	-	-	-	3	3,010
Region 10 Missouri .....	422	42,802	66	7,996	-	-	1	(D)	356	26,732	28	(D)
Region 11 Arkansas-White-Red .....	175	40,666	17	9,690	61	12,436	15	7,500	72	6,650	20	4,390
Region 12 Texas-Gulf .....	281	592	-	-	-	-	-	-	2	(D)	279	(D)
Region 13 Rio Grande .....	367	31,387	29	4,350	-	-	69	2,844	168	13,940	101	10,253
Region 14 Upper Colorado .....	677	39,000	94	94	-	-	328	3,936	171	21,122	84	13,848
Region 15 Lower Colorado .....	135	6,948	23	1,380	-	-	112	(D)	2	(D)	-	-
Region 16 Great Basin .....	334	59,651	234	20,605	96	2,946	-	-	107	27,061	45	9,039
Region 17 Pacific Northwest .....	973	71,445	30	1,110	361	593	4	2,800	308	56,595	626	10,347
Region 18 California .....	2,625	90,550	19	5,909	546	6,795	4	3,600	63	16,402	2,147	57,844
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	17	(D)	-	-	14	104	2	(D)	-	-	1	(D)

**Table 8. Estimated Quantity of Water Applied Using Only One Method of Distribution: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Water applied by all methods			Only sprinkler systems			Only gravity flow systems		
	Acres irrigated	Acre-feet applied	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre
United States ..... 2008 ..	54,929,915	91,235,036	1.7	78,945	20,226,970	1.2	59,271	13,456,627	2.2
..... 2003 ..	52,492,687	86,757,665	1.7	72,670	18,288,542	1.3	73,446	15,743,675	2.0
<b>2008 DATA</b>									
Alabama .....	75,023	42,512	0.6	335	65,617	0.6	86	2,334	0.9
Alaska .....	1,589	327	0.2	15	1,367	0.2	1	(D)	(D)
Arizona .....	861,496	4,622,309	5.4	556	62,810	3.4	1,946	578,548	5.6
Arkansas .....	4,493,435	8,631,781	1.9	137	101,229	1.9	2,860	2,736,611	2.0
California .....	7,329,245	22,599,659	3.1	11,476	582,633	2.5	10,472	2,472,035	3.3
Colorado .....	2,865,840	4,541,276	1.6	2,465	974,293	1.6	8,212	1,177,311	1.5
Connecticut .....	2,337	1,536	0.7	58	1,205	0.4	-	-	-
Delaware .....	104,620	74,379	0.7	261	98,017	0.7	-	-	-
Florida .....	1,222,797	1,701,120	1.4	1,287	156,861	1.0	571	403,311	1.4
Georgia .....	1,007,763	876,884	0.9	2,189	785,301	0.8	109	3,163	0.5
Hawaii .....	99,577	453,547	4.6	192	1,196	1.5	194	1,107	1.0
Idaho .....	3,319,827	6,228,403	1.9	5,259	1,825,812	1.8	5,529	371,403	2.1
Illinois .....	457,078	231,390	0.5	963	456,785	0.5	32	3,602	0.6
Indiana .....	404,399	198,880	0.5	975	386,651	0.5	-	-	-
Iowa .....	162,838	78,939	0.5	441	147,219	0.5	20	1,355	1.7
Kansas .....	2,570,003	3,146,607	1.2	2,886	1,903,395	1.2	580	58,294	1.1
Kentucky .....	32,380	15,698	0.5	526	29,102	0.5	94	2,155	0.4
Louisiana .....	932,712	972,164	1.0	231	44,854	0.4	1,236	663,556	1.1
Maine .....	18,151	6,946	0.4	135	26,823	0.3	-	-	-
Maryland .....	85,552	55,259	0.6	393	77,024	0.6	22	132	0.6
Massachusetts .....	17,421	18,894	1.1	509	14,183	1.1	7	98	0.1
Michigan .....	531,927	298,440	0.6	1,327	456,206	0.6	49	1,090	0.3
Minnesota .....	504,330	333,669	0.7	1,414	483,754	0.6	37	17,077	1.6
Mississippi .....	1,451,652	1,402,099	1.0	112	54,344	0.7	540	581,811	1.1
Missouri .....	1,232,354	996,875	0.8	896	269,241	0.6	495	428,700	0.9
Montana .....	1,947,159	2,660,677	1.4	2,149	420,631	1.2	4,296	708,973	1.4
Nebraska .....	8,365,545	6,699,545	0.8	8,305	3,426,198	0.8	794	286,736	1.4
Nevada .....	685,261	1,436,932	2.1	376	151,883	2.5	1,103	294,530	1.8
New Hampshire .....	720	193	0.3	29	328	0.3	8	24	0.2
New Jersey .....	59,412	45,305	0.8	315	24,088	0.7	21	1,348	0.9
New Mexico .....	835,639	1,896,349	2.3	1,569	297,791	2.0	5,632	293,717	2.5
New York .....	20,158	14,800	0.7	146	8,193	0.8	4	32	(D)
North Carolina .....	148,999	83,847	0.6	1,343	133,562	0.5	-	-	-
North Dakota .....	248,070	224,462	0.9	453	196,322	0.7	89	30,196	1.4
Ohio .....	18,548	9,398	0.5	139	12,167	0.5	23	326	0.6
Oklahoma .....	461,235	524,638	1.1	958	351,142	1.1	132	33,955	1.3
Oregon .....	1,758,602	3,276,679	1.9	6,778	802,905	1.6	1,928	370,020	1.9
Pennsylvania .....	17,359	13,000	0.7	261	8,314	0.8	51	209	0.3
Rhode Island .....	681	674	1.0	26	349	1.5	4	4	4.4
South Carolina .....	104,091	86,236	0.8	323	83,536	0.7	4	380	0.4
South Dakota .....	360,071	271,274	0.8	710	259,867	0.7	327	45,295	1.0
Tennessee .....	72,862	42,271	0.6	268	55,249	0.6	46	2,130	0.8
Texas .....	5,356,876	6,819,783	1.3	5,729	3,081,530	1.2	3,113	619,929	1.9
Utah .....	1,068,929	2,430,148	2.3	4,306	293,059	2.2	4,311	354,201	2.0
Vermont .....	488	235	0.5	22	221	0.5	5	15	0.1
Virginia .....	44,818	24,796	0.6	320	38,188	0.5	16	288	0.5
Washington .....	1,675,898	3,781,371	2.3	7,426	1,060,337	2.1	1,228	98,429	2.5
West Virginia .....	906	975	1.1	43	465	0.2	7	(D)	5.9
Wisconsin .....	396,123	322,377	0.8	975	390,508	0.8	34	728	3.2
Wyoming .....	1,497,119	3,039,481	2.0	938	124,215	1.5	3,003	811,317	2.1
<b>Water Resources Regions</b>									
Region 01 New England .....	39,468	28,287	0.7	764	42,998	0.5	19	126	0.2
Region 02 Mid-Atlantic .....	309,972	211,328	0.7	1,480	241,301	0.6	122	2,114	1.0
Region 03 South Atlantic-Gulf .....	2,554,462	2,789,496	1.1	5,547	1,218,523	0.8	771	410,264	1.4
Region 04 Great Lakes .....	721,586	414,509	0.6	1,908	629,873	0.6	89	1,474	0.4
Region 05 Ohio .....	304,963	146,211	0.5	1,273	284,492	0.5	113	1,842	0.4
Region 06 Tennessee .....	41,141	25,616	0.6	230	33,880	0.6	40	(D)	(D)
Region 07 Upper Mississippi .....	1,339,287	830,916	0.6	3,349	1,304,594	0.6	120	19,555	0.7
Region 08 Lower Mississippi .....	7,346,743	10,786,749	1.5	845	363,480	1.0	4,516	3,989,375	1.6
Region 09 Souris-Red-Rainy .....	158,617	123,225	0.8	388	151,074	0.6	10	13,463	1.9
Region 10 Missouri .....	13,825,255	14,386,086	1.0	14,018	5,446,506	0.9	8,987	1,819,039	1.6
Region 11 Arkansas-White-Red .....	5,412,670	7,469,640	1.4	4,657	3,427,166	1.3	3,430	805,685	1.5
Region 12 Texas-Gulf .....	3,499,153	4,182,307	1.2	4,558	1,759,264	1.0	2,390	487,563	1.9
Region 13 Rio Grande .....	1,079,145	2,492,101	2.3	1,349	270,033	2.3	5,471	489,062	2.2
Region 14 Upper Colorado .....	1,359,888	2,460,845	1.8	2,915	213,232	2.0	6,070	808,674	1.6
Region 15 Lower Colorado .....	936,248	4,905,155	5.2	559	71,335	3.3	2,336	630,079	5.5
Region 16 Great Basin .....	1,599,757	3,560,900	2.2	3,502	419,837	2.3	4,346	558,344	2.1
Region 17 Pacific Northwest .....	6,855,656	13,332,398	1.9	19,807	3,707,369	1.9	9,336	961,667	2.0
Region 18 California .....	7,444,738	22,635,393	3.0	11,589	639,450	2.5	10,910	2,456,931	3.2
Region 19 Alaska .....	1,589	327	0.2	15	1,367	0.2	1	(D)	(D)
Region 20 Hawaii .....	99,577	453,547	4.6	192	1,196	1.5	194	1,107	1.0

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**Table 8. Estimated Quantity of Water Applied Using Only One Method of Distribution: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Only drip, trickle, or low-flow micro sprinkler systems			Only subirrigation		
	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre
United States .....2008 ..	28,815	2,099,436	2.2	507	95,103	0.7
.....2003 ..	29,728	1,708,752	1.8	47	67,435	1.2
<b>2008 DATA</b>						
Alabama .....	218	2,209	0.7	4	4	0.6
Alaska .....	6	12	0.1	-	-	-
Arizona .....	311	26,727	3.8	-	-	-
Arkansas .....	180	2,100	2.0	-	-	-
California .....	13,954	1,308,221	2.6	80	58,742	0.7
Colorado .....	13	14,000	1.2	-	-	-
Connecticut .....	71	427	0.5	-	-	-
Delaware .....	22	175	0.9	-	-	-
Florida .....	2,974	431,097	1.5	14	34,010	0.8
Georgia .....	454	41,398	1.1	52	520	0.8
Hawaii .....	548	9,577	2.3	-	-	-
Idaho .....	18	11,250	1.6	273	819	0.2
Illinois .....	68	811	0.1	-	-	-
Indiana .....	55	719	0.4	-	-	-
Iowa .....	28	149	0.1	-	-	-
Kansas .....	117	3,072	0.6	-	-	-
Kentucky .....	179	1,075	0.6	-	-	-
Louisiana .....	54	54	0.5	-	-	-
Maine .....	56	273	0.1	-	-	-
Maryland .....	92	1,245	0.5	-	-	-
Massachusetts .....	58	387	0.6	-	-	-
Michigan .....	555	12,809	0.5	-	-	-
Minnesota .....	74	473	0.4	-	-	-
Mississippi .....	208	3,568	0.7	-	-	-
Missouri .....	76	2,318	0.1	-	-	-
Montana .....	290	1,740	1.1	-	-	-
Nebraska .....	-	-	-	-	-	-
Nevada .....	49	49	3.1	-	-	-
New Hampshire .....	37	116	0.4	-	-	-
New Jersey .....	128	6,104	1.0	-	-	-
New Mexico .....	438	10,863	2.8	-	-	-
New York .....	255	5,611	0.5	-	-	-
North Carolina .....	343	4,503	0.8	-	-	-
North Dakota .....	7	105	1.0	-	-	-
Ohio .....	150	1,829	0.6	-	-	-
Oklahoma .....	162	8,550	1.1	-	-	-
Oregon .....	834	57,724	1.9	-	-	-
Pennsylvania .....	620	5,155	0.8	-	-	-
Rhode Island .....	18	151	0.6	-	-	-
South Carolina .....	139	5,015	1.2	-	-	-
South Dakota .....	5	5	1.5	-	-	-
Tennessee .....	192	2,663	0.4	-	-	-
Texas .....	1,730	37,777	1.5	-	-	-
Utah .....	140	1,138	1.8	84	1,008	2.3
Vermont .....	33	213	0.4	-	-	-
Virginia .....	243	2,640	0.4	-	-	-
Washington .....	2,481	69,595	1.9	-	-	-
West Virginia .....	26	156	0.8	-	-	-
Wisconsin .....	77	398	0.7	-	-	-
Wyoming .....	29	3,190	2.2	-	-	-
<b>Water Resources Regions</b>						
Region 01 New England .....	250	1,394	0.4	-	-	-
Region 02 Mid-Atlantic .....	1,049	15,721	0.8	-	-	-
Region 03 South Atlantic-Gulf .....	4,289	486,802	1.4	70	34,534	0.8
Region 04 Great Lakes .....	764	18,007	0.5	-	-	-
Region 05 Ohio .....	497	3,551	0.6	-	-	-
Region 06 Tennessee .....	210	3,276	0.6	-	-	-
Region 07 Upper Mississippi .....	212	1,451	0.4	-	-	-
Region 08 Lower Mississippi .....	202	2,947	1.5	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-
Region 10 Missouri .....	107	14,598	1.2	-	-	-
Region 11 Arkansas-White-Red .....	735	15,138	0.9	-	-	-
Region 12 Texas-Gulf .....	1,712	27,052	1.2	-	-	-
Region 13 Rio Grande .....	128	20,276	2.6	-	-	-
Region 14 Upper Colorado .....	2	(D)	(D)	-	-	-
Region 15 Lower Colorado .....	311	26,727	3.8	-	-	-
Region 16 Great Basin .....	187	(D)	(D)	84	1,008	2.3
Region 17 Pacific Northwest .....	3,652	143,499	1.9	273	819	0.2
Region 18 California .....	13,954	1,308,221	2.6	80	58,742	0.7
Region 19 Alaska .....	6	12	0.1	-	-	-
Region 20 Hawaii .....	548	9,577	2.3	-	-	-

**Table 9. Estimated Quantity of Water Applied Using Only Sprinkler Systems to Distribute Water: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Only center pivot systems <sup>1</sup>											
	All pressures			Only low pressure under 30 psi			Only medium pressure 30 to 59 psi			Only high pressure 60 psi or more		
	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre
United States ..... 2008 ..	28,450	14,541,017	1.1	13,988	7,395,187	1.1	10,831	5,113,524	1.1	1,966	583,140	1.1
..... 2003 ..	26,743	12,743,191	1.2	11,603	(D)	1.2	9,987	5,094,445	1.2	3,618	(D)	(D)
<b>2008 DATA</b>												
Alabama .....	163	43,877	0.6	51	9,123	0.4	85	28,224	0.6	21	3,430	0.7
Alaska .....	4	1,125	0.2	4	1,125	0.2	-	-	0.3	-	-	-
Arizona .....	205	52,765	3.6	173	45,850	3.8	28	4,295	2.8	3	1,020	4.1
Arkansas .....	93	98,399	1.9	25	41,010	1.7	25	44,808	2.1	19	741	3.1
California .....	806	38,963	1.6	-	-	-	806	38,963	1.6	-	-	-
Colorado .....	1,426	888,525	1.5	581	314,619	1.3	771	504,746	1.6	11	19,422	2.9
Connecticut .....	13	81	0.3	-	-	-	13	81	0.3	-	-	-
Delaware .....	195	80,018	0.7	60	15,167	0.9	115	50,644	0.7	15	6,728	0.6
Florida .....	341	84,136	0.9	281	40,734	1.0	51	32,194	0.8	5	4,345	0.8
Georgia .....	1,149	564,476	0.9	226	134,874	0.9	613	298,321	0.8	178	46,905	0.9
Hawaii .....	44	248	1.8	28	130	(D)	16	118	(D)	-	-	-
Idaho .....	299	410,314	1.9	105	168,291	1.7	126	183,915	1.9	58	38,135	3.6
Illinois .....	888	423,738	0.5	349	184,735	0.5	423	179,238	0.6	54	12,175	0.4
Indiana .....	654	298,644	0.5	204	83,504	0.5	327	149,674	0.5	63	30,438	0.4
Iowa .....	404	135,076	0.5	173	56,201	0.6	156	54,456	0.5	55	11,542	0.4
Kansas .....	2,742	1,854,368	1.2	1,800	1,382,802	1.3	816	418,602	1.2	110	16,828	1.1
Kentucky .....	60	16,290	0.5	11	1,955	0.5	38	13,375	0.5	9	160	0.3
Louisiana .....	52	42,128	0.4	15	9,621	0.3	30	25,325	0.4	5	1,582	0.3
Maine .....	38	1,754	0.1	28	(D)	(D)	7	1,295	0.1	3	(D)	(D)
Maryland .....	249	69,049	0.6	109	26,922	0.7	113	29,188	0.6	10	2,858	0.3
Massachusetts .....	145	2,927	1.0	2	(D)	(D)	136	2,552	1.0	7	(D)	(D)
Michigan .....	470	237,379	0.6	127	41,772	0.5	160	103,695	0.6	128	32,665	0.5
Minnesota .....	1,086	399,465	0.6	475	154,594	0.6	365	124,158	0.6	126	25,539	0.6
Mississippi .....	90	42,894	0.7	32	15,315	0.7	42	21,903	0.7	14	4,510	1.0
Missouri .....	559	233,468	0.6	254	117,340	0.6	194	81,087	0.7	93	17,149	0.6
Montana .....	352	128,457	1.3	141	49,026	1.2	136	47,864	1.7	49	17,717	1.0
Nebraska .....	7,607	3,166,699	0.8	3,225	1,103,828	0.8	3,206	1,421,059	0.8	377	107,470	0.9
Nevada .....	146	100,668	2.4	73	54,016	1.9	54	43,742	2.9	14	1,720	1.9
New Hampshire .....	6	9	0.4	6	9	0.4	-	-	-	-	-	-
New Jersey .....	26	4,931	0.6	8	1,396	0.6	10	1,869	0.6	4	1,554	0.7
New Mexico .....	381	187,014	1.7	352	169,600	1.6	25	13,764	1.8	2	(D)	(D)
New York .....	9	1,122	0.5	6	(D)	0.5	-	-	-	2	(D)	(D)
North Carolina .....	71	21,628	0.5	35	14,028	0.5	12	3,800	0.5	20	1,440	0.8
North Dakota .....	396	175,233	0.8	154	66,373	0.7	206	97,838	0.8	27	7,127	0.7
Ohio .....	32	9,427	0.5	13	4,124	0.8	19	5,303	0.3	-	-	-
Oklahoma .....	715	322,114	1.1	433	249,227	1.1	206	60,417	1.0	70	6,870	0.8
Oregon .....	455	309,769	2.0	339	94,291	2.3	96	196,990	1.9	20	18,488	2.0
Pennsylvania .....	5	940	4.4	3	(D)	(D)	2	(D)	(D)	-	-	-
Rhode Island .....	4	8	0.1	-	-	-	4	8	0.1	-	-	-
South Carolina .....	169	56,659	0.7	56	20,007	0.6	73	27,341	0.8	31	4,449	0.3
South Dakota .....	638	230,705	0.7	240	76,420	0.7	227	109,970	0.9	111	18,592	0.4
Tennessee .....	94	47,078	0.6	41	20,583	0.6	38	17,762	0.7	5	3,060	0.5
Texas .....	3,812	2,901,111	1.2	3,170	2,304,494	1.1	530	331,729	1.4	67	30,995	1.3
Utah .....	156	51,560	2.6	93	23,557	3.0	63	28,003	2.3	-	-	-
Vermont .....	4	20	0.1	-	-	-	4	20	0.1	-	-	-
Virginia .....	87	13,947	0.6	17	3,587	0.7	51	6,310	0.5	14	1,365	0.9
Washington .....	387	458,240	2.3	157	213,637	2.2	197	198,768	2.4	27	32,290	2.1
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	409	271,814	0.7	62	28,843	0.6	153	99,110	0.8	139	52,935	0.7
Wyoming .....	314	61,757	1.7	251	51,557	1.6	63	10,200	2.0	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	210	4,799	0.7	36	563	0.2	164	3,956	0.7	10	280	0.8
Region 02 Mid-Atlantic .....	548	166,856	0.7	193	46,063	0.8	289	88,011	0.7	35	12,425	0.5
Region 03 South Atlantic-Gulf .....	1,882	761,643	0.8	649	219,209	0.9	817	381,997	0.8	264	60,696	0.8
Region 04 Great Lakes .....	703	350,049	0.6	182	69,144	0.6	259	161,199	0.6	181	45,591	0.5
Region 05 Ohio .....	537	222,964	0.5	176	76,759	0.5	287	111,703	0.5	36	9,404	0.4
Region 06 Tennessee .....	59	20,920	0.7	12	3,398	(D)	26	11,483	(D)	9	(D)	(D)
Region 07 Upper Mississippi .....	2,405	1,080,181	0.6	861	350,346	0.5	967	398,868	0.6	348	110,396	0.6
Region 08 Lower Mississippi .....	527	338,279	1.0	256	159,903	0.9	204	133,410	1.2	25	8,111	0.6
Region 09 Souris-Red-Rainy .....	350	135,946	0.7	169	56,258	0.6	129	58,241	0.7	36	8,045	0.6
Region 10 Missouri .....	11,415	4,890,534	0.9	5,165	1,993,888	0.9	4,664	2,103,953	0.9	624	162,562	0.8
Region 11 Arkansas-White-Red .....	4,147	3,299,782	1.3	2,705	2,364,543	1.3	1,152	649,369	1.2	223	29,719	1.0
Region 12 Texas-Gulf .....	2,677	1,581,710	1.0	2,325	1,365,254	1.0	303	165,613	1.4	43	25,715	1.4
Region 13 Rio Grande .....	295	225,417	2.1	164	62,997	1.9	116	138,807	2.1	8	15,840	3.2
Region 14 Upper Colorado .....	128	25,120	1.4	97	15,480	1.5	31	9,640	1.4	-	-	-
Region 15 Lower Colorado .....	208	61,290	3.5	173	45,850	3.8	17	11,900	2.6	17	1,940	2.9
Region 16 Great Basin .....	281	163,223	2.3	163	75,953	2.2	111	85,080	2.3	2	(D)	(D)
Region 17 Pacific Northwest .....	1,216	1,165,084	2.1	625	484,650	2.1	470	558,003	2.1	105	88,913	2.7
Region 18 California .....	814	45,847	1.8	5	3,674	2.8	809	42,173	1.7	-	-	-
Region 19 Alaska .....	4	1,125	0.2	4	1,125	0.2	-	-	-	-	-	-
Region 20 Hawaii .....	44	248	1.8	28	130	(D)	16	118	(D)	-	-	-

See footnote(s) at end of table.

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**Table 9. Estimated Quantity of Water Applied Using Only Sprinkler Systems to Distribute Water: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Only linear move tower systems <sup>1</sup>								
	All pressures			Only low pressure under 30 psi			Only medium to high pressure 30 psi or more		
	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre
United States .....	592	59,622	1.0	144	38,103	1.1	430	18,610	0.9
.....2008 ..	724	88,461	1.2	164	37,177	1.2	558	51,116	1.2
.....2003 ..									
<b>2008 DATA</b>									
Alabama .....	12	238	0.3	7	203	0.3	5	35	0.1
Alaska .....	1	(D)	(D)	-	-	-	1	(D)	(D)
Arizona .....	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-
California .....	-	-	-	-	-	-	-	-	-
Colorado .....	94	940	(Z)	94	940	(Z)	-	-	-
Connecticut .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Delaware .....	1	(D)	(D)	1	(D)	(D)	-	-	-
Florida .....	2	(D)	(D)	2	(D)	(D)	-	-	-
Georgia .....	-	-	-	-	-	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-
Idaho .....	2	(D)	(D)	2	(D)	(D)	-	-	-
Illinois .....	-	-	-	-	-	-	-	-	-
Indiana .....	18	2,115	0.6	3	546	0.7	2	(D)	(D)
Iowa .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Kansas .....	-	-	-	-	-	-	-	-	-
Kentucky .....	3	560	0.2	1	(D)	(D)	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-
Maryland .....	4	802	0.7	2	(D)	(D)	2	(D)	(D)
Massachusetts .....	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-
Missouri .....	8	800	0.5	-	-	-	8	800	0.5
Montana .....	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-
New Jersey .....	7	124	0.3	-	-	-	7	124	0.3
New Mexico .....	9	16,880	0.9	9	16,880	0.9	-	-	-
New York .....	-	-	-	-	-	-	-	-	-
North Carolina .....	21	1,860	1.6	-	-	-	21	1,860	1.6
North Dakota .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Ohio .....	-	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	-	-	-	-	-	-	-
Oregon .....	5	2,415	1.2	-	-	-	5	2,415	1.2
Pennsylvania .....	1	(D)	(D)	-	-	-	1	(D)	(D)
Rhode Island .....	-	-	-	-	-	-	-	-	-
South Carolina .....	8	80	0.2	-	-	-	8	80	0.2
South Dakota .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Tennessee .....	16	861	0.7	10	(D)	(D)	6	(D)	(D)
Texas .....	342	8,379	0.9	-	-	-	342	8,379	0.9
Utah .....	6	2,700	0.3	-	-	-	3	300	0.3
Vermont .....	-	-	-	-	-	-	-	-	-
Virginia .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Washington .....	-	-	-	-	-	-	-	-	-
West Virginia .....	1	(D)	(D)	-	-	-	1	(D)	(D)
Wisconsin .....	21	608	0.4	13	104	1.0	8	504	0.3
Wyoming .....	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>									
Region 01 New England .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Region 02 Mid-Atlantic .....	16	2,973	0.5	3	2,196	0.4	13	777	0.5
Region 03 South Atlantic-Gulf .....	43	6,528	0.8	9	(D)	(D)	34	(D)	(D)
Region 04 Great Lakes .....	26	273	0.6	13	104	1.0	-	-	-
Region 05 Ohio .....	13	1,767	0.4	9	(D)	(D)	2	(D)	(D)
Region 06 Tennessee .....	3	(D)	(D)	1	(D)	(D)	2	(D)	(D)
Region 07 Upper Mississippi .....	13	1,180	0.6	3	546	0.7	10	634	0.4
Region 08 Lower Mississippi .....	5	810	0.7	1	(D)	(D)	4	(D)	(D)
Region 09 Souris-Red-Rainy .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Region 10 Missouri .....	10	2,212	0.4	-	-	-	10	2,212	0.4
Region 11 Arkansas-White-Red .....	-	-	-	-	-	-	-	-	-
Region 12 Texas-Gulf .....	350	19,259	0.6	8	10,880	0.3	342	8,379	0.9
Region 13 Rio Grande .....	1	(D)	(D)	1	(D)	(D)	-	-	-
Region 14 Upper Colorado .....	94	940	(Z)	94	940	(Z)	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	6	2,700	0.3	-	-	-	3	300	0.3
Region 17 Pacific Northwest .....	7	(D)	(D)	2	(D)	(D)	5	2,415	1.2
Region 18 California .....	-	-	-	-	-	-	-	-	-
Region 19 Alaska .....	1	(D)	(D)	-	-	-	1	(D)	(D)
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 9. Estimated Quantity of Water Applied Using Only Sprinkler Systems to Distribute Water: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Only solid set and permanent systems <sup>1</sup>								
	All pressures			Only low pressure under 30 psi			Only medium to high pressure 30 psi or more		
	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre
United States .....	13,276	549,546	2.2	2,762	80,268	2.1	10,499	451,220	2.2
2008 ..									
2003 ..	10,573	484,511	2.4	3,343	73,292	1.4	7,227	410,098	2.5
<b>2008 DATA</b>									
Alabama .....	25	497	0.4	12	144	0.5	13	353	0.4
Alaska .....	3	12	0.3	-	-	-	3	12	0.3
Arizona .....	219	659	1.8	219	659	1.8	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-
California .....	4,921	266,034	2.5	757	32,499	2.3	4,160	225,627	2.5
Colorado .....	19	16,720	1.6	19	16,720	1.6	-	-	-
Connecticut .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Delaware .....	8	120	0.7	-	-	-	8	120	0.7
Florida .....	758	26,299	1.5	363	11,803	2.6	395	14,496	0.5
Georgia .....	212	24,384	1.4	-	-	-	212	24,384	1.4
Hawaii .....	37	206	1.3	12	12	1.2	25	194	1.3
Idaho .....	546	3,003	1.9	-	-	-	546	3,003	1.9
Illinois .....	-	-	-	-	-	-	-	-	-
Indiana .....	40	1,851	0.6	-	-	-	38	491	0.4
Iowa .....	5	60	2.0	-	-	-	5	60	2.0
Kansas .....	-	-	-	-	-	-	-	-	-
Kentucky .....	6	24	1.8	-	-	-	6	24	1.8
Louisiana .....	56	1,388	1.0	-	-	-	56	1,388	1.0
Maine .....	3	30	0.5	-	-	-	3	30	0.5
Maryland .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Massachusetts .....	336	9,856	1.2	8	330	0.8	328	9,526	1.2
Michigan .....	138	5,251	0.6	-	-	-	138	5,251	0.6
Minnesota .....	28	700	0.7	-	-	-	28	700	0.7
Mississippi .....	2	(D)	(D)	-	-	-	-	-	-
Missouri .....	37	37	1.0	-	-	-	37	37	1.0
Montana .....	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-
New Hampshire .....	6	36	0.4	-	-	-	6	36	0.4
New Jersey .....	64	3,188	1.2	4	44	2.7	60	3,144	1.2
New Mexico .....	655	983	2.3	327	327	3.0	328	656	1.9
New York .....	38	667	2.3	31	217	3.6	7	450	1.7
North Carolina .....	233	12,210	1.1	47	1,720	0.9	186	10,490	1.1
North Dakota .....	-	-	-	-	-	-	-	-	-
Ohio .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Oklahoma .....	52	4,132	1.5	2	(D)	(D)	50	(D)	(D)
Oregon .....	391	15,536	0.9	-	-	-	389	15,216	0.9
Pennsylvania .....	29	330	1.7	2	(D)	(D)	27	(D)	(D)
Rhode Island .....	6	(D)	(D)	5	10	1.0	1	(D)	(D)
South Carolina .....	46	588	0.7	2	(D)	(D)	44	(D)	(D)
South Dakota .....	-	-	-	-	-	-	-	-	-
Tennessee .....	12	(D)	(D)	-	-	-	12	(D)	(D)
Texas .....	284	3,111	0.8	279	2,511	0.9	5	600	0.2
Utah .....	170	5,916	3.0	-	-	-	170	5,916	3.0
Vermont .....	8	105	0.8	-	-	-	8	105	0.8
Virginia .....	1	(D)	(D)	-	-	-	1	(D)	(D)
Washington .....	3,683	123,817	2.4	673	10,272	2.1	3,005	109,475	2.5
West Virginia .....	-	-	-	-	-	-	-	-	-
Wisconsin .....	193	14,494	3.0	-	-	-	193	14,494	3.0
Wyoming .....	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>									
Region 01 New England .....	356	10,241	1.2	13	340	0.8	343	9,901	1.2
Region 02 Mid-Atlantic .....	144	4,194	1.3	37	341	3.4	107	3,853	1.1
Region 03 South Atlantic-Gulf .....	1,272	65,558	1.3	421	14,047	2.3	851	51,511	1.1
Region 04 Great Lakes .....	151	5,290	0.6	-	-	-	151	5,290	0.6
Region 05 Ohio .....	19	1,850	(D)	-	-	-	17	490	(D)
Region 06 Tennessee .....	14	979	(D)	3	(D)	0.5	11	(D)	(D)
Region 07 Upper Mississippi .....	238	15,446	2.8	-	-	-	238	15,446	2.8
Region 08 Lower Mississippi .....	102	5,859	0.2	-	-	-	100	1,459	1.0
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....	71	20,852	1.6	21	19,140	1.7	50	1,712	0.9
Region 12 Texas-Gulf .....	284	3,111	0.8	279	2,511	0.9	5	600	0.2
Region 13 Rio Grande .....	655	983	2.3	327	(D)	3.0	328	(D)	1.9
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	219	659	1.8	219	659	1.8	-	-	-
Region 16 Great Basin .....	170	5,916	3.0	-	-	-	170	5,916	3.0
Region 17 Pacific Northwest .....	4,618	142,036	2.3	673	10,272	2.1	3,940	127,694	2.3
Region 18 California .....	4,923	266,354	2.5	757	32,499	2.3	4,160	225,627	2.5
Region 19 Alaska .....	3	12	0.3	-	-	-	3	12	0.3
Region 20 Hawaii .....	37	206	1.3	12	12	1.2	25	194	1.3

See footnote(s) at end of table.

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**Table 9. Estimated Quantity of Water Applied Using Only Sprinkler Systems to Distribute Water: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Only hand move systems			Only big gun or traveler systems			Only side roll, wheel move, or other mechanical move systems		
	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre
United States .....	16,069	268,388	1.8	3,683	271,101	0.7	5,563	414,893	1.5
2008 ..	15,728	511,679	1.4	4,089	299,773	1.2	4,517	407,039	1.7
<b>2008 DATA</b>									
Alabama .....	52	922	0.7	51	5,775	0.4	6	1,390	0.7
Alaska .....	6	78	0.3	-	-	-	-	-	-
Arizona .....	110	2,436	1.5	12	1,200	5.0	3	1,560	3.1
Arkansas .....	-	-	-	25	1,500	2.5	-	-	-
California .....	5,131	79,121	2.5	54	19,440	1.1	159	19,979	2.6
Colorado .....	193	2,895	1.0	1	(D)	(D)	401	20,768	1.8
Connecticut .....	34	238	0.5	2	(D)	(D)	-	-	-
Delaware .....	-	-	-	9	906	0.6	-	-	-
Florida .....	-	-	-	139	24,970	0.2	6	3,228	0.2
Georgia .....	155	3,654	2.0	194	10,101	0.7	-	-	-
Hawaii .....	94	406	1.9	-	-	-	-	-	-
Idaho .....	2,155	29,392	2.1	-	-	-	509	47,760	1.9
Illinois .....	13	13	1.5	20	3,895	0.4	2	(D)	(D)
Indiana .....	33	322	0.7	73	5,704	0.3	17	2,862	0.2
Iowa .....	-	-	-	7	274	0.3	-	-	-
Kansas .....	-	-	-	112	3,472	0.9	-	-	-
Kentucky .....	206	1,799	0.4	194	5,699	0.5	42	2,022	0.4
Louisiana .....	106	318	1.0	17	1,020	0.4	-	-	-
Maine .....	11	178	0.5	44	2,861	0.1	-	-	-
Maryland .....	47	169	0.9	41	2,252	0.4	28	492	0.5
Massachusetts .....	7	49	0.1	7	231	0.7	7	(D)	(D)
Michigan .....	120	1,943	0.4	213	21,481	0.3	51	1,254	0.4
Minnesota .....	74	281	1.0	40	1,150	0.5	-	-	-
Mississippi .....	-	-	-	15	1,680	0.9	3	3,770	0.8
Missouri .....	76	76	1.0	138	5,175	0.3	39	4,385	1.4
Montana .....	208	5,974	1.2	144	1,152	(D)	492	35,267	0.7
Nebraska .....	-	-	-	117	8,190	0.8	118	24,915	0.9
Nevada .....	-	-	-	-	-	-	139	11,225	2.4
New Hampshire .....	10	22	0.2	1	(D)	(D)	1	(D)	(D)
New Jersey .....	101	813	0.4	72	3,962	0.5	-	-	-
New Mexico .....	39	2,028	1.2	-	-	-	394	8,624	2.7
New York .....	50	744	1.0	22	1,642	0.3	12	1,184	0.9
North Carolina .....	184	3,588	0.1	482	43,919	0.4	16	560	0.5
North Dakota .....	13	44	1.2	4	420	1.2	7	280	0.6
Ohio .....	48	191	1.1	22	962	0.2	6	378	0.6
Oklahoma .....	93	4,833	0.6	3	900	1.0	2	(D)	(D)
Oregon .....	3,455	55,440	1.3	251	22,255	2.0	543	77,561	1.4
Pennsylvania .....	133	828	0.3	44	2,865	0.3	2	(D)	(D)
Rhode Island .....	14	102	0.3	1	(D)	(D)	-	-	-
South Carolina .....	19	616	0.6	31	3,719	0.7	5	380	0.4
South Dakota .....	26	52	0.7	-	-	-	-	-	-
Tennessee .....	52	372	0.5	72	2,561	0.3	6	614	0.3
Texas .....	558	3,627	1.2	279	2,790	0.5	209	24,352	0.5
Utah .....	1,115	16,604	1.2	-	-	-	1,569	49,268	2.1
Vermont .....	10	96	0.3	-	-	-	-	-	-
Virginia .....	48	1,412	0.6	145	10,058	0.5	5	290	0.3
Washington .....	974	41,814	2.2	450	37,885	1.2	617	56,886	1.7
West Virginia .....	39	155	0.3	3	(D)	(D)	-	-	-
Wisconsin .....	111	1,195	1.7	60	4,607	0.4	-	-	-
Wyoming .....	146	3,548	1.9	72	(D)	0.4	147	12,050	1.9
<b>Water Resources Regions</b>									
Region 01 New England .....	76	589	0.4	55	3,260	0.2	8	741	0.1
Region 02 Mid-Atlantic .....	274	2,328	0.5	258	17,321	0.5	45	1,890	0.7
Region 03 South Atlantic-Gulf .....	427	9,615	1.0	954	89,848	0.4	33	4,718	0.3
Region 04 Great Lakes .....	208	2,416	0.5	306	28,069	0.4	53	1,584	0.5
Region 05 Ohio .....	354	2,456	0.5	217	8,640	0.4	40	2,534	0.3
Region 06 Tennessee .....	56	867	0.8	66	5,100	0.4	15	1,789	0.5
Region 07 Upper Mississippi .....	197	1,384	1.7	102	8,232	0.3	10	2,214	0.2
Region 08 Lower Mississippi .....	123	403	0.9	63	(D)	(D)	13	8,379	1.1
Region 09 Souris-Red-Rainy .....	7	14	1.5	-	-	-	-	-	-
Region 10 Missouri .....	217	3,540	1.5	546	18,107	0.6	549	56,190	1.0
Region 11 Arkansas-White-Red .....	132	6,861	0.8	69	3,422	1.7	66	6,124	0.5
Region 12 Texas-Gulf .....	558	3,627	1.2	279	2,790	0.5	147	21,592	0.7
Region 13 Rio Grande .....	-	-	-	-	-	-	331	6,832	3.1
Region 14 Upper Colorado .....	689	7,748	1.1	1	(D)	(D)	1,510	48,295	2.1
Region 15 Lower Colorado .....	110	2,436	1.5	12	1,200	5.0	3	1,560	3.1
Region 16 Great Basin .....	964	14,928	1.4	-	-	-	867	37,068	1.8
Region 17 Pacific Northwest .....	6,446	129,571	1.8	701	60,140	1.5	1,687	173,274	1.6
Region 18 California .....	5,131	79,121	2.5	54	19,440	1.1	186	40,109	2.1
Region 19 Alaska .....	6	78	0.3	-	-	-	-	-	-
Region 20 Hawaii .....	94	406	1.9	-	-	-	-	-	-

<sup>1</sup> Farms reporting more than one pressure are not included in the "All pressures" columns.

**Table 10. Estimated Quantity of Water Applied Using Only Gravity Flow Systems to Distribute Water: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Total			Only down rows or furrows			Only controlled flooding (between borders or within basins)		
	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre
United States .....	59,271	13,456,627	2.2	19,086	3,449,137	2.0	22,336	4,098,939	2.4
2008 ..									
2003 ..	73,446	15,743,675	2.0	24,813	4,880,321	1.9	30,475	4,767,164	2.3
<b>2008 DATA</b>									
Alabama .....	86	2,334	0.9	71	1,758	1.0	5	40	0.5
Alaska .....	1	(D)	(D)	1	(D)	(D)	-	-	-
Arizona .....	1,946	578,548	5.6	166	100,721	5.1	1,295	249,689	6.4
Arkansas .....	2,860	2,736,611	2.0	834	473,750	2.1	646	491,039	2.2
California .....	10,472	2,472,035	3.3	2,525	445,247	3.2	3,442	837,230	3.5
Colorado .....	8,212	1,177,311	1.5	3,902	348,215	2.0	1,675	263,129	1.4
Connecticut .....	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-
Florida .....	571	403,311	1.4	104	58,192	1.4	29	314,403	1.3
Georgia .....	109	3,163	0.5	57	1,915	0.4	-	-	-
Hawaii .....	194	1,107	1.0	95	131	1.3	70	386	1.0
Idaho .....	5,529	371,403	2.1	2,436	179,332	2.5	1,907	90,815	1.2
Illinois .....	32	3,602	0.6	15	461	1.1	2	(D)	(D)
Indiana .....	-	-	-	-	-	-	-	-	-
Iowa .....	20	1,355	1.7	5	1,155	1.7	5	20	5.6
Kansas .....	580	58,294	1.1	477	46,778	1.2	88	4,016	1.0
Kentucky .....	94	2,155	0.4	50	985	0.3	22	652	0.5
Louisiana .....	1,236	663,556	1.1	406	195,229	0.8	691	340,096	1.5
Maine .....	-	-	-	-	-	-	-	-	-
Maryland .....	22	132	0.6	22	132	0.6	-	-	-
Massachusetts .....	7	98	0.1	-	-	-	7	98	0.1
Michigan .....	49	1,090	0.3	49	1,090	0.3	-	-	-
Minnesota .....	37	17,077	1.6	14	14	0.2	20	14,153	1.5
Mississippi .....	540	581,811	1.1	252	152,926	0.9	87	54,170	1.3
Missouri .....	495	428,700	0.9	346	250,642	0.8	31	33,817	0.8
Montana .....	4,296	708,973	1.4	442	71,359	2.3	2,780	380,055	1.2
Nebraska .....	794	286,736	1.4	769	257,186	1.1	-	-	-
Nevada .....	1,103	294,530	1.8	71	7,750	3.1	692	130,926	2.0
New Hampshire .....	8	24	0.2	8	24	0.2	-	-	-
New Jersey .....	21	1,348	0.9	17	908	0.6	4	440	1.5
New Mexico .....	5,632	293,717	2.5	740	58,975	2.4	3,643	160,482	2.8
New York .....	4	32	(D)	4	32	(Z)	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-	-
North Dakota .....	89	30,196	1.4	17	8,433	1.6	35	5,136	0.9
Ohio .....	23	326	0.6	14	146	0.8	-	-	-
Oklahoma .....	132	33,955	1.3	63	30,175	1.3	44	443	1.9
Oregon .....	1,928	370,020	1.9	563	56,321	2.8	837	118,836	2.1
Pennsylvania .....	51	209	0.3	29	143	0.3	-	-	-
Rhode Island .....	4	4	4.4	-	-	-	-	-	-
South Carolina .....	4	380	0.4	2	(D)	(D)	-	-	-
South Dakota .....	327	45,295	1.0	41	8,031	1.0	181	21,957	1.0
Tennessee .....	46	2,130	0.8	31	1,952	0.8	-	-	-
Texas .....	3,113	619,929	1.9	1,401	309,320	1.6	1,284	213,417	2.6
Utah .....	4,311	354,201	2.0	1,157	50,061	2.4	1,672	120,097	2.2
Vermont .....	5	15	0.1	5	15	0.1	-	-	-
Virginia .....	16	288	0.5	16	288	0.5	-	-	-
Washington .....	1,228	98,429	2.5	706	72,029	2.6	20	15,980	1.1
West Virginia .....	7	(D)	5.9	4	(D)	0.4	2	(D)	(D)
Wisconsin .....	34	728	3.2	13	26	0.5	8	520	3.0
Wyoming .....	3,003	811,317	2.1	1,146	257,064	2.4	1,112	235,943	1.9
<b>Water Resources Regions</b>									
Region 01 New England .....	19	126	0.2	8	24	0.2	7	98	0.1
Region 02 Mid-Atlantic .....	122	2,114	1.0	93	1,502	0.5	6	544	2.5
Region 03 South Atlantic-Gulf .....	771	410,264	1.4	230	62,041	1.4	39	315,523	1.3
Region 04 Great Lakes .....	89	1,474	0.4	80	1,294	0.4	-	-	-
Region 05 Ohio .....	113	1,842	0.4	69	672	0.3	22	(D)	0.5
Region 06 Tennessee .....	40	(D)	(D)	21	(D)	(D)	5	40	0.5
Region 07 Upper Mississippi .....	120	19,555	0.7	55	11,297	0.6	30	5,180	0.6
Region 08 Lower Mississippi .....	4,516	3,989,375	1.6	1,652	991,759	1.4	1,328	856,552	1.8
Region 09 Souris-Red-Rainy .....	10	13,463	1.9	-	-	-	9	(D)	1.8
Region 10 Missouri .....	8,987	1,819,039	1.6	3,116	663,879	1.8	3,713	509,062	1.3
Region 11 Arkansas-White-Red .....	3,430	805,685	1.5	1,642	334,713	1.6	899	108,506	1.6
Region 12 Texas-Gulf .....	2,390	487,563	1.9	1,039	207,723	1.6	943	205,194	2.6
Region 13 Rio Grande .....	5,471	489,062	2.2	1,029	136,148	1.8	3,675	198,205	2.7
Region 14 Upper Colorado .....	6,070	808,674	1.6	2,467	138,233	1.9	1,041	241,280	1.7
Region 15 Lower Colorado .....	2,336	630,079	5.5	433	115,716	5.1	1,297	249,309	6.4
Region 16 Great Basin .....	4,346	558,344	2.1	748	27,143	2.5	2,177	239,556	2.1
Region 17 Pacific Northwest .....	9,336	961,667	2.0	3,629	317,075	2.7	3,349	294,401	1.5
Region 18 California .....	10,910	2,456,931	3.2	2,679	439,727	3.1	3,726	863,298	3.4
Region 19 Alaska .....	1	(D)	(D)	1	(D)	(D)	-	-	-
Region 20 Hawaii .....	194	1,107	1.0	95	131	1.3	70	386	1.0

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**Table 10. Estimated Quantity of Water Applied Using Only Gravity Flow Systems to Distribute Water: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Only uncontrolled flooding (rangeland, pastureland, etc.)			Only other gravity		
	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre
United States .....2008 ..	6,059	901,645	1.8	2,794	193,099	2.6
.....2003 ..	9,188	1,197,437	1.5	1,090	110,249	2.2
<b>2008 DATA</b>						
Alabama .....	-	-	-	10	536	0.5
Alaska .....	-	-	-	-	-	-
Arizona .....	201	4,397	4.3	109	218	3.5
Arkansas .....	-	-	-	-	-	-
California .....	1,378	100,954	4.3	1,059	59,594	3.6
Colorado .....	730	204,570	1.2	99	6,894	1.1
Connecticut .....	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-
Florida .....	213	9,807	2.0	219	17,849	3.2
Georgia .....	-	-	-	52	1,248	(D)
Hawaii .....	2	(D)	(D)	12	24	2.2
Idaho .....	670	28,501	1.0	155	26,170	2.0
Illinois .....	13	91	0.5	-	-	-
Indiana .....	-	-	-	-	-	-
Iowa .....	5	175	1.0	5	5	1.6
Kansas .....	-	-	-	15	7,500	0.5
Kentucky .....	7	(D)	0.5	13	44	0.7
Louisiana .....	6	3,140	1.1	4	6,800	1.6
Maine .....	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-
Minnesota .....	-	-	-	3	2,910	(D)
Mississippi .....	-	-	-	-	-	-
Missouri .....	4	604	0.5	-	-	-
Montana .....	677	105,450	1.5	-	-	-
Nebraska .....	-	-	-	-	-	-
Nevada .....	252	105,076	1.2	12	12,072	2.9
New Hampshire .....	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-
New Mexico .....	394	29,809	1.2	516	8,644	1.5
New York .....	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-
North Dakota .....	7	77	0.1	-	-	-
Ohio .....	-	-	-	-	-	-
Oklahoma .....	23	2,217	1.5	-	-	-
Oregon .....	375	112,718	1.6	18	8,558	1.3
Pennsylvania .....	-	-	-	22	66	0.3
Rhode Island .....	-	-	-	4	4	4.4
South Carolina .....	-	-	-	2	(D)	(D)
South Dakota .....	30	2,885	1.5	29	3,080	1.1
Tennessee .....	4	47	0.9	9	(D)	2.9
Texas .....	14	2,800	0.3	-	-	-
Utah .....	625	46,771	2.1	100	11,065	2.6
Vermont .....	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-
Washington .....	-	-	-	247	1,690	2.2
West Virginia .....	-	-	-	1	(D)	(D)
Wisconsin .....	-	-	-	13	182	4.3
Wyoming .....	429	141,510	2.0	66	17,735	2.6
<b>Water Resources Regions</b>						
Region 01 New England .....	-	-	-	4	4	4.4
Region 02 Mid-Atlantic .....	-	-	-	23	68	0.3
Region 03 South Atlantic-Gulf .....	213	9,807	2.0	283	19,833	3.0
Region 04 Great Lakes .....	-	-	-	-	-	-
Region 05 Ohio .....	7	(D)	(D)	13	44	0.7
Region 06 Tennessee .....	3	32	1.3	9	9	2.9
Region 07 Upper Mississippi .....	13	91	0.5	20	(D)	(D)
Region 08 Lower Mississippi .....	7	3,155	1.1	4	6,800	1.6
Region 09 Souris-Red-Rainy .....	-	-	-	1	(D)	(D)
Region 10 Missouri .....	824	209,849	1.6	92	20,615	2.1
Region 11 Arkansas-White-Red .....	277	15,823	0.8	77	8,430	0.7
Region 12 Texas-Gulf .....	16	5,400	1.3	-	-	-
Region 13 Rio Grande .....	125	29,558	1.5	126	3,778	0.8
Region 14 Upper Colorado .....	1,058	230,954	1.4	452	11,910	2.0
Region 15 Lower Colorado .....	307	7,967	3.1	109	218	3.5
Region 16 Great Basin .....	659	128,815	2.1	90	22,257	2.7
Region 17 Pacific Northwest .....	1,174	168,174	1.5	420	36,418	1.9
Region 18 California .....	1,374	91,974	3.9	1,059	59,594	3.6
Region 19 Alaska .....	-	-	-	-	-	-
Region 20 Hawaii .....	2	(D)	(D)	12	24	2.2

**Table 11. Estimated Quantity of Water Applied by Source or Supplier: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Water applied from all sources			Ground water (from wells)					
	Acres irrigated	Acre-feet applied <sup>1</sup>	Average acre-feet per acre	Total			Only source		
				Farms	Acres irrigated	Acre-feet applied	Farms	Acres irrigated	Average acre-feet per acre
United States ..... 2008 ..	54,929,915	91,235,036	1.7	97,690	36,181,006	48,491,704	76,641	26,585,599	1.2
..... 2003 ..	52,492,687	86,757,665	1.7	100,717	32,316,182	43,453,757	83,460	25,968,975	1.2
<b>2008 DATA</b>									
Alabama .....	75,023	42,512	0.6	290	22,070	12,802	269	16,748	0.5
Alaska .....	1,589	327	0.2	19	1,550	323	19	1,550	0.2
Arizona .....	861,496	4,622,309	5.4	844	327,251	1,306,425	621	136,452	4.0
Arkansas .....	4,493,435	8,631,781	1.9	3,646	3,909,914	6,864,792	2,454	2,491,256	1.8
California .....	7,329,245	22,599,659	3.1	23,998	4,344,670	10,719,609	17,430	1,923,056	2.6
Colorado .....	2,865,840	4,541,276	1.6	2,526	1,251,730	1,795,203	1,472	914,653	1.4
Connecticut .....	2,337	1,536	0.7	60	440	185	37	343	0.4
Delaware .....	104,620	74,379	0.7	276	91,541	63,275	228	69,819	0.7
Florida .....	1,222,797	1,701,120	1.4	4,436	656,773	900,851	4,230	543,187	1.4
Georgia .....	1,007,763	876,884	0.9	2,509	770,421	693,986	1,829	570,361	0.9
Hawaii .....	99,577	453,547	4.6	90	51,975	108,855	56	1,902	1.1
Idaho .....	3,319,827	6,228,403	1.9	2,262	1,203,147	2,142,149	1,225	574,067	1.7
Illinois .....	457,078	231,390	0.5	1,038	446,078	225,523	1,007	434,548	0.5
Indiana .....	404,399	198,880	0.5	912	345,164	169,810	738	261,481	0.5
Iowa .....	162,838	78,939	0.5	451	155,878	74,969	437	154,449	0.5
Kansas .....	2,570,003	3,146,607	1.2	4,092	2,490,789	3,074,409	3,929	2,414,963	1.2
Kentucky .....	32,380	15,698	0.5	214	18,274	9,586	162	16,548	0.5
Louisiana .....	932,712	972,164	1.0	1,327	739,674	741,536	1,144	622,630	1.0
Maine .....	18,151	6,946	0.4	93	8,329	(D)	86	254	0.4
Maryland .....	85,552	55,259	0.6	294	58,284	38,407	235	42,657	0.6
Massachusetts .....	17,421	18,894	1.1	141	933	(D)	126	701	0.2
Michigan .....	531,927	298,440	0.6	1,423	371,726	218,225	1,033	155,884	0.5
Minnesota .....	504,330	333,669	0.7	1,379	466,109	294,428	1,254	431,397	0.6
Mississippi .....	1,451,652	1,402,099	1.0	1,084	1,401,988	1,327,911	916	1,132,577	0.9
Missouri .....	1,232,354	996,875	0.8	1,415	1,177,805	969,642	1,387	1,148,048	0.8
Montana .....	1,947,159	2,660,677	1.4	187	56,079	63,171	16	12,516	1.0
Nebraska .....	8,365,545	6,699,545	0.8	14,609	7,842,363	6,005,834	11,430	5,819,334	0.8
Nevada .....	685,261	1,436,932	2.1	732	275,142	689,506	468	180,637	2.5
New Hampshire .....	720	193	0.3	40	138	21	37	93	0.2
New Jersey .....	59,412	45,305	0.8	439	40,617	31,411	371	31,866	0.8
New Mexico .....	835,639	1,896,349	2.3	3,455	548,401	1,066,753	2,630	402,976	1.9
New York .....	20,158	14,800	0.7	293	7,402	5,862	279	7,054	0.8
North Carolina .....	148,999	83,847	0.6	381	22,073	14,470	193	13,039	0.7
North Dakota .....	248,070	224,462	0.9	358	164,688	128,749	328	145,537	0.8
Ohio .....	18,548	9,398	0.5	171	5,386	3,578	146	4,657	0.7
Oklahoma .....	461,235	524,638	1.1	1,160	382,445	434,935	1,097	360,014	1.2
Oregon .....	1,758,602	3,276,679	1.9	4,258	421,888	713,268	3,308	243,982	1.8
Pennsylvania .....	17,359	13,000	0.7	562	4,947	2,898	536	4,251	0.5
Rhode Island .....	681	674	1.0	32	90	69	30	74	0.8
South Carolina .....	104,091	86,236	0.8	472	74,252	58,233	391	46,886	0.7
South Dakota .....	360,071	271,274	0.8	646	207,600	123,009	623	201,781	0.6
Tennessee .....	72,862	42,271	0.6	243	60,466	34,140	213	60,125	0.6
Texas .....	5,356,876	6,819,783	1.3	8,982	4,686,872	5,552,255	7,870	4,269,700	1.2
Utah .....	1,068,929	2,430,148	2.3	861	158,439	455,480	380	91,909	3.0
Vermont .....	488	235	0.5	29	100	30	24	76	0.3
Virginia .....	44,818	24,796	0.6	240	3,652	1,240	225	1,197	0.2
Washington .....	1,675,898	3,781,371	2.3	3,218	435,997	937,019	2,539	250,567	1.9
West Virginia .....	906	975	1.1	42	185	96	26	80	0.2
Wisconsin .....	396,123	322,377	0.8	853	357,744	255,101	742	313,354	0.7
Wyoming .....	1,497,119	3,039,481	2.0	608	111,527	156,633	415	64,363	1.5
<b>Water Resources Regions</b>									
Region 01 New England .....	39,468	28,287	0.7	374	9,942	5,318	320	1,473	0.3
Region 02 Mid-Atlantic .....	309,972	211,328	0.7	1,914	205,393	142,699	1,688	156,032	0.7
Region 03 South Atlantic-Gulf .....	2,554,462	2,789,496	1.1	8,169	1,545,696	1,681,447	6,984	1,189,816	1.1
Region 04 Great Lakes .....	721,586	414,509	0.6	2,033	519,101	311,046	1,518	263,066	0.6
Region 05 Ohio .....	304,963	146,211	0.5	971	257,400	119,998	859	223,446	0.5
Region 06 Tennessee .....	41,141	25,616	0.6	169	10,459	5,087	127	9,101	0.5
Region 07 Upper Mississippi .....	1,339,287	830,916	0.6	3,246	1,338,826	737,127	2,980	1,138,641	0.6
Region 08 Lower Mississippi .....	7,346,743	10,786,749	1.5	6,664	6,657,405	9,049,885	5,277	4,988,086	1.3
Region 09 Souris-Red-Rainy .....	158,617	123,225	0.8	323	130,428	89,395	299	118,616	0.7
Region 10 Missouri .....	13,825,255	14,386,086	1.0	19,538	9,868,085	8,183,108	15,420	7,596,855	0.8
Region 11 Arkansas-White-Red .....	5,412,670	7,469,640	1.4	6,885	4,909,361	6,525,974	6,217	4,447,087	1.3
Region 12 Texas-Gulf .....	3,499,153	4,182,307	1.2	7,277	2,951,242	3,172,724	6,321	2,669,375	1.0
Region 13 Rio Grande .....	1,079,145	2,492,101	2.3	3,409	612,632	1,346,281	2,393	367,177	2.3
Region 14 Upper Colorado .....	1,359,888	2,460,845	1.8	419	27,363	24,167	217	7,257	1.3
Region 15 Lower Colorado .....	936,248	4,905,155	5.2	1,016	351,848	1,372,134	727	155,611	3.9
Region 16 Great Basin .....	1,599,757	3,560,900	2.2	1,839	500,021	1,212,823	1,094	324,077	2.4
Region 17 Pacific Northwest .....	6,855,656	13,332,398	1.9	9,268	1,959,888	3,633,106	6,677	996,093	1.8
Region 18 California .....	7,444,738	22,635,393	3.0	24,067	4,372,391	10,770,207	17,448	1,930,338	2.6
Region 19 Alaska .....	1,589	327	0.2	19	1,550	323	19	1,550	0.2
Region 20 Hawaii .....	99,577	453,547	4.6	90	51,975	108,855	56	1,902	1.1

See footnote(s) at end of table.

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**Table 11. Estimated Quantity of Water Applied by Source or Supplier: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	On-farm surface source					
	Total			Only source		
	Farms	Acres irrigated	Acre-feet applied	Farms	Acres irrigated	Average acre-feet per acre
United States .....2008 ..	54,352	8,813,848	13,773,706	37,973	4,551,387	1.6
.....2003 ..	45,470	7,241,081	11,737,520	35,718	4,874,155	1.6
<b>2008 DATA</b>						
Alabama .....	318	44,833	24,189	289	38,831	0.5
Alaska .....	4	39	4	4	39	0.1
Arizona .....	751	127,845	638,978	640	54,560	4.7
Arkansas .....	1,471	985,911	1,720,577	328	78,494	2.3
California .....	9,092	1,425,715	2,651,880	4,848	293,402	3.8
Colorado .....	4,028	722,231	1,199,188	3,149	458,069	1.5
Connecticut .....	97	1,646	1,276	73	1,242	1.0
Delaware .....	76	12,685	10,686	30	4,217	0.8
Florida .....	758	268,153	317,610	547	143,462	1.3
Georgia .....	1,749	239,624	175,831	1,059	118,415	0.7
Hawaii .....	335	12,707	38,154	321	4,372	0.6
Idaho .....	3,650	606,693	980,301	2,754	371,890	1.6
Illinois .....	66	8,388	3,069	39	4,362	0.3
Indiana .....	316	52,618	26,320	154	22,265	0.4
Iowa .....	56	4,800	2,661	47	2,928	0.5
Kansas .....	358	49,330	33,003	218	17,688	0.5
Kentucky .....	517	12,454	4,958	432	10,916	0.4
Louisiana .....	335	179,850	191,579	182	115,937	0.9
Maine .....	94	16,277	(D)	88	5,843	0.1
Maryland .....	310	26,205	16,159	251	15,773	0.6
Massachusetts .....	487	14,620	(D)	464	12,827	1.3
Michigan .....	1,067	162,048	78,109	679	67,634	0.4
Minnesota .....	227	32,482	24,584	105	21,326	0.9
Mississippi .....	287	67,607	72,430	128	12,585	0.6
Missouri .....	486	56,061	26,733	458	48,554	0.5
Montana .....	3,901	830,781	1,125,801	3,362	695,750	1.3
Nebraska .....	2,519	254,738	192,740	25	13,500	1.5
Nevada .....	697	271,419	409,889	566	155,519	1.2
New Hampshire .....	48	522	154	41	326	0.4
New Jersey .....	235	18,369	(D)	167	13,638	0.8
New Mexico .....	1,856	98,068	175,381	1,428	59,743	1.6
New York .....	230	11,178	7,746	207	8,550	0.6
North Carolina .....	1,682	123,696	62,249	1,492	106,580	0.5
North Dakota .....	102	22,246	21,847	88	17,967	0.8
Ohio .....	224	9,105	3,442	191	7,721	0.4
Oklahoma .....	189	36,197	33,807	142	26,705	0.8
Oregon .....	4,638	542,767	944,840	3,840	371,589	1.7
Pennsylvania .....	470	11,815	(D)	444	10,372	0.8
Rhode Island .....	24	383	564	22	319	1.6
South Carolina .....	308	30,668	27,847	221	16,439	0.8
South Dakota .....	115	23,022	21,763	89	18,788	1.0
Tennessee .....	248	11,082	6,472	218	10,812	0.6
Texas .....	2,148	156,965	141,072	1,311	64,482	1.3
Utah .....	2,094	236,592	503,240	1,830	205,811	2.1
Vermont .....	42	388	205	37	304	0.6
Virginia .....	375	38,022	21,414	357	31,876	0.6
Washington .....	3,059	309,106	675,006	2,830	221,871	2.1
West Virginia .....	64	742	878	48	665	1.3
Wisconsin .....	504	40,035	64,126	390	24,758	2.1
Wyoming .....	1,645	605,120	1,051,516	1,340	541,671	1.7
<b>Water Resources Regions</b>						
Region 01 New England .....	767	33,594	21,982	701	20,699	1.0
Region 02 Mid-Atlantic .....	1,315	99,489	65,108	1,088	68,022	0.7
Region 03 South Atlantic-Gulf .....	4,997	705,037	607,791	3,785	420,617	0.8
Region 04 Great Lakes .....	1,509	199,242	98,968	987	86,637	0.4
Region 05 Ohio .....	989	42,886	21,082	848	32,095	0.5
Region 06 Tennessee .....	314	27,075	16,543	270	25,730	0.6
Region 07 Upper Mississippi .....	810	96,432	86,164	549	59,662	1.1
Region 08 Lower Mississippi .....	1,591	1,042,945	1,662,940	290	127,958	1.1
Region 09 Souris-Red-Rainy .....	66	20,730	19,667	45	17,760	1.0
Region 10 Missouri .....	7,576	1,626,506	2,081,846	4,064	1,089,568	1.4
Region 11 Arkansas-White-Red .....	1,408	368,524	591,367	833	143,361	1.8
Region 12 Texas-Gulf .....	1,907	124,114	132,254	1,287	59,322	1.4
Region 13 Rio Grande .....	1,610	229,547	359,827	996	131,463	1.2
Region 14 Upper Colorado .....	4,447	550,383	1,020,638	3,981	496,580	1.8
Region 15 Lower Colorado .....	866	132,647	648,856	752	56,262	4.6
Region 16 Great Basin .....	1,947	441,888	838,532	1,612	294,543	1.8
Region 17 Pacific Northwest .....	12,588	1,603,578	2,831,203	10,530	1,107,994	1.7
Region 18 California .....	9,306	1,456,485	2,630,781	5,030	308,703	3.5
Region 19 Alaska .....	4	39	4	4	39	0.1
Region 20 Hawaii .....	335	12,707	38,154	321	4,372	0.6

See footnote(s) at end of table.

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**Table 11. Estimated Quantity of Water Applied by Source or Supplier: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Off-farm surface water suppliers					
	Total			Only source		
	Farms	Acres irrigated	Acre-feet applied	Farms	Acres irrigated	Average acre-feet per acre
United States ..... 2008 ..	80,500	13,069,453	28,969,626	68,503	8,489,326	2.2
..... 2003 ..	83,019	13,839,769	31,566,388	72,411	10,147,139	2.3
<b>2008 DATA</b>						
Alabama .....	86	8,120	5,521	78	7,444	0.7
Alaska .....	-	-	-	-	-	-
Arizona .....	1,706	553,273	2,676,906	1,460	307,567	4.9
Arkansas .....	231	37,897	46,412	145	4,440	1.3
California .....	20,632	3,220,628	9,228,170	15,573	1,191,942	3.5
Colorado .....	7,562	1,089,231	1,546,884	6,879	820,281	1.4
Connecticut .....	15	251	75	13	(D)	0.4
Delaware .....	5	394	419	3	165	0.6
Florida .....	275	352,644	482,659	257	190,749	1.3
Georgia .....	41	8,024	7,068	6	3,000	0.7
Hawaii .....	688	80,943	306,538	666	10,859	1.6
Idaho .....	9,366	1,548,956	3,105,952	8,473	1,097,313	2.1
Illinois .....	18	3,844	2,799	14	3,590	0.8
Indiana .....	35	7,969	2,751	23	2,936	0.2
Iowa .....	34	2,160	1,309	29	2,155	0.6
Kansas .....	230	37,354	39,194	198	25,055	1.1
Kentucky .....	176	1,939	1,154	143	1,428	0.4
Louisiana .....	214	25,760	39,050	183	13,715	1.6
Maine .....	17	761	200	14	525	0.3
Maryland .....	52	1,063	693	52	1,063	0.7
Massachusetts .....	72	2,065	653	64	1,616	0.3
Michigan .....	22	5,045	2,106	19	4,188	0.4
Minnesota .....	68	8,891	14,656	59	7,189	1.9
Mississippi .....	75	2,023	1,758	65	(D)	(D)
Missouri .....	4	1,000	500	4	1,000	0.5
Montana .....	5,016	1,071,787	1,471,704	4,541	922,451	1.4
Nebraska .....	1,209	435,425	500,971	178	174,611	1.4
Nevada .....	582	161,230	337,537	430	101,922	2.1
New Hampshire .....	6	60	18	1	(D)	(D)
New Jersey .....	2	(D)	(D)	2	(D)	(D)
New Mexico .....	4,419	291,053	654,215	3,970	213,297	2.2
New York .....	100	1,662	1,193	83	1,433	0.8
North Carolina .....	106	6,005	7,129	98	3,345	1.6
North Dakota .....	176	61,146	73,866	155	55,026	1.2
Ohio .....	19	4,494	2,378	7	2,088	0.6
Oklahoma .....	172	45,553	55,896	149	37,451	1.3
Oregon .....	4,525	810,529	1,618,572	3,780	592,417	2.0
Pennsylvania .....	84	597	(D)	84	597	0.3
Rhode Island .....	7	208	42	7	208	(D)
South Carolina .....	21	(D)	156	11	166	0.3
South Dakota .....	443	130,619	126,502	414	123,895	1.0
Tennessee .....	131	1,362	1,659	119	1,294	1.3
Texas .....	2,799	605,515	1,126,457	2,242	460,128	2.0
Utah .....	8,523	691,879	1,471,428	8,070	623,261	2.1
Vermont .....	-	-	-	-	-	-
Virginia .....	60	3,144	2,141	57	2,478	0.8
Washington .....	7,151	935,038	2,169,347	6,645	749,919	2.2
West Virginia .....	-	-	-	-	-	-
Wisconsin .....	22	2,437	3,151	13	1,356	1.7
Wyoming .....	3,303	808,284	1,831,332	3,027	722,967	2.2
<b>Water Resources Regions</b>						
Region 01 New England .....	117	3,345	987	99	2,480	0.3
Region 02 Mid-Atlantic .....	200	5,360	3,522	195	4,465	0.7
Region 03 South Atlantic-Gulf .....	513	373,003	500,258	438	202,331	1.3
Region 04 Great Lakes .....	147	11,221	4,496	113	6,881	0.4
Region 05 Ohio .....	245	8,946	5,132	200	5,226	0.5
Region 06 Tennessee .....	98	3,942	3,986	84	3,884	1.0
Region 07 Upper Mississippi .....	78	9,747	7,625	63	7,218	0.9
Region 08 Lower Mississippi .....	497	51,748	73,925	385	15,277	1.6
Region 09 Souris-Red-Rainy .....	38	9,173	14,163	29	7,227	1.7
Region 10 Missouri .....	10,611	2,596,910	4,121,131	8,662	2,046,213	1.7
Region 11 Arkansas-White-Red .....	2,744	288,607	352,298	2,612	193,654	1.3
Region 12 Texas-Gulf .....	2,081	490,039	877,329	1,580	358,842	1.9
Region 13 Rio Grande .....	4,102	401,760	785,993	3,568	254,713	2.0
Region 14 Upper Colorado .....	6,380	804,790	1,416,040	6,098	723,823	1.7
Region 15 Lower Colorado .....	2,041	603,294	2,884,166	1,728	352,696	4.9
Region 16 Great Basin .....	7,215	698,953	1,509,544	6,620	564,730	2.2
Region 17 Pacific Northwest .....	21,668	3,352,542	6,868,089	19,418	2,497,765	2.0
Region 18 California .....	21,037	3,275,130	9,234,406	15,945	1,231,042	3.4
Region 19 Alaska .....	-	-	-	-	-	-
Region 20 Hawaii .....	688	80,943	306,538	666	10,859	1.6

See footnote(s) at end of table.

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**Table 12. Irrigation by Estimated Quantity of Water Applied: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	500 to 999 acre-feet			1,000 to 1,999 acre-feet			2,000 acre-feet or more		
	Farms	Acres irrigated	Acre-feet of water applied	Farms	Acres irrigated	Acre-feet of water applied	Farms	Acres irrigated	Acre-feet of water applied
United States .....2008 ..	14,564	8,202,706	10,337,642	11,534	10,445,476	16,019,187	9,498	21,441,384	51,163,322
.....2003 ..	16,471	(D)	(D)	11,186	9,895,336	15,550,482	8,725	18,329,956	44,599,868
<b>2008 DATA</b>									
Alabama .....	15	13,953	9,696	5	7,693	6,538	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-
Arizona .....	109	19,652	88,079	163	56,635	240,538	400	729,499	4,143,088
Arkansas .....	604	328,589	430,968	929	1,024,542	1,334,366	1,284	2,975,317	6,694,991
California .....	1,628	526,354	1,200,744	2,388	1,078,552	3,369,156	2,383	4,493,972	15,474,932
Colorado .....	876	407,488	629,935	729	625,085	1,031,577	455	910,744	1,915,291
Connecticut .....	1	(D)	(D)	-	-	-	-	-	-
Delaware .....	24	22,389	16,153	19	21,639	22,882	2	(D)	(D)
Florida .....	203	102,607	145,421	114	141,444	169,411	141	710,493	1,165,260
Georgia .....	263	217,319	191,426	99	139,066	133,972	74	188,719	251,324
Hawaii .....	4	3,843	2,632	1	(D)	(D)	8	85,432	436,186
Idaho .....	990	410,985	729,815	673	455,950	890,888	740	1,698,447	3,779,952
Illinois .....	89	98,292	63,405	36	59,922	48,567	8	29,500	22,228
Indiana .....	70	78,020	45,993	20	35,222	29,126	4	24,413	17,448
Iowa .....	10	(D)	(D)	8	16,372	10,648	2	(D)	(D)
Kansas .....	695	440,676	500,711	610	679,744	848,432	371	934,945	1,355,363
Kentucky .....	4	4,600	2,560	1	(D)	(D)	-	-	-
Louisiana .....	256	206,982	175,051	197	221,660	273,305	105	222,826	368,128
Maine .....	-	-	-	-	-	-	1	(D)	(D)
Maryland .....	19	17,229	13,116	4	5,211	5,071	-	-	-
Massachusetts .....	1	(D)	(D)	3	2,398	3,588	-	-	-
Michigan .....	92	102,031	62,076	34	69,298	43,433	21	108,662	80,467
Minnesota .....	82	74,261	56,111	36	69,981	48,635	21	80,416	77,590
Mississippi .....	196	190,321	144,418	193	311,489	266,933	223	747,397	883,829
Missouri .....	238	248,343	172,450	156	237,660	205,396	126	416,704	465,871
Montana .....	732	363,384	514,907	444	394,959	577,743	186	415,712	842,330
Nebraska .....	2,124	1,866,327	1,449,953	1,527	2,119,966	2,064,612	381	1,141,173	1,327,336
Nevada .....	154	64,903	113,205	181	110,022	253,809	162	383,995	920,516
New Hampshire .....	-	-	-	-	-	-	-	-	-
New Jersey .....	8	5,692	(D)	5	(D)	6,789	1	(D)	(D)
New Mexico .....	376	103,735	243,077	154	98,540	215,086	168	350,868	1,067,309
New York .....	2	(D)	(D)	-	-	-	-	-	-
North Carolina .....	37	21,910	23,493	5	6,000	5,760	3	9,400	10,400
North Dakota .....	63	45,180	46,048	38	49,772	51,405	16	45,112	53,018
Ohio .....	2	(D)	(D)	1	(D)	(D)	-	-	-
Oklahoma .....	112	67,642	78,908	83	89,733	113,845	58	144,529	208,996
Oregon .....	673	289,847	506,721	358	252,565	507,405	364	738,285	1,660,569
Pennsylvania .....	3	600	(D)	-	-	-	2	(D)	(D)
Rhode Island .....	-	-	-	-	-	-	-	-	-
South Carolina .....	28	24,478	18,550	14	20,247	19,346	5	12,182	23,521
South Dakota .....	87	59,634	59,643	19	24,270	25,266	11	40,369	50,391
Tennessee .....	16	21,629	12,543	8	14,885	11,953	1	(D)	(D)
Texas .....	1,399	972,493	995,484	1,173	1,256,040	1,623,805	802	1,930,337	3,318,989
Utah .....	790	222,584	539,467	325	164,177	434,463	194	272,557	796,961
Vermont .....	-	-	-	-	-	-	-	-	-
Virginia .....	5	4,222	3,728	3	4,970	3,898	-	-	-
Washington .....	600	190,098	409,683	387	254,583	549,144	411	816,548	2,133,342
West Virginia .....	-	-	-	-	-	-	-	-	-
Wisconsin .....	79	48,617	53,588	32	59,477	40,598	24	127,233	114,342
Wyoming .....	805	298,631	570,504	359	258,401	527,722	340	630,149	1,470,192
<b>Water Resources Regions</b>									
Region 01 New England .....	2	(D)	(D)	3	2,398	3,588	1	(D)	(D)
Region 02 Mid-Atlantic .....	58	49,482	39,279	30	34,192	37,111	3	7,326	7,469
Region 03 South Atlantic-Gulf .....	543	377,423	386,883	235	311,602	332,562	223	920,794	1,450,505
Region 04 Great Lakes .....	132	140,133	89,635	49	90,458	64,071	25	133,008	97,962
Region 05 Ohio .....	44	46,263	29,112	11	17,024	(D)	6	20,400	(D)
Region 06 Tennessee .....	8	(D)	(D)	4	(D)	5,255	-	-	-
Region 07 Upper Mississippi .....	236	219,137	161,716	99	184,127	133,583	44	201,995	171,783
Region 08 Lower Mississippi .....	1,158	901,369	839,776	1,351	1,660,248	1,902,996	1,568	3,972,543	7,547,990
Region 09 Souris-Red-Rainy .....	30	25,410	23,182	12	25,180	18,437	8	(D)	35,937
Region 10 Missouri .....	4,097	2,829,860	2,810,831	2,721	3,199,741	3,685,135	1,041	2,597,394	4,175,253
Region 11 Arkansas-White-Red .....	1,454	837,762	1,007,724	1,303	1,397,174	1,851,246	919	2,358,509	3,935,502
Region 12 Texas-Gulf .....	960	688,252	693,836	702	737,464	957,362	499	1,033,566	1,816,991
Region 13 Rio Grande .....	328	96,354	215,833	221	165,990	332,061	301	503,298	1,516,055
Region 14 Upper Colorado .....	572	231,841	430,930	332	230,880	458,435	182	392,153	959,721
Region 15 Lower Colorado .....	107	20,552	85,867	170	60,030	250,070	425	784,759	4,372,638
Region 16 Great Basin .....	791	253,680	548,278	422	229,267	578,037	347	631,311	1,719,878
Region 17 Pacific Northwest .....	2,362	921,049	1,724,115	1,440	922,194	1,969,439	1,486	3,237,710	7,521,400
Region 18 California .....	1,678	552,585	1,240,983	2,428	1,100,899	3,425,161	2,412	4,527,625	15,375,924
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	4	3,843	2,632	1	(D)	(D)	8	85,432	436,186

<sup>1</sup> May not add to total due to rounding.

**Table 13. Water Transfers by Use and Source: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Number of farms transferring water (renting or leasing) to -						Quantity of water transferred to others by water source		
	Other agricultural producers	Municipal or industrial users	Environmental uses	Transfer use unknown			On-farm sources		Off-farm supplier (acre-feet)
				Total	Pooled for multiple uses	Transferred by irrigation district	Ground water (from wells) (acre-feet)	Surface water (acre-feet)	
United States ..... 2008 ..	1,290	63	33	17	12	5	271,163	56,414	240,315
..... 2003 ..	1,091	321	80	388	111	277	176,798	62,771	207,976
<b>2008 DATA</b>									
Alabama .....	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-
Arizona .....	1	4	-	-	-	-	(D)	-	8,936
Arkansas .....	-	25	-	-	-	-	17,500	-	-
California .....	171	14	-	5	-	5	144,062	18,085	27,614
Colorado .....	18	-	-	-	-	-	(D)	3,700	(D)
Connecticut .....	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-
Florida .....	-	-	6	-	-	-	60	-	-
Georgia .....	1	-	-	-	-	-	(D)	(D)	-
Hawaii .....	14	-	-	-	-	-	(D)	(D)	-
Idaho .....	305	-	-	-	-	-	381	328	136,450
Illinois .....	21	-	-	-	-	-	803	-	-
Indiana .....	3	-	-	-	-	-	461	-	-
Iowa .....	1	-	-	-	-	-	(D)	-	-
Kansas .....	45	5	-	-	-	-	840	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-
Massachusetts .....	7	-	-	-	-	-	-	231	-
Michigan .....	-	-	-	-	-	-	-	-	-
Minnesota .....	29	-	-	-	-	-	1,214	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-
Missouri .....	11	-	-	-	-	-	-	330	-
Montana .....	7	-	-	-	-	-	-	1,800	2,000
Nebraska .....	51	-	-	-	-	-	927	-	-
Nevada .....	26	-	-	-	-	-	10,562	(D)	78
New Hampshire .....	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-
New Mexico .....	8	4	-	-	-	-	5,948	9,010	(D)
New York .....	-	-	-	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-	-
North Dakota .....	5	-	-	-	-	-	(D)	360	(D)
Ohio .....	-	-	-	-	-	-	-	-	-
Oklahoma .....	4	3	-	-	-	-	45,004	(D)	-
Oregon .....	16	-	4	-	-	-	15	496	1,404
Pennsylvania .....	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-	-
South Dakota .....	3	-	-	-	-	-	105	-	-
Tennessee .....	2	4	-	-	-	-	(D)	4,004	(D)
Texas .....	36	-	-	-	-	-	(D)	325	-
Utah .....	373	4	23	-	-	-	3,090	7,572	30,981
Vermont .....	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-
Washington .....	115	-	-	-	-	-	7,559	(D)	29,788
West Virginia .....	-	-	-	-	-	-	-	-	-
Wisconsin .....	3	-	-	12	12	-	(D)	12	-
Wyoming .....	14	-	-	-	-	-	-	1,498	-
<b>Water Resources Regions</b>									
Region 01 New England .....	7	-	-	-	-	-	-	231	-
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....	1	-	6	-	-	-	97	(D)	-
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....	2	-	-	-	-	-	(D)	-	-
Region 06 Tennessee .....	2	2	-	-	-	-	(D)	4,004	-
Region 07 Upper Mississippi .....	53	-	-	12	12	-	2,087	12	-
Region 08 Lower Mississippi .....	-	27	-	-	-	-	17,500	-	(D)
Region 09 Souris-Red-Rainy .....	2	-	-	-	-	-	(D)	-	-
Region 10 Missouri .....	97	-	-	-	-	-	1,210	7,358	(D)
Region 11 Arkansas-White-Red .....	66	8	-	-	-	-	45,844	7,880	-
Region 12 Texas-Gulf .....	36	-	-	-	-	-	(D)	(D)	-
Region 13 Rio Grande .....	3	4	-	-	-	-	6,048	(D)	(D)
Region 14 Upper Colorado .....	8	-	23	-	-	-	92	-	4,824
Region 15 Lower Colorado .....	1	13	-	-	-	-	(D)	16,923	18,536
Region 16 Great Basin .....	391	4	-	-	-	-	13,560	8,538	26,235
Region 17 Pacific Northwest .....	436	-	1	-	-	-	7,955	(D)	167,642
Region 18 California .....	171	5	3	5	-	5	144,059	1,342	18,014
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	14	-	-	-	-	-	(D)	(D)	-

**Table 14. Irrigation Wells on Farms: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Wells capable of being used		Wells used							
	Farms	Number	Farms	Number	With meters			With backflow prevention devices		
					Farms	Number	Acres irrigated	Farms	Number	Acres irrigated
United States .....	97,942	426,756	97,690	407,913	28,835	107,384	10,776,675	59,657	252,242	21,556,605
2008 ..	97,942	426,756	97,690	407,913	28,835	107,384	10,776,675	59,657	252,242	21,556,605
2003 ..	100,717	396,167	100,717	374,806	18,926	61,116	6,710,714	60,481	214,110	18,810,378
<b>2008 DATA</b>										
Alabama .....	290	486	290	457	21	33	2,770	174	286	15,403
Alaska .....	19	25	19	25	1	(D)	(D)	4	7	512
Arizona .....	844	3,429	844	3,193	260	933	109,488	288	1,259	150,560
Arkansas .....	3,646	40,340	3,646	38,729	355	1,147	165,946	1,621	12,489	1,234,953
California .....	23,998	65,079	23,998	61,192	5,918	15,415	1,669,726	13,112	32,555	2,624,036
Colorado .....	2,778	12,310	2,526	10,916	1,225	5,978	587,052	1,581	7,878	817,842
Connecticut .....	60	100	60	65	-	-	-	26	31	196
Delaware .....	276	1,155	276	1,100	31	99	6,846	229	926	68,694
Florida .....	4,436	13,302	4,436	12,698	1,108	4,384	360,984	2,961	8,679	440,746
Georgia .....	2,509	8,452	2,509	8,052	1,407	4,396	466,009	1,823	6,349	523,687
Hawaii .....	90	125	90	124	46	54	5,692	69	103	51,687
Idaho .....	2,262	7,091	2,262	6,982	408	1,069	224,603	1,806	4,990	729,598
Illinois .....	1,038	3,951	1,038	3,857	123	308	32,246	725	2,883	295,780
Indiana .....	912	2,817	912	2,746	133	202	33,113	617	1,837	198,495
Iowa .....	451	1,352	451	1,240	53	103	10,134	300	792	92,832
Kansas .....	4,092	19,794	4,092	19,301	3,457	16,436	2,061,627	3,206	16,029	1,901,713
Kentucky .....	214	321	214	313	21	31	3,004	148	224	14,709
Louisiana .....	1,327	6,682	1,327	6,414	105	260	26,356	656	2,956	350,705
Maine .....	93	121	93	117	6	20	(D)	93	117	2,802
Maryland .....	294	863	294	827	36	59	2,936	216	626	42,708
Massachusetts .....	141	224	141	203	45	65	237	102	159	448
Michigan .....	1,423	4,439	1,423	4,097	218	562	30,615	1,044	3,184	306,826
Minnesota .....	1,379	4,414	1,379	4,312	376	1,149	120,162	938	3,381	343,456
Mississippi .....	1,084	11,898	1,084	11,394	82	148	14,590	697	4,802	530,606
Missouri .....	1,415	13,264	1,415	12,869	100	268	21,527	644	3,552	338,380
Montana .....	187	477	187	417	48	92	20,026	146	347	45,759
Nebraska .....	14,609	80,099	14,609	77,347	6,498	25,129	2,555,881	11,134	51,694	4,932,181
Nevada .....	732	2,012	732	1,843	354	783	110,373	481	1,209	156,346
New Hampshire .....	40	48	40	46	11	15	26	24	28	92
New Jersey .....	439	1,089	439	974	58	104	6,615	241	590	21,760
New Mexico .....	3,455	8,786	3,455	8,315	1,371	3,066	196,704	1,542	4,740	318,387
New York .....	293	442	293	392	29	41	1,106	190	259	4,732
North Carolina .....	381	948	381	920	28	98	3,260	152	376	14,664
North Dakota .....	358	1,659	358	1,621	220	996	107,377	281	1,380	134,663
Ohio .....	171	240	171	215	26	32	2,080	121	146	3,936
Oklahoma .....	1,160	3,966	1,160	3,727	156	495	63,876	757	2,550	213,571
Oregon .....	4,258	7,557	4,258	7,184	950	1,891	178,885	1,993	3,849	238,620
Pennsylvania .....	562	880	562	786	43	69	799	354	473	2,829
Rhode Island .....	32	36	32	36	5	5	15	32	34	90
South Carolina .....	472	1,230	472	1,135	98	229	5,102	314	701	42,279
South Dakota .....	646	1,803	646	1,755	78	121	16,473	344	885	100,113
Tennessee .....	243	581	243	557	48	97	10,012	137	294	27,466
Texas .....	8,982	79,671	8,982	77,389	2,388	18,599	1,193,479	5,293	58,976	3,490,668
Utah .....	861	1,876	861	1,786	112	229	31,149	332	807	95,751
Vermont .....	29	40	29	36	4	4	12	17	21	60
Virginia .....	240	335	240	276	60	67	(D)	80	96	1,666
Washington .....	3,218	6,142	3,218	5,244	479	1,173	219,549	1,698	3,360	300,186
West Virginia .....	42	57	42	52	3	(D)	82	22	27	140
Wisconsin .....	853	3,253	853	3,192	190	751	65,745	596	2,669	263,586
Wyoming .....	608	1,495	608	1,445	43	171	23,682	296	637	69,686
<b>Water Resources Regions</b>										
Region 01 New England .....	374	537	374	475	67	105	(D)	285	377	3,640
Region 02 Mid-Atlantic .....	1,914	4,539	1,914	4,150	259	440	18,867	1,195	2,856	141,899
Region 03 South Atlantic-Gulf .....	8,169	24,604	8,169	23,325	2,721	9,189	837,712	5,466	16,415	1,034,717
Region 04 Great Lakes .....	2,033	5,859	2,033	5,503	306	704	44,232	1,402	4,200	399,930
Region 05 Ohio .....	971	2,528	971	2,415	138	221	24,010	692	1,590	151,078
Region 06 Tennessee .....	169	267	169	244	15	25	2,372	103	154	8,663
Region 07 Upper Mississippi .....	3,246	11,488	3,246	11,154	634	1,991	200,254	2,260	8,686	872,004
Region 08 Lower Mississippi .....	6,664	65,460	6,664	63,310	530	1,674	218,273	3,321	22,298	2,304,761
Region 09 Souris-Red-Rainy .....	323	1,411	323	1,388	147	746	68,219	234	1,111	98,852
Region 10 Missouri .....	19,617	98,756	19,538	94,671	8,604	33,108	3,441,350	14,340	63,847	6,318,352
Region 11 Arkansas-White-Red .....	6,885	44,776	6,885	43,388	3,612	16,536	2,222,927	4,877	30,382	3,227,131
Region 12 Texas-Gulf .....	7,277	62,311	7,277	60,627	1,598	15,333	725,965	4,052	46,526	2,257,095
Region 13 Rio Grande .....	3,582	10,299	3,409	9,117	1,594	5,647	406,145	1,529	5,428	364,371
Region 14 Upper Colorado .....	419	619	419	615	5	(D)	563	124	136	10,535
Region 15 Lower Colorado .....	1,016	3,829	1,016	3,530	369	1,136	122,228	340	1,433	164,524
Region 16 Great Basin .....	1,839	4,115	1,839	3,913	492	960	138,092	1,151	2,524	314,081
Region 17 Pacific Northwest .....	9,268	19,957	9,268	18,612	1,743	4,026	608,845	5,060	11,528	1,193,777
Region 18 California .....	24,067	65,251	24,067	61,327	5,954	15,475	1,682,508	13,153	32,641	2,638,996
Region 19 Alaska .....	19	25	19	25	1	(D)	7	4	7	512
Region 20 Hawaii .....	90	125	90	124	46	54	5,692	69	103	51,687

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**Table 14. Irrigation Wells on Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms by number of wells used									
	1 well	2 wells	3 wells	4 wells	5 wells	6 wells	7 to 9 wells	10 to 14 wells	15 to 19 wells	20 wells or more
United States ..... 2008 ..	45,933	14,802	8,454	6,523	3,189	3,025	5,464	4,904	1,920	3,476
..... 2003 ..	48,187	16,900	8,249	5,334	3,442	2,979	6,545	4,586	2,015	2,480
<b>2008 DATA</b>										
Alabama .....	222	24	18	13	5	5	2	1	-	-
Alaska .....	15	3	-	1	-	-	-	-	-	-
Arizona .....	293	299	44	42	30	30	47	20	14	25
Arkansas .....	571	195	308	320	210	145	412	604	330	551
California .....	14,574	2,928	1,795	2,095	451	650	794	368	133	210
Colorado .....	999	493	158	155	148	149	190	90	57	87
Connecticut .....	57	2	-	1	-	-	-	-	-	-
Delaware .....	77	49	50	27	19	15	20	11	4	4
Florida .....	2,284	928	299	429	118	89	118	84	32	55
Georgia .....	1,081	513	290	185	63	70	120	118	56	13
Hawaii .....	80	8	-	-	-	-	-	2	-	-
Idaho .....	994	593	262	52	94	60	85	64	32	26
Illinois .....	385	196	116	69	71	42	66	68	10	15
Indiana .....	402	161	115	73	48	33	36	26	11	7
Iowa .....	202	97	45	36	13	23	19	9	5	2
Kansas .....	1,157	685	485	390	226	124	525	317	86	97
Kentucky .....	169	30	6	2	-	4	1	2	-	-
Louisiana .....	381	270	147	104	71	67	110	85	38	54
Maine .....	89	1	-	-	-	2	-	1	-	-
Maryland .....	141	49	34	22	12	8	14	11	3	-
Massachusetts .....	120	4	14	-	-	2	-	-	-	1
Michigan .....	700	337	118	73	51	36	33	39	17	19
Minnesota .....	728	248	123	57	57	35	52	41	15	23
Mississippi .....	149	91	76	96	61	58	143	144	94	172
Missouri .....	294	162	146	74	81	61	125	183	109	180
Montana .....	119	13	13	20	5	8	4	5	-	-
Nebraska .....	3,507	2,619	1,931	1,251	750	657	1,595	1,464	372	463
Nevada .....	442	108	58	38	13	18	27	18	4	6
New Hampshire .....	34	6	-	-	-	-	-	-	-	-
New Jersey .....	259	61	39	35	18	10	5	10	2	-
New Mexico .....	2,540	279	229	74	42	40	63	115	27	46
New York .....	250	13	20	2	4	2	2	-	-	-
North Carolina .....	193	105	34	11	9	9	2	16	-	2
North Dakota .....	130	67	47	17	21	9	37	16	2	12
Ohio .....	139	23	6	3	-	-	-	-	-	-
Oklahoma .....	552	245	104	40	37	64	36	41	25	16
Oregon .....	3,254	550	161	81	43	35	60	40	24	10
Pennsylvania .....	432	77	40	7	3	-	-	3	-	-
Rhode Island .....	29	2	1	-	-	-	-	-	-	-
South Carolina .....	293	46	35	59	10	4	7	8	5	5
South Dakota .....	279	177	59	37	28	7	30	23	5	1
Tennessee .....	140	52	19	7	6	3	9	5	1	1
Texas .....	3,119	1,235	532	318	302	368	593	802	388	1,325
Utah .....	490	144	159	17	18	3	11	11	6	2
Vermont .....	22	7	-	-	-	-	-	-	-	-
Virginia .....	234	2	-	-	1	2	-	-	-	1
Washington .....	2,463	383	198	56	26	35	26	10	7	14
West Virginia .....	34	6	2	-	-	-	-	-	-	-
Wisconsin .....	480	123	90	34	17	22	32	22	6	27
Wyoming .....	335	93	28	100	7	21	13	7	-	4
<b>Water Resources Regions</b>										
Region 01 New England .....	337	15	15	1	-	4	-	1	-	1
Region 02 Mid-Atlantic .....	1,218	236	183	93	57	37	41	35	9	5
Region 03 South Atlantic-Gulf .....	4,157	1,617	675	697	205	175	248	227	93	75
Region 04 Great Lakes .....	1,113	423	158	93	74	38	39	51	22	22
Region 05 Ohio .....	562	154	66	59	39	21	36	25	4	5
Region 06 Tennessee .....	122	34	6	4	-	2	1	-	-	-
Region 07 Upper Mississippi .....	1,526	597	349	160	140	108	142	125	34	65
Region 08 Lower Mississippi .....	1,131	654	586	547	382	313	728	939	515	869
Region 09 Souris-Red-Rainy .....	131	55	38	17	10	11	35	16	4	6
Region 10 Missouri .....	5,431	3,699	2,284	1,651	1,010	874	1,996	1,637	411	545
Region 11 Arkansas-White-Red .....	1,695	1,165	767	518	378	327	711	650	311	363
Region 12 Texas-Gulf .....	3,016	815	449	217	187	247	391	554	248	1,153
Region 13 Rio Grande .....	2,496	298	197	76	32	37	44	108	47	74
Region 14 Upper Colorado .....	311	20	88	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	409	345	46	42	30	30	49	23	16	26
Region 16 Great Basin .....	1,193	235	200	63	32	23	46	29	10	8
Region 17 Pacific Northwest .....	6,379	1,490	550	177	162	127	156	114	63	50
Region 18 California .....	14,611	2,939	1,797	2,107	451	651	801	368	133	209
Region 19 Alaska .....	15	3	-	1	-	-	-	-	-	-
Region 20 Hawaii .....	80	8	-	-	-	-	-	2	-	-

**Table 15. Irrigation Wells Used on Farms: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All wells used		Flowing or artesian wells used		Change in average depth to water <sup>1</sup>			
	Farms	Number	Farms	Number	Increased		Decreased	
					Farms	Number of wells	Farms	Number of wells
United States .....2008 ..	97,690	407,913	692	1,347	13,477	71,341	12,168	77,810
.....2003 ..	100,717	374,806	1,868	3,796	12,936	64,481	12,141	72,055
<b>2008 DATA</b>								
Alabama .....	290	457	-	-	4	4	15	29
Alaska .....	19	25	3	3	4	5	3	3
Arizona .....	844	3,193	3	3	96	407	195	574
Arkansas .....	3,646	38,729	50	178	606	6,509	632	8,412
California .....	23,998	61,192	11	30	5,616	18,562	2,889	9,865
Colorado .....	2,526	10,916	28	123	562	2,558	738	3,096
Connecticut .....	60	65	-	-	-	-	-	-
Delaware .....	276	1,100	5	7	2	(D)	4	12
Florida .....	4,436	12,698	231	368	226	746	365	1,068
Georgia .....	2,509	8,052	15	30	68	353	80	426
Hawaii .....	90	124	4	4	11	11	-	-
Idaho .....	2,262	6,982	19	68	630	1,841	169	593
Illinois .....	1,038	3,857	1	(D)	22	129	45	148
Indiana .....	912	2,746	-	-	2	(D)	7	30
Iowa .....	451	1,240	-	-	11	77	18	53
Kansas .....	4,092	19,301	-	-	632	4,831	1,060	5,747
Kentucky .....	214	313	-	-	-	-	-	-
Louisiana .....	1,327	6,414	-	-	42	148	69	344
Maine .....	93	117	-	-	-	-	-	-
Maryland .....	294	827	-	-	2	(D)	1	(D)
Massachusetts .....	141	203	-	-	-	-	-	-
Michigan .....	1,423	4,097	24	30	44	195	8	29
Minnesota .....	1,379	4,312	5	11	35	138	15	155
Mississippi .....	1,084	11,394	4	4	105	1,351	91	939
Missouri .....	1,415	12,869	-	-	58	751	33	305
Montana .....	187	417	8	16	-	-	4	24
Nebraska .....	14,609	77,347	25	25	1,391	9,214	1,761	10,135
Nevada .....	732	1,843	2	(D)	135	466	116	370
New Hampshire .....	40	46	3	3	-	-	-	-
New Jersey .....	439	974	29	50	8	31	23	89
New Mexico .....	3,455	8,315	15	83	244	1,183	627	2,564
New York .....	293	392	-	-	-	-	-	-
North Carolina .....	381	920	-	-	85	170	-	-
North Dakota .....	358	1,621	-	-	15	88	24	85
Ohio .....	171	215	-	-	-	-	-	-
Oklahoma .....	1,160	3,727	2	(D)	108	532	123	579
Oregon .....	4,258	7,184	27	98	270	515	37	230
Pennsylvania .....	562	786	-	-	1	(D)	46	46
Rhode Island .....	32	36	-	-	-	-	-	-
South Carolina .....	472	1,135	3	3	21	57	22	56
South Dakota .....	646	1,755	57	60	26	54	21	80
Tennessee .....	243	557	2	(D)	21	55	17	26
Texas .....	8,982	77,389	-	-	1,586	18,679	2,361	30,390
Utah .....	861	1,786	2	(D)	138	376	248	463
Vermont .....	29	36	-	-	-	-	1	(D)
Virginia .....	240	276	-	-	-	-	9	9
Washington .....	3,218	5,244	111	119	602	949	103	277
West Virginia .....	42	52	-	-	2	(D)	5	5
Wisconsin .....	853	3,192	3	8	33	202	43	277
Wyoming .....	608	1,445	-	-	13	128	140	268
<b>Water Resources Regions</b>								
Region 01 New England .....	374	475	3	3	-	-	-	-
Region 02 Mid-Atlantic .....	1,914	4,150	34	57	15	49	61	142
Region 03 South Atlantic-Gulf .....	8,169	23,325	249	401	404	1,330	476	1,562
Region 04 Great Lakes .....	2,033	5,503	25	31	46	201	26	63
Region 05 Ohio .....	971	2,415	1	(D)	14	40	54	54
Region 06 Tennessee .....	169	244	-	-	11	21	16	37
Region 07 Upper Mississippi .....	3,246	11,154	7	18	91	500	82	584
Region 08 Lower Mississippi .....	6,664	63,310	56	184	705	7,481	777	9,299
Region 09 Souris-Red-Rainy .....	323	1,388	-	-	9	72	11	38
Region 10 Missouri .....	19,538	94,671	90	101	1,939	11,938	2,706	14,021
Region 11 Arkansas-White-Red .....	6,885	43,388	4	10	999	8,195	1,723	14,078
Region 12 Texas-Gulf .....	7,277	60,627	-	-	1,377	16,594	1,812	23,395
Region 13 Rio Grande .....	3,409	9,117	41	202	271	1,694	663	2,148
Region 14 Upper Colorado .....	419	615	-	-	94	94	84	84
Region 15 Lower Colorado .....	1,016	3,530	3	3	96	407	196	588
Region 16 Great Basin .....	1,839	3,913	12	(D)	296	904	343	810
Region 17 Pacific Northwest .....	9,268	18,612	149	229	1,460	3,215	246	1,039
Region 18 California .....	24,067	61,327	11	30	5,635	18,590	2,889	9,865
Region 19 Alaska .....	19	25	3	3	4	5	3	3
Region 20 Hawaii .....	90	124	4	4	11	11	-	-

See footnote(s) at end of table.

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**Table 15. Irrigation Wells Used on Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All pumped wells <sup>2</sup>								
	Farms	Number	Average well depth (feet)	Average depth to water <sup>3</sup> (feet)	Average depth to bowls <sup>4</sup> (feet)	Average pumping capacity (gpm)	Average operating pressure (psi)	Average engine size (hp)	Average hours of operation (hours)
United States ..... 2008 ..	97,296	406,566	243	100	166	779	35	74	1,065
..... 2003 ..	100,717	371,010	238	97	158	826	37	78	1,049
<b>2008 DATA</b>									
Alabama .....	290	457	180	82	118	242	58	30	524
Alaska .....	16	22	94	49	70	585	48	37	235
Arizona .....	844	3,190	521	197	316	1,090	24	110	2,003
Arkansas .....	3,646	38,551	125	47	95	1,293	33	70	639
California .....	23,998	61,162	380	123	236	744	33	67	1,220
Colorado .....	2,523	10,793	200	105	150	835	39	67	1,519
Connecticut .....	60	65	237	77	152	80	91	32	2,383
Delaware .....	272	1,093	106	19	69	656	43	69	391
Florida .....	4,216	12,330	493	55	122	1,234	41	118	409
Georgia .....	2,509	8,022	338	124	192	721	51	101	636
Hawaii .....	86	120	192	128	159	2,008	53	187	1,704
Idaho .....	2,254	6,914	296	175	229	1,170	58	153	1,968
Illinois .....	1,038	(D)	117	28	66	824	40	69	316
Indiana .....	912	2,746	85	26	56	738	51	70	364
Iowa .....	451	1,240	99	20	55	780	39	61	283
Kansas .....	4,092	19,301	226	121	190	652	28	137	1,321
Kentucky .....	214	313	148	82	109	429	49	39	274
Louisiana .....	1,327	6,414	133	42	83	1,684	15	85	543
Maine .....	93	117	292	60	104	261	55	46	143
Maryland .....	294	827	124	34	80	578	40	61	871
Massachusetts .....	141	203	320	169	270	880	90	173	98
Michigan .....	1,423	4,067	117	32	87	543	67	59	442
Minnesota .....	1,379	4,301	122	34	85	641	45	52	588
Mississippi .....	1,084	11,390	107	43	68	1,855	32	66	533
Missouri .....	1,415	12,869	116	19	57	1,304	18	65	364
Montana .....	183	401	214	71	163	911	57	92	1,144
Nebraska .....	14,609	77,322	187	72	130	781	39	76	621
Nevada .....	732	(D)	367	89	189	1,185	41	113	2,574
New Hampshire .....	37	43	272	136	214	226	58	29	83
New Jersey .....	410	924	120	20	58	420	67	54	578
New Mexico .....	3,455	8,232	261	115	187	692	28	58	1,695
New York .....	293	392	86	42	75	114	48	34	223
North Carolina .....	381	920	203	52	137	121	35	25	570
North Dakota .....	358	1,621	85	32	63	641	44	47	552
Ohio .....	171	215	135	46	109	169	55	30	272
Oklahoma .....	1,160	(D)	237	119	202	505	33	128	1,286
Oregon .....	4,258	7,086	236	48	110	543	57	63	785
Pennsylvania .....	562	786	214	82	175	123	33	16	387
Rhode Island .....	32	36	266	188	246	17	56	44	685
South Carolina .....	470	1,132	293	52	138	403	47	35	759
South Dakota .....	643	1,695	107	38	74	688	44	55	524
Tennessee .....	243	(D)	199	75	124	769	45	58	491
Texas .....	8,982	77,389	284	179	245	252	27	53	1,808
Utah .....	861	(D)	355	99	186	997	43	70	1,852
Vermont .....	29	36	248	78	149	265	63	43	718
Virginia .....	240	276	306	157	209	110	77	15	582
Washington .....	3,107	5,125	277	107	165	510	64	83	1,746
West Virginia .....	42	52	196	138	176	17	51	2	723
Wisconsin .....	853	3,184	147	40	90	802	61	80	606
Wyoming .....	608	1,445	144	63	102	635	42	44	1,811
<b>Water Resources Regions</b>									
Region 01 New England .....	371	472	292	125	205	477	76	97	467
Region 02 Mid-Atlantic .....	1,881	4,093	146	44	98	429	49	50	549
Region 03 South Atlantic-Gulf .....	7,947	22,924	410	79	148	946	45	102	512
Region 04 Great Lakes .....	2,033	5,472	120	35	86	580	65	61	472
Region 05 Ohio .....	971	(D)	89	30	61	689	45	64	302
Region 06 Tennessee .....	169	244	220	104	160	210	60	23	518
Region 07 Upper Mississippi .....	3,246	11,136	124	32	77	747	46	65	475
Region 08 Lower Mississippi .....	6,664	63,126	121	42	83	1,430	29	70	550
Region 09 Souris-Red-Rainy .....	323	1,388	85	27	62	640	44	43	515
Region 10 Missouri .....	19,531	94,570	184	75	130	766	39	78	729
Region 11 Arkansas-White-Red .....	6,885	43,378	289	174	255	646	26	120	1,579
Region 12 Texas-Gulf .....	7,277	60,627	250	151	208	202	28	32	1,763
Region 13 Rio Grande .....	3,406	8,915	248	97	161	893	32	62	1,416
Region 14 Upper Colorado .....	419	615	249	108	160	936	41	42	1,201
Region 15 Lower Colorado .....	1,016	3,527	494	186	299	1,079	25	107	2,009
Region 16 Great Basin .....	1,831	(D)	355	104	197	1,008	45	93	2,177
Region 17 Pacific Northwest .....	9,157	18,383	267	108	165	759	59	102	1,448
Region 18 California .....	24,067	61,297	380	123	236	745	33	67	1,222
Region 19 Alaska .....	16	22	94	49	70	585	48	37	235
Region 20 Hawaii .....	86	120	192	128	159	2,008	53	187	1,704

<sup>1</sup> Increases and decreases in depth are reported over a five year period.

<sup>2</sup> Data do not include flowing or artesian wells.

<sup>3</sup> Depth at the start of the irrigation season.

<sup>4</sup> Depth to bowls or impellers.

**Table 16. Characteristics for Irrigation Wells Used on Farms: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Average well depth <sup>1</sup>				Number of wells with an average well depth of -					
	For all pumped wells (feet)	For farms with one well (feet)	For farms with two wells (feet)	For farms with three wells (feet)	Under 50 feet	50 to 99 feet	100 to 199 feet	200 to 299 feet	300 to 499 feet	500 feet or more
United States .....2008 ..	243	258	295	249	14,373	55,644	150,311	71,674	74,455	40,109
.....2003 ..	238	266	248	253	14,426	50,115	137,386	69,061	70,045	29,977
<b>2008 DATA</b>										
Alabama .....	180	179	176	205	4	77	193	130	49	4
Alaska .....	94	109	(D)	-	(D)	9	(D)	3	-	-
Arizona .....	521	431	637	525	-	853	170	90	207	1,870
Arkansas .....	125	148	165	143	-	5,267	31,946	920	340	78
California .....	380	312	430	311	54	2,952	8,879	14,360	18,113	16,804
Colorado .....	200	178	308	146	459	2,557	2,923	2,080	2,418	356
Connecticut .....	237	257	(D)	-	14	(D)	(D)	22	23	(D)
Delaware .....	106	100	95	89	30	679	348	16	(D)	(D)
Florida .....	493	296	558	492	1,218	1,651	1,657	837	1,260	5,707
Georgia .....	338	423	390	324	-	260	1,450	2,126	2,375	1,811
Hawaii .....	192	183	204	-	(D)	-	77	33	5	3
Idaho .....	296	303	301	303	138	142	1,359	2,852	1,951	472
Illinois .....	117	121	188	126	95	1,306	2,204	168	44	38
Indiana .....	85	103	83	79	423	1,368	875	77	-	3
Iowa .....	99	136	92	93	130	486	573	23	24	4
Kansas .....	226	189	163	184	490	3,686	5,075	4,470	4,131	1,449
Kentucky .....	148	155	140	154	11	108	117	52	25	-
Louisiana .....	133	153	157	173	30	1,457	3,930	795	162	40
Maine .....	292	342	(D)	-	-	(D)	(D)	15	(D)	27
Maryland .....	124	138	163	134	(D)	419	225	141	24	(D)
Massachusetts .....	320	503	35	(D)	43	116	-	-	7	37
Michigan .....	117	131	114	147	401	1,200	2,113	306	45	(D)
Minnesota .....	122	149	122	99	334	1,838	1,593	210	314	12
Mississippi .....	107	103	114	112	-	2,240	9,129	21	-	-
Missouri .....	116	289	108	239	281	4,222	7,985	77	72	232
Montana .....	214	180	174	289	25	81	131	43	102	19
Nebraska .....	187	212	182	221	3,930	11,571	28,704	21,971	10,696	450
Nevada .....	367	331	292	382	-	7	172	316	923	419
New Hampshire .....	272	263	295	-	6	-	(D)	8	14	(D)
New Jersey .....	120	130	104	120	44	243	570	61	4	(D)
New Mexico .....	261	215	158	198	62	1,005	2,325	1,387	2,860	593
New York .....	86	73	89	139	74	226	(D)	57	(D)	-
North Carolina .....	203	239	109	203	170	73	77	371	229	-
North Dakota .....	85	122	118	91	237	935	395	36	18	-
Ohio .....	135	136	108	89	17	75	88	22	(D)	(D)
Oklahoma .....	237	205	213	237	164	962	603	602	1,088	302
Oregon .....	236	209	211	175	1,932	910	1,359	555	1,498	832
Pennsylvania .....	214	219	238	158	32	69	330	190	117	48
Rhode Island .....	266	(D)	(D)	(D)	8	(D)	-	5	(D)	5
South Carolina .....	293	304	298	280	(D)	13	326	129	614	46
South Dakota .....	107	152	115	107	387	464	646	147	26	25
Tennessee .....	199	200	277	185	9	45	264	139	76	22
Texas .....	284	360	397	328	1,743	3,864	27,838	14,144	22,600	7,200
Utah .....	355	310	314	383	-	50	172	155	1,213	189
Vermont .....	248	(D)	(D)	-	4	4	10	8	-	10
Virginia .....	306	335	(D)	-	-	17	88	38	82	51
Washington .....	277	154	269	280	906	869	1,237	1,041	205	867
West Virginia .....	196	191	(D)	(D)	-	20	(D)	19	(D)	-
Wisconsin .....	147	199	177	168	21	1,060	1,559	304	204	36
Wyoming .....	144	202	185	62	422	165	485	102	259	12
<b>Water Resources Regions</b>										
Region 01 New England .....	292	372	158	73	75	139	67	50	60	81
Region 02 Mid-Atlantic .....	146	194	160	127	176	1,579	1,469	517	225	127
Region 03 South Atlantic-Gulf .....	410	319	462	387	1,396	2,131	3,713	3,586	4,530	7,568
Region 04 Great Lakes .....	120	136	113	135	444	1,597	2,929	408	88	6
Region 05 Ohio .....	89	120	87	81	286	1,466	523	102	25	11
Region 06 Tennessee .....	220	195	332	126	(D)	29	(D)	60	27	18
Region 07 Upper Mississippi .....	124	158	148	124	629	4,220	5,047	618	534	88
Region 08 Lower Mississippi .....	121	151	149	143	311	10,778	49,396	1,908	611	122
Region 09 Souris-Red-Rainy .....	85	110	(D)	82	149	789	442	8	-	-
Region 10 Missouri .....	184	195	184	208	5,432	15,840	33,468	25,745	13,477	608
Region 11 Arkansas-White-Red .....	289	228	313	260	1,341	5,405	10,089	5,087	15,257	6,199
Region 12 Texas-Gulf .....	250	358	334	254	1,001	3,738	27,165	12,402	13,590	2,731
Region 13 Rio Grande .....	248	224	220	225	62	1,945	2,350	1,666	1,872	1,020
Region 14 Upper Colorado .....	249	152	225	368	-	110	99	108	278	20
Region 15 Lower Colorado .....	494	346	575	522	-	957	255	136	231	1,948
Region 16 Great Basin .....	355	316	321	359	-	39	278	951	1,958	618
Region 17 Pacific Northwest .....	267	198	261	257	2,986	1,916	3,948	3,920	3,494	2,119
Region 18 California .....	380	313	430	311	60	2,957	8,899	14,366	18,193	16,822
Region 19 Alaska .....	94	109	(D)	-	(D)	9	(D)	3	-	-
Region 20 Hawaii .....	192	183	204	-	(D)	-	77	33	5	3

See footnote(s) at end of table.

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**Table 16. Characteristics for Irrigation Wells Used on Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Average depth to water <sup>1</sup>				Number of wells with an average depth to water of -					
	For all pumped wells (feet)	For farms with one well (feet)	For farms with two wells (feet)	For farms with three wells (feet)	Under 50 feet	50 to 99 feet	100 to 199 feet	200 to 299 feet	300 to 499 feet	500 feet or more
United States .....2008 ..	100	97	101	92	154,457	96,525	99,419	34,883	19,606	1,676
.....2003 ..	97	106	95	87	145,380	98,750	77,323	30,680	16,675	(D)
<b>2008 DATA</b>										
Alabama .....	82	96	77	84	152	138	151	11	5	-
Alaska .....	49	52	(D)	-	12	7	(D)	-	-	-
Arizona .....	197	167	335	149	870	362	335	643	942	38
Arkansas .....	47	63	41	47	23,795	11,893	2,863	-	-	-
California .....	123	123	132	115	13,438	18,925	17,466	7,412	3,041	880
Colorado .....	105	104	133	83	3,887	2,238	2,929	1,391	164	184
Connecticut .....	77	83	(D)	-	37	(D)	(D)	(D)	-	-
Delaware .....	19	17	18	18	1,040	35	(D)	-	-	-
Florida .....	55	46	73	69	6,542	3,643	2,059	44	42	-
Georgia .....	124	144	124	111	1,651	2,236	3,009	518	587	21
Hawaii .....	128	123	145	-	4	25	85	-	(D)	(D)
Idaho .....	175	146	193	189	597	780	3,338	1,738	387	74
Illinois .....	28	30	43	31	3,469	307	59	20	-	-
Indiana .....	26	35	25	23	2,465	215	63	-	3	-
Iowa .....	20	21	21	18	1,193	28	(D)	(D)	-	-
Kansas .....	121	91	76	95	6,031	2,599	6,803	2,961	907	-
Kentucky .....	82	88	84	80	125	85	84	(D)	(D)	-
Louisiana .....	42	40	47	47	4,553	1,604	(D)	(D)	-	-
Maine .....	60	73	(D)	-	86	5	26	-	-	-
Maryland .....	34	42	58	40	660	151	(D)	-	(D)	-
Massachusetts .....	169	256	21	(D)	117	42	-	-	7	37
Michigan .....	32	42	33	31	3,383	560	124	-	-	-
Minnesota .....	34	43	34	27	3,489	648	164	-	-	-
Mississippi .....	43	47	42	39	7,387	3,798	205	-	-	-
Missouri .....	19	49	22	45	12,304	462	(D)	86	(D)	-
Montana .....	71	47	92	91	182	113	81	25	-	-
Nebraska .....	72	79	61	80	27,420	29,646	19,367	889	-	-
Nevada .....	89	72	71	122	395	684	704	54	-	-
New Hampshire .....	136	132	145	-	6	(D)	22	11	-	-
New Jersey .....	20	32	16	18	877	25	22	-	-	-
New Mexico .....	115	91	53	85	2,225	1,864	3,020	668	455	-
New York .....	42	41	34	47	328	20	44	-	-	-
North Carolina .....	52	77	23	43	349	512	59	-	-	-
North Dakota .....	32	40	53	36	1,277	317	27	-	-	-
Ohio .....	46	47	39	23	137	53	17	8	-	-
Oklahoma .....	119	98	107	119	1,380	609	850	457	417	(D)
Oregon .....	48	43	37	27	4,965	1,400	584	31	28	78
Pennsylvania .....	82	91	87	37	281	263	195	24	23	-
Rhode Island .....	188	229	(D)	(D)	16	-	(D)	(D)	-	5
South Carolina .....	52	58	55	52	576	459	94	(D)	(D)	-
South Dakota .....	38	51	44	28	1,328	240	102	25	-	-
Tennessee .....	75	83	115	67	270	170	85	-	30	-
Texas .....	179	170	194	177	9,440	6,283	32,055	17,350	12,081	180
Utah .....	99	80	94	102	257	460	1,019	30	13	-
Vermont .....	78	39	139	-	21	(D)	(D)	-	(D)	-
Virginia .....	157	179	(D)	-	55	106	18	3	94	-
Washington .....	107	61	117	136	2,423	1,173	714	360	287	168
West Virginia .....	138	158	(D)	(D)	5	15	13	19	-	-
Wisconsin .....	40	46	38	35	2,174	900	97	-	(D)	-
Wyoming .....	63	99	61	13	783	413	128	77	44	-
<b>Water Resources Regions</b>										
Region 01 New England .....	125	158	73	37	270	55	75	23	(D)	42
Region 02 Mid-Atlantic .....	44	79	47	31	3,140	552	258	32	111	-
Region 03 South Atlantic-Gulf .....	79	79	85	86	9,317	7,015	5,358	575	638	(D)
Region 04 Great Lakes .....	35	43	33	32	4,274	1,000	194	(D)	-	-
Region 05 Ohio .....	30	55	37	19	2,075	215	91	25	7	-
Region 06 Tennessee .....	104	105	134	69	79	(D)	82	-	(D)	-
Region 07 Upper Mississippi .....	32	40	36	29	9,231	1,530	338	(D)	(D)	-
Region 08 Lower Mississippi .....	42	53	43	44	42,813	16,904	3,380	(D)	24	-
Region 09 Souris-Red-Rainy .....	27	37	(D)	23	1,275	(D)	(D)	-	-	-
Region 10 Missouri .....	75	77	66	77	34,281	32,947	24,793	2,367	182	-
Region 11 Arkansas-White-Red .....	174	107	169	133	12,030	4,480	7,748	9,455	9,512	153
Region 12 Texas-Gulf .....	151	168	133	122	8,467	6,095	30,314	11,486	4,230	35
Region 13 Rio Grande .....	97	95	101	95	3,887	1,722	2,368	619	135	184
Region 14 Upper Colorado .....	108	115	27	113	138	111	346	-	20	-
Region 15 Lower Colorado .....	186	131	297	147	1,060	407	437	643	942	38
Region 16 Great Basin .....	104	90	100	131	604	1,091	2,040	84	25	-
Region 17 Pacific Northwest .....	108	61	117	123	8,003	3,219	4,028	2,123	690	320
Region 18 California .....	123	123	132	115	13,497	18,982	17,479	7,418	3,041	880
Region 19 Alaska .....	49	52	(D)	-	12	7	(D)	-	-	-
Region 20 Hawaii .....	128	123	145	-	4	25	85	-	(D)	(D)

See footnote(s) at end of table.

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**Table 16. Characteristics for Irrigation Wells Used on Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Average depth to bowls <sup>1</sup>				Number of wells with an average depth to bowls of -					
	For all pumped wells (feet)	For farms with one well (feet)	For farms with two wells (feet)	For farms with three wells (feet)	Under 50 feet	50 to 99 feet	100 to 199 feet	200 to 299 feet	300 to 499 feet	500 feet or more
United States .....2008 .. .....2003 ..	166 (NA)	158 (NA)	180 (NA)	163 (NA)	40,925 (NA)	103,752 (NA)	145,924 (NA)	59,040 (NA)	46,728 (NA)	10,197 (NA)
<b>2008 DATA</b>										
Alabama .....	118	123	115	95	38	173	214	12	20	-
Alaska .....	70	75	(D)	-	4	14	(D)	-	-	-
Arizona .....	316	296	444	245	129	896	134	210	1,230	591
Arkansas .....	95	114	98	117	1,173	22,034	14,807	448	89	-
California .....	236	185	280	198	1,448	5,131	25,760	10,703	13,474	4,646
Colorado .....	150	130	179	122	1,378	3,119	3,366	2,035	673	222
Connecticut .....	152	162	(D)	-	(D)	(D)	25	12	(D)	-
Delaware .....	69	57	60	57	322	727	24	(D)	-	(D)
Florida .....	122	94	151	147	3,094	2,028	5,451	1,097	648	12
Georgia .....	192	229	184	192	102	1,243	3,775	1,621	1,123	158
Hawaii .....	159	141	162	-	(D)	14	65	32	(D)	3
Idaho .....	229	217	239	253	197	460	2,014	3,131	926	186
Illinois .....	66	72	89	66	1,208	2,215	368	40	12	12
Indiana .....	56	64	53	49	1,339	1,145	251	(D)	-	(D)
Iowa .....	55	77	53	59	568	584	84	-	4	-
Kansas .....	190	157	132	146	1,545	5,268	4,191	4,659	3,308	330
Kentucky .....	109	107	111	146	60	124	102	8	19	-
Louisiana .....	83	87	84	99	599	4,310	1,353	115	33	4
Maine .....	104	(D)	(D)	-	27	44	43	3	-	-
Maryland .....	80	85	109	93	247	351	206	(D)	(D)	-
Massachusetts .....	270	422	30	(D)	43	116	-	-	7	37
Michigan .....	87	98	89	97	804	1,964	1,227	63	9	-
Minnesota .....	85	98	85	65	913	2,323	825	211	29	-
Mississippi .....	68	65	68	68	552	10,064	774	-	-	-
Missouri .....	57	124	66	118	4,317	7,903	417	114	108	10
Montana .....	163	143	154	163	25	89	175	56	56	-
Nebraska .....	130	151	122	160	9,730	17,105	37,014	12,684	789	-
Nevada .....	189	155	161	201	11	130	846	732	118	-
New Hampshire .....	214	205	237	-	6	-	11	19	7	-
New Jersey .....	58	71	54	53	356	491	67	10	-	-
New Mexico .....	187	147	115	149	464	1,761	2,818	1,933	1,126	130
New York .....	75	64	76	117	115	191	(D)	54	(D)	-
North Carolina .....	137	157	54	149	186	134	404	143	53	-
North Dakota .....	63	80	94	70	692	700	213	16	-	-
Ohio .....	109	110	102	63	28	95	66	13	(D)	(D)
Oklahoma .....	202	162	157	212	444	953	593	790	797	144
Oregon .....	110	101	84	79	2,616	1,299	1,912	1,057	98	104
Pennsylvania .....	175	169	212	149	32	77	437	148	66	26
Rhode Island .....	246	(D)	(D)	(D)	(D)	(D)	5	-	13	5
South Carolina .....	138	133	172	117	79	95	843	77	38	-
South Dakota .....	74	106	83	71	789	616	222	43	-	25
Tennessee .....	124	143	185	104	95	209	153	64	34	-
Texas .....	245	249	283	259	2,992	4,005	31,015	15,201	21,012	3,164
Utah .....	186	171	172	193	7	122	621	990	39	-
Vermont .....	149	147	153	-	(D)	14	-	8	(D)	4
Virginia .....	209	229	(D)	-	(D)	7	125	(D)	106	-
Washington .....	165	102	180	178	1,051	1,241	1,840	110	532	351
West Virginia .....	176	170	(D)	(D)	5	15	(D)	23	(D)	-
Wisconsin .....	90	113	95	87	417	1,898	715	128	26	-
Wyoming .....	102	146	115	37	632	249	315	172	69	8
<b>Water Resources Regions</b>										
Region 01 New England .....	205	256	129	63	102	166	84	34	40	46
Region 02 Mid-Atlantic .....	98	132	119	92	1,034	1,815	754	273	173	44
Region 03 South Atlantic-Gulf .....	148	138	155	163	3,503	3,712	10,704	2,950	1,885	170
Region 04 Great Lakes .....	86	96	85	90	1,023	2,824	1,491	125	(D)	-
Region 05 Ohio .....	61	89	65	52	1,097	1,019	240	30	20	7
Region 06 Tennessee .....	160	151	230	104	(D)	91	(D)	51	28	-
Region 07 Upper Mississippi .....	77	95	83	68	2,941	6,029	1,756	325	69	16
Region 08 Lower Mississippi .....	83	99	85	98	5,986	39,745	16,659	584	148	4
Region 09 Souris-Red-Rainy .....	62	75	(D)	65	662	482	244	-	-	-
Region 10 Missouri .....	130	139	122	151	13,176	21,657	41,870	16,364	1,426	77
Region 11 Arkansas-White-Red .....	255	173	252	213	3,138	9,469	6,110	6,210	15,464	2,987
Region 12 Texas-Gulf .....	208	249	205	185	2,124	3,888	30,349	13,031	10,550	685
Region 13 Rio Grande .....	161	150	161	160	575	3,388	2,158	2,038	476	280
Region 14 Upper Colorado .....	160	128	75	209	-	151	192	252	20	-
Region 15 Lower Colorado .....	299	236	399	241	191	947	297	271	1,230	591
Region 16 Great Basin .....	197	182	185	215	18	210	1,696	1,751	157	12
Region 17 Pacific Northwest .....	165	113	167	173	3,868	2,995	5,362	3,979	1,550	629
Region 18 California .....	236	185	279	198	1,460	5,136	25,835	10,740	13,480	4,646
Region 19 Alaska .....	70	75	(D)	-	4	14	(D)	-	-	-
Region 20 Hawaii .....	159	141	162	-	(D)	14	65	32	(D)	3

<sup>1</sup> Data do not include flowing or artesian wells.

**Table 17. Irrigation Pumps on Farms: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms	Total pumps <sup>1</sup>	Farms with -									
			1 pump	2 pumps	3 pumps	4 pumps	5 pumps	6 or 7 pumps	8 or 9 pumps	10 to 19 pumps	20 to 29 pumps	30 pumps or more
United States .....	2008 .. 158,622	573,924	82,284	24,375	13,787	9,330	4,297	6,944	4,705	8,535	2,374	1,991
	2003 .. 146,651	517,238	70,243	28,592	11,966	8,110	4,783	6,568	4,508	8,489	2,001	1,391
<b>2008 DATA</b>												
Alabama .....	665	1,250	427	127	40	27	14	13	8	9	-	-
Alaska .....	23	29	19	3	-	1	-	-	-	-	-	-
Arizona .....	1,163	4,278	525	327	64	41	39	46	27	62	16	16
Arkansas .....	3,959	46,441	490	335	244	324	232	337	312	980	361	344
California .....	41,762	101,675	28,348	3,892	2,380	2,856	574	1,448	1,088	807	179	190
Colorado .....	4,720	18,831	2,271	806	433	303	100	253	185	194	54	121
Connecticut .....	144	217	102	32	1	4	1	3	1	-	-	-
Delaware .....	305	1,237	91	46	52	34	22	27	10	18	2	3
Florida .....	4,805	14,572	2,348	1,101	322	439	164	136	79	143	30	43
Georgia .....	3,518	11,964	1,258	715	629	287	100	177	117	218	10	7
Hawaii .....	258	444	198	23	13	17	1	4	-	-	-	2
Idaho .....	9,033	25,403	5,082	1,589	865	411	181	293	173	303	82	54
Illinois .....	1,081	3,974	407	211	118	71	67	73	38	79	15	2
Indiana .....	1,075	3,300	429	228	147	74	60	61	32	35	5	4
Iowa .....	507	1,330	236	113	49	36	13	37	7	14	2	-
Kansas .....	4,451	20,362	1,407	704	475	412	233	455	229	438	58	40
Kentucky .....	668	986	486	115	42	15	-	5	1	4	-	-
Louisiana .....	1,571	7,742	440	291	173	113	96	177	70	150	44	17
Maine .....	193	393	160	10	7	4	3	1	3	2	-	3
Maryland .....	597	1,405	345	74	73	42	18	17	10	15	3	-
Massachusetts .....	640	1,933	267	201	55	21	29	34	13	10	7	3
Michigan .....	2,121	6,422	1,066	420	193	127	60	70	70	84	18	13
Minnesota .....	1,492	4,729	741	308	134	68	45	80	31	60	9	16
Mississippi .....	1,212	12,152	247	103	80	73	75	109	94	247	111	73
Missouri .....	1,877	13,593	631	248	159	75	85	117	89	291	106	76
Montana .....	4,047	9,845	1,787	1,239	252	300	171	175	45	68	7	3
Nebraska .....	14,711	82,372	3,062	2,944	1,676	1,174	860	1,357	1,042	2,105	287	204
Nevada .....	874	2,350	435	222	51	58	23	31	23	22	5	4
New Hampshire .....	82	125	59	11	6	5	-	1	-	-	-	-
New Jersey .....	574	1,468	307	91	67	35	29	16	6	18	2	3
New Mexico .....	4,047	10,064	2,708	576	265	125	55	67	41	154	31	25
New York .....	482	883	284	92	66	18	8	5	8	1	-	-
North Carolina .....	1,644	3,962	909	372	156	58	6	58	1	76	4	4
North Dakota .....	550	2,024	240	105	62	28	29	32	20	22	5	7
Ohio .....	318	512	234	43	24	5	5	4	-	2	1	-
Oklahoma .....	1,333	4,239	596	334	119	39	47	82	31	63	16	6
Oregon .....	10,602	21,172	6,933	1,765	894	328	155	157	118	201	40	11
Pennsylvania .....	1,005	1,574	657	246	63	23	4	6	3	1	2	-
Rhode Island .....	50	91	32	7	3	7	-	-	1	-	-	-
South Carolina .....	700	1,708	383	125	54	76	22	9	7	17	6	1
South Dakota .....	920	2,372	467	185	84	66	34	18	27	37	2	-
Tennessee .....	441	932	275	63	47	17	9	14	8	7	1	-
Texas .....	10,310	82,335	3,511	1,313	1,138	533	267	589	408	1,172	737	642
Utah .....	2,529	4,979	1,400	513	413	89	34	40	11	26	2	1
Vermont .....	53	95	27	14	8	4	-	-	-	-	-	-
Virginia .....	645	1,097	466	53	90	7	13	6	3	6	-	1
Washington .....	11,525	24,837	7,756	1,513	1,034	269	243	205	136	290	46	33
West Virginia .....	87	106	72	13	-	2	-	-	-	-	-	-
Wisconsin .....	1,235	4,789	574	193	156	80	42	54	40	67	16	13
Wyoming .....	2,018	5,331	1,089	321	311	109	29	45	39	17	52	6
<b>Water Resources Regions</b>												
Region 01 New England .....	1,130	2,790	634	265	75	41	33	39	18	12	7	6
Region 02 Mid-Atlantic .....	3,056	6,781	1,812	453	360	159	91	69	38	58	9	7
Region 03 South Atlantic-Gulf .....	11,574	33,693	5,556	2,459	1,207	870	308	396	209	464	50	55
Region 04 Great Lakes .....	3,009	8,612	1,539	631	277	174	88	77	84	102	22	15
Region 05 Ohio .....	1,810	3,754	1,120	342	124	63	50	48	27	31	1	4
Region 06 Tennessee .....	436	829	261	66	58	33	1	11	5	1	-	-
Region 07 Upper Mississippi .....	3,794	13,215	1,692	724	423	203	154	228	100	200	43	27
Region 08 Lower Mississippi .....	7,069	71,690	1,087	758	552	497	441	671	504	1,540	541	478
Region 09 Souris-Red-Rainy .....	385	1,607	156	67	46	25	12	17	17	24	2	5
Region 10 Missouri .....	25,436	117,534	7,969	5,172	2,626	1,950	1,217	1,965	1,382	2,438	392	325
Region 11 Arkansas-White-Red .....	7,683	47,398	1,892	1,235	1,017	638	388	731	387	976	200	219
Region 12 Texas-Gulf .....	8,455	64,699	3,384	891	982	385	173	362	303	792	677	506
Region 13 Rio Grande .....	3,613	10,552	2,066	781	255	130	42	45	41	163	59	31
Region 14 Upper Colorado .....	2,551	3,749	1,949	329	216	31	14	3	5	-	-	1
Region 15 Lower Colorado .....	1,366	4,720	657	369	76	41	39	57	27	66	17	17
Region 16 Great Basin .....	3,678	7,399	2,258	694	359	154	51	66	35	44	12	5
Region 17 Pacific Northwest .....	31,176	71,481	19,513	5,213	2,735	975	598	683	407	798	155	99
Region 18 California .....	42,120	102,948	28,522	3,900	2,386	2,943	596	1,458	1,118	821	187	189
Region 19 Alaska .....	23	29	19	3	-	1	-	-	-	-	-	-
Region 20 Hawaii .....	258	444	198	23	13	17	1	4	-	-	-	2

<sup>1</sup> Data include only well pumps for wells used.



**Table 18. Irrigation Pumps on Farms for Wells: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms	Pumps <sup>1</sup>	Average operating pressure (see text) for -				Well pumps with average operating pressure of -						
			All pumped wells (psi)	Farms with one well (psi)	Farms with two wells (psi)	Farms with three wells (psi)	Under 30 psi	30 to 59 psi	60 to 79 psi	80 to 99 psi	100 or more psi		
											Well pumps	Average psi	
United States ..... 2008 ..	97,296	406,566	35	40	42	37	172,126	193,841	29,694	5,734	5,171	116	
..... 2003 ..	100,717	371,010	37	43	38	41	130,198	184,194	45,574	5,649	5,395	116	
<b>2008 DATA</b>													
Alabama .....	290	457	58	55	65	62	(D)	322	99	(D)	26	178	
Alaska .....	16	22	48	44	(D)	-	(D)	5	7	(D)	-	-	
Arizona .....	844	3,190	24	30	22	23	2,437	745	8	-	-	-	
Arkansas .....	3,646	38,551	33	32	35	25	18,134	18,566	1,791	60	-	-	
California .....	29,998	61,162	33	29	39	29	29,848	26,376	4,144	251	543	121	
Colorado .....	2,523	10,793	39	41	46	40	1,382	9,160	251	-	-	-	
Connecticut .....	60	65	91	92	(D)	-	-	(D)	7	32	(D)	100	
Delaware .....	272	1,093	43	55	42	38	105	827	116	17	28	109	
Florida .....	4,216	12,330	41	40	50	36	2,867	7,343	1,604	152	364	118	
Georgia .....	2,509	8,022	51	42	47	53	1,044	4,863	1,133	454	528	119	
Hawaii .....	86	120	53	44	54	-	(D)	63	40	(D)	(D)	(D)	
Idaho .....	2,254	6,914	58	57	52	60	490	2,759	3,217	348	100	108	
Illinois .....	1,038	(D)	40	41	46	40	568	3,087	142	(D)	30	118	
Indiana .....	912	2,746	51	66	55	48	350	1,705	382	184	125	123	
Iowa .....	451	1,240	39	47	37	41	2,400	892	66	32	10	133	
Kansas .....	4,092	19,301	28	31	31	26	12,873	6,184	105	139	-	-	
Kentucky .....	214	313	49	52	52	34	67	150	61	19	16	108	
Louisiana .....	1,327	6,414	15	37	11	11	5,643	541	123	62	45	148	
Maine .....	93	117	55	44	(D)	-	-	(D)	41	-	(D)	(D)	
Maryland .....	294	827	40	46	38	38	213	509	69	20	16	106	
Massachusetts .....	141	203	90	99	40	(D)	37	10	33	42	81	138	
Michigan .....	1,423	4,067	67	60	60	78	332	1,218	1,202	742	573	113	
Minnesota .....	1,379	4,301	45	60	48	48	564	3,004	383	176	174	116	
Mississippi .....	1,084	11,390	32	23	31	32	4,295	6,646	342	63	44	122	
Missouri .....	1,415	12,869	18	31	23	21	10,767	1,907	172	(D)	(D)	(D)	
Montana .....	183	401	57	59	63	38	(D)	281	52	41	(D)	123	
Nebraska .....	14,609	77,322	39	45	50	38	19,231	51,229	5,653	727	482	105	
Nevada .....	732	(D)	41	47	43	39	(D)	1,308	245	-	-	-	
New Hampshire .....	37	43	58	68	34	-	4	(D)	4	10	(D)	(D)	
New Jersey .....	410	924	67	64	64	69	47	263	398	103	113	113	
New Mexico .....	3,455	8,232	28	27	25	46	6,269	1,454	392	-	117	133	
New York .....	293	392	48	42	75	41	89	218	29	45	11	149	
North Carolina .....	381	920	35	29	49	33	388	505	13	-	14	157	
North Dakota .....	358	1,621	44	43	47	46	181	1,246	137	(D)	(D)	(D)	
Ohio .....	171	215	55	52	61	54	23	97	80	-	15	130	
Oklahoma .....	1,160	(D)	33	35	39	45	1,355	2,158	185	(D)	17	114	
Oregon .....	4,258	7,086	57	56	41	60	353	3,158	2,459	680	436	105	
Pennsylvania .....	562	786	33	35	23	41	367	335	19	12	53	111	
Rhode Island .....	32	36	56	58	(D)	(D)	5	12	14	5	-	-	
South Carolina .....	470	1,132	47	50	48	46	79	911	132	10	-	-	
South Dakota .....	643	1,695	44	52	47	49	335	979	294	70	17	106	
Tennessee .....	243	(D)	45	52	44	44	107	321	108	(D)	14	111	
Texas .....	8,982	77,389	27	31	24	26	49,903	26,588	818	40	40	100	
Utah .....	861	(D)	43	51	41	37	116	1,357	301	(D)	-	-	
Vermont .....	29	36	63	63	63	-	-	15	13	8	-	-	
Virginia .....	240	276	77	83	(D)	-	(D)	35	122	(D)	67	116	
Washington .....	3,107	5,125	64	56	72	61	162	2,064	1,523	677	699	120	
West Virginia .....	42	52	51	53	(D)	(D)	4	34	14	-	-	-	
Wisconsin .....	853	3,184	61	62	76	55	107	1,476	1,031	318	252	111	
Wyoming .....	608	1,445	42	31	38	52	435	836	120	(D)	(D)	(D)	
<b>Water Resources Regions</b>													
Region 01 New England .....	371	472	76	76	48	76	46	105	99	93	129	126	
Region 02 Mid-Atlantic .....	1,881	4,093	49	54	44	46	736	2,106	721	250	280	115	
Region 03 South Atlantic-Gulf .....	7,947	22,924	45	41	49	44	4,453	13,915	3,019	624	913	120	
Region 04 Great Lakes .....	2,033	5,472	65	62	63	74	395	1,912	1,534	908	723	114	
Region 05 Ohio .....	971	(D)	45	47	50	43	503	1,481	280	97	(D)	131	
Region 06 Tennessee .....	169	244	60	57	(D)	53	35	130	(D)	(D)	40	136	
Region 07 Upper Mississippi .....	3,246	11,136	46	55	50	45	1,365	7,449	1,470	448	404	114	
Region 08 Lower Mississippi .....	6,664	63,126	29	36	24	22	34,349	26,094	2,409	157	117	129	
Region 09 Souris-Red-Rainy .....	323	1,388	44	49	48	50	209	1,000	(D)	68	(D)	(D)	
Region 10 Missouri .....	19,531	94,570	39	43	47	39	25,095	61,430	6,563	925	557	106	
Region 11 Arkansas-White-Red .....	6,885	43,378	26	31	30	28	29,837	13,117	248	124	52	104	
Region 12 Texas-Gulf .....	7,277	60,627	28	32	25	28	36,573	23,191	818	40	5	100	
Region 13 Rio Grande .....	3,406	8,915	32	29	29	51	4,635	3,772	391	-	117	133	
Region 14 Upper Colorado .....	419	615	41	42	72	34	(D)	566	(D)	26	-	-	
Region 15 Lower Colorado .....	1,016	3,527	25	25	24	23	2,601	882	44	-	-	-	
Region 16 Great Basin .....	1,831	(D)	45	54	46	43	499	2,408	885	(D)	-	-	
Region 17 Pacific Northwest .....	9,157	18,383	59	56	53	62	938	7,743	6,827	1,644	1,231	113	
Region 18 California .....	24,067	61,297	33	30	39	29	29,816	26,472	4,197	265	547	121	
Region 19 Alaska .....	16	22	48	44	(D)	-	(D)	5	7	(D)	-	-	
Region 20 Hawaii .....	86	120	53	44	54	-	(D)	63	40	(D)	(D)	(D)	

<sup>1</sup> Data include only well pumps for wells used.

**Table 19. Irrigation Pumps on Farms Other Than for Wells: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Pumps to discharge water from tailwater pits											
	Farms	Pumps	Average pumping lift (feet)	Average operating pressure (psi)	Average discharge capacity (gpm)	Pumps by discharge capacity						
						Less than 500 gpm	500 to 999 gpm	1,000 to 1,499 gpm	1,500 to 1,999 gpm	2,000 to 2,999 gpm	3,000 or more gpm	
											Pumps	Average gpm
United States .....	10,423	22,996	16	29	876	5,029	11,243	3,456	1,576	1,007	685	4,420
2003 ..	11,548	21,609	13	30	813	7,318	8,348	3,391	581	1,240	731	4,550
<b>2008 DATA</b>												
Alabama .....	23	49	16	43	561	(D)	20	(D)	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	161	291	25	28	1,243	-	45	206	19	(D)	(D)	(D)
Arkansas .....	912	2,110	13	22	1,980	235	131	164	827	403	350	4,318
California .....	2,648	6,041	13	24	915	1,802	1,391	2,439	99	163	147	5,894
Colorado .....	1,110	4,350	13	27	524	74	4,246	30	-	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	2	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-
Florida .....	61	155	11	27	2,081	(D)	32	(D)	(D)	75	(D)	3,500
Georgia .....	104	376	18	58	1,895	-	79	63	-	234	-	-
Hawaii .....	12	12	15	32	1,444	-	-	12	-	-	-	-
Idaho .....	602	1,777	28	49	687	25	1,637	115	-	-	-	-
Illinois .....	4	30	7	32	2,896	-	-	(D)	-	-	(D)	(D)
Indiana .....	3	(D)	11	30	1,275	-	(D)	(D)	-	-	-	-
Iowa .....	8	11	22	38	63	11	-	-	-	-	-	-
Kansas .....	166	448	11	19	441	316	132	-	-	-	-	-
Kentucky .....	4	(D)	11	21	650	(D)	-	(D)	-	-	-	-
Louisiana .....	22	29	11	34	3,690	-	-	(D)	-	9	(D)	4,767
Maine .....	2	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-	-
Maryland .....	3	(D)	8	27	540	(D)	(D)	-	-	-	-	-
Massachusetts .....	132	276	7	41	1,007	(D)	(D)	101	-	17	(D)	(D)
Michigan .....	26	26	15	32	735	-	26	-	-	-	-	-
Minnesota .....	10	10	(D)	30	600	-	10	-	-	-	-	-
Mississippi .....	58	106	9	24	1,764	7	7	12	25	45	10	3,100
Missouri .....	1	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-
Montana .....	263	479	18	45	706	177	185	108	-	(D)	(D)	(D)
Nebraska .....	1,727	2,918	17	19	531	986	1,932	-	-	-	-	-
Nevada .....	84	84	17	31	1,108	(D)	6	73	(D)	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	8	29	7	39	890	-	18	11	-	-	-	-
New Mexico .....	461	499	22	31	454	(D)	370	(D)	-	-	-	-
New York .....	7	10	20	53	1,226	(D)	-	(D)	(D)	-	-	-
North Carolina .....	128	294	87	78	423	246	-	-	48	-	-	-
North Dakota .....	2	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-
Ohio .....	6	10	16	23	320	(D)	(D)	-	-	-	-	-
Oklahoma .....	104	155	22	47	434	142	13	-	-	-	-	-
Oregon .....	281	387	12	36	627	51	322	(D)	(D)	(D)	-	-
Pennsylvania .....	24	26	16	38	358	(D)	(D)	-	-	-	-	-
Rhode Island .....	1	(D)	(D)	(D)	(D)	-	-	-	-	-	(D)	(D)
South Carolina .....	17	19	40	62	770	6	5	8	-	-	-	-
South Dakota .....	8	11	14	33	1,179	-	(D)	(D)	-	-	-	-
Tennessee .....	2	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-
Texas .....	446	730	14	21	968	181	444	13	-	4	88	3,284
Utah .....	401	550	15	32	1,588	3	3	9	529	-	6	3,000
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	9	34	46	29	131	30	(D)	(D)	-	-	-	-
Washington .....	124	207	11	54	381	160	47	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	18	36	10	39	1,384	(D)	-	(D)	(D)	-	-	-
Wyoming .....	228	384	25	37	404	315	38	-	(D)	(D)	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	135	282	7	41	1,017	77	69	101	-	17	18	3,967
Region 02 Mid-Atlantic .....	43	73	11	44	692	26	29	18	-	-	-	-
Region 03 South Atlantic-Gulf .....	337	922	40	58	1,304	309	135	95	58	309	16	3,500
Region 04 Great Lakes .....	37	43	16	34	944	-	30	(D)	-	-	-	-
Region 05 Ohio .....	4	(D)	(D)	19	100	(D)	-	-	-	-	-	-
Region 06 Tennessee .....	5	(D)	(D)	116	588	-	(D)	-	-	-	-	-
Region 07 Upper Mississippi .....	35	75	8	35	1,779	(D)	(D)	19	(D)	-	(D)	(D)
Region 08 Lower Mississippi .....	880	2,049	12	21	1,974	242	131	165	730	445	336	4,381
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	2,709	7,392	16	25	533	1,357	5,867	128	(D)	(D)	(D)	(D)
Region 11 Arkansas-White-Red .....	812	1,313	16	25	751	544	570	23	122	12	42	3,714
Region 12 Texas-Gulf .....	228	393	15	20	1,216	127	174	-	-	4	88	3,284
Region 13 Rio Grande .....	224	327	10	25	653	41	255	31	-	-	-	-
Region 14 Upper Colorado .....	715	837	19	31	769	124	509	-	204	-	-	-
Region 15 Lower Colorado .....	188	318	24	28	1,265	-	45	211	41	(D)	(D)	(D)
Region 16 Great Basin .....	360	428	16	33	1,453	10	23	77	307	5	6	3,000
Region 17 Pacific Northwest .....	1,037	2,453	23	47	630	355	1,972	(D)	(D)	(D)	-	-
Region 18 California .....	2,662	6,059	13	24	914	1,802	1,411	2,442	99	158	147	5,894
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	12	12	15	32	1,444	-	-	12	-	-	-	-

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**Table 19. Irrigation Pumps on Farms Other Than for Wells: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Pumps to discharge water from ponds, lakes, reservoirs, and rivers												
	Farms	Pumps	Average pumping lift (feet)	Average operating pressure (psi)	Average discharge capacity (gpm)	Pumps by discharge capacity						3,000 or more gpm	
						Less than 500 gpm	500 to 999 gpm	1,000 to 1,499 gpm	1,500 to 1,999 gpm	2,000 to 2,999 gpm	Pumps	Average gpm	
United States .....	63,434	112,661	23	51	1,088	27,639	37,957	23,006	14,560	4,237	5,262	5,297	
2008 ..	45,835	94,179	19	49	1,014	34,645	28,091	11,745	4,886	(D)	(D)	5,148	
2003 ..													
<b>2008 DATA</b>													
Alabama .....	409	727	37	66	895	81	480	117	31	4	14	3,429	
Alaska .....	4	4	36	51	(D)	(D)	(D)	-	-	-	-	-	
Arizona .....	62	315	13	47	1,694	60	-	38	179	(D)	(D)	3,941	
Arkansas .....	1,350	4,267	13	32	2,540	273	417	496	469	1,564	1,048	4,890	
California .....	19,491	24,534	18	36	1,027	1,759	10,412	6,658	4,960	498	247	4,945	
Colorado .....	1,702	2,517	18	45	708	613	1,527	297	76	4	-	-	
Connecticut .....	107	146	28	53	1,503	73	(D)	18	(D)	(D)	(D)	(D)	
Delaware .....	81	134	13	59	940	23	94	5	(D)	(D)	7	4,714	
Florida .....	758	1,693	8	37	2,814	454	304	84	128	226	497	7,201	
Georgia .....	1,799	3,387	28	74	736	418	2,396	457	93	14	9	3,000	
Hawaii .....	98	153	134	43	1,352	(D)	-	(D)	103	-	-	-	
Idaho .....	5,682	13,089	18	58	1,126	1,817	2,696	8,082	282	66	146	4,940	
Illinois .....	72	89	10	55	809	(D)	52	11	-	-	(D)	(D)	
Indiana .....	327	537	11	63	1,497	69	246	183	4	8	27	13,889	
Iowa .....	59	75	17	59	549	11	64	-	-	-	-	-	
Kansas .....	432	563	15	52	793	-	450	105	8	-	-	-	
Kentucky .....	491	621	24	65	358	484	66	55	7	9	-	-	
Louisiana .....	335	1,014	15	16	3,124	62	-	80	90	139	643	4,052	
Maine .....	106	265	22	76	563	180	68	(D)	(D)	-	(D)	(D)	
Maryland .....	359	561	19	58	499	154	382	25	-	-	-	-	
Massachusetts .....	492	1,371	7	52	906	265	885	130	(D)	(D)	44	4,511	
Michigan .....	1,073	2,257	11	77	664	663	1,288	146	56	87	17	3,647	
Minnesota .....	213	395	12	57	1,123	84	130	121	(D)	(D)	26	(D)	
Mississippi .....	240	511	13	34	1,996	-	20	43	111	307	30	3,683	
Missouri .....	481	697	15	61	973	37	252	376	18	(D)	(D)	2,500	
Montana .....	3,536	8,245	29	48	1,477	1,094	918	1,157	4,347	362	367	6,009	
Nebraska .....	983	1,395	29	38	815	(D)	1,111	(D)	-	(D)	-	-	
Nevada .....	117	149	22	38	1,505	(D)	(D)	110	(D)	6	9	4,111	
New Hampshire .....	54	82	36	71	245	72	(D)	(D)	-	-	-	-	
New Jersey .....	230	499	11	71	952	149	113	99	83	(D)	(D)	(D)	
New Mexico .....	226	514	142	66	3,855	33	20	-	6	66	389	4,606	
New York .....	204	436	18	66	582	181	184	(D)	(D)	(D)	-	-	
North Carolina .....	1,282	2,726	17	67	604	1,657	703	173	120	(D)	(D)	7,900	
North Dakota .....	215	375	31	45	1,191	26	104	183	8	37	17	3,341	
Ohio .....	168	280	14	65	474	121	121	38	-	-	-	-	
Oklahoma .....	190	290	15	50	742	69	198	(D)	-	(D)	(D)	(D)	
Oregon .....	6,689	12,516	35	67	662	5,017	6,745	317	117	160	160	3,199	
Pennsylvania .....	462	690	35	68	440	520	84	(D)	73	(D)	(D)	(D)	
Rhode Island .....	20	36	14	53	1,727	18	(D)	-	-	(D)	(D)	(D)	
South Carolina .....	309	496	20	54	875	121	275	(D)	(D)	(D)	44	3,750	
South Dakota .....	243	505	93	50	3,147	24	159	79	11	65	167	7,149	
Tennessee .....	189	343	31	64	554	167	133	34	(D)	133	(D)	(D)	
Texas .....	1,946	2,956	21	39	667	1,811	121	54	878	45	47	4,064	
Utah .....	1,242	2,124	17	46	789	510	1,270	288	24	32	-	-	
Vermont .....	32	59	19	43	244	53	-	6	-	-	-	-	
Virginia .....	406	722	28	89	634	217	450	31	10	(D)	(D)	(D)	
Washington .....	6,843	13,974	27	57	910	7,465	2,348	1,332	1,764	117	948	5,505	
West Virginia .....	52	54	28	53	(D)	54	-	-	-	-	-	-	
Wisconsin .....	504	1,402	8	65	1,990	263	240	191	315	197	196	6,569	
Wyoming .....	1,069	1,871	20	41	916	346	389	999	77	52	8	8,000	
<b>Water Resources Regions</b>													
Region 01 New England .....	796	1,923	12	56	883	631	978	157	46	44	67	5,910	
Region 02 Mid-Atlantic .....	1,361	2,416	24	69	604	1,024	1,022	182	116	57	15	4,307	
Region 03 South Atlantic-Gulf .....	4,722	9,165	21	64	1,112	2,682	4,281	833	396	355	618	6,946	
Region 04 Great Lakes .....	1,475	3,000	11	75	666	908	1,625	231	121	98	17	3,647	
Region 05 Ohio .....	916	1,269	22	66	545	709	267	199	76	(D)	(D)	(D)	
Region 06 Tennessee .....	297	572	24	57	605	297	172	79	8	4	12	3,283	
Region 07 Upper Mississippi .....	790	1,820	10	61	1,929	300	436	369	284	204	227	7,377	
Region 08 Lower Mississippi .....	1,542	4,706	14	27	2,566	178	340	414	581	1,636	1,557	4,039	
Region 09 Souris-Red-Rainy .....	83	208	18	54	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	
Region 10 Missouri .....	6,031	11,699	27	47	1,323	1,103	3,807	2,904	2,865	461	559	6,297	
Region 11 Arkansas-White-Red .....	955	1,841	16	44	1,918	274	628	361	100	277	201	8,477	
Region 12 Texas-Gulf .....	1,841	2,761	20	40	602	1,811	100	29	729	45	47	4,064	
Region 13 Rio Grande .....	233	485	53	45	1,712	33	92	105	142	70	43	4,931	
Region 14 Upper Colorado .....	1,182	1,891	42	50	1,307	598	763	162	40	-	328	4,583	
Region 15 Lower Colorado .....	72	334	13	47	1,655	60	18	39	179	(D)	(D)	3,941	
Region 16 Great Basin .....	1,631	2,473	18	49	1,000	426	860	1,103	37	38	9	4,111	
Region 17 Pacific Northwest .....	19,590	40,365	27	60	919	14,566	11,368	9,020	3,768	389	1,254	5,145	
Region 18 California .....	19,815	25,576	19	37	1,014	1,988	11,144	6,724	4,969	504	247	4,945	
Region 19 Alaska .....	4	4	36	51	(D)	(D)	(D)	-	-	-	-	-	
Region 20 Hawaii .....	98	153	134	43	1,352	(D)	-	(D)	103	-	-	-	

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**Table 19. Irrigation Pumps on Farms Other Than for Wells: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Relifting or boosting water within systems											
	Farms	Pumps	Average pumping lift (feet)	Average operating pressure (psi)	Average discharge capacity (gpm)	Pumps by discharge capacity						
						Less than 500 gpm	500 to 999 gpm	1,000 to 1,499 gpm	1,500 to 1,999 gpm	2,000 to 2,999 gpm	3,000 or more gpm	
										Pumps	Average gpm	
United States .....	14,754	31,701	46	48	1,261	10,227	5,792	7,815	2,600	2,837	2,430	5,734
2003 ..	14,613	34,236	19	45	1,325	9,856	7,755	4,865	2,553	5,927	3,280	4,771
<b>2008 DATA</b>												
Alabama .....	13	17	20	50	571	(D)	8	(D)	-	-	-	-
Alaska .....	3	3	29	60	300	3	-	-	-	-	-	-
Arizona .....	209	482	28	64	2,486	39	(D)	51	(D)	261	100	3,989
Arkansas .....	579	1,513	11	31	2,883	30	28	76	70	431	878	3,710
California .....	3,622	9,938	59	49	1,015	3,292	1,259	3,047	1,413	855	72	5,664
Colorado .....	727	1,171	12	28	1,197	23	544	523	3	21	57	6,502
Connecticut .....	1	(D)	(D)	(D)	(D)	-	-	-	-	-	(D)	(D)
Delaware .....	3	(D)	7	110	1,054	-	(D)	-	-	(D)	-	-
Florida .....	74	394	7	34	4,823	16	82	14	41	34	207	8,201
Georgia .....	80	179	28	56	1,509	15	24	36	-	104	-	-
Hawaii .....	96	159	64	39	3,691	(D)	(D)	-	-	(D)	104	5,499
Idaho .....	2,202	3,623	33	53	1,275	221	264	2,868	170	(D)	(D)	(D)
Illinois .....	-	-	-	-	-	-	-	-	-	-	-	-
Indiana .....	10	12	18	54	1,025	-	5	7	-	-	-	-
Iowa .....	3	4	29	44	132	4	-	-	-	-	-	-
Kansas .....	34	50	18	31	1,116	-	31	(D)	-	(D)	-	-
Kentucky .....	47	48	32	61	173	41	7	-	-	-	-	-
Louisiana .....	111	285	16	18	2,546	18	4	16	4	198	45	3,867
Maine .....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Maryland .....	5	(D)	8	75	483	(D)	(D)	(D)	-	-	-	-
Massachusetts .....	50	83	7	35	6,728	-	(D)	29	(D)	-	47	11,147
Michigan .....	53	72	9	56	928	(D)	9	12	-	-	11	4,000
Minnesota .....	12	23	15	45	1,887	40	6	-	(D)	12	(D)	(D)
Mississippi .....	56	145	11	22	2,094	(D)	19	(D)	17	75	25	3,480
Missouri .....	21	25	25	47	788	9	4	12	-	-	-	-
Montana .....	281	720	32	46	1,133	130	127	247	142	54	20	6,000
Nebraska .....	391	737	8	45	662	(D)	634	(D)	-	-	-	-
Nevada .....	165	280	13	59	1,063	64	11	169	31	(D)	(D)	(D)
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	6	16	7	53	1,491	(D)	(D)	-	(D)	-	-	-
New Mexico .....	500	819	113	32	4,663	149	98	19	-	-	553	6,746
New York .....	39	45	12	61	1,688	(D)	(D)	(D)	-	31	-	-
North Carolina .....	22	22	8	55	611	18	-	-	-	4	-	-
North Dakota .....	14	26	40	62	2,015	(D)	(D)	3	(D)	6	(D)	(D)
Ohio .....	7	7	20	50	291	4	3	-	-	-	-	-
Oklahoma .....	38	73	190	37	715	17	44	-	12	-	-	-
Oregon .....	732	1,183	80	61	829	166	788	196	26	(D)	(D)	(D)
Pennsylvania .....	38	72	20	62	287	69	3	-	-	-	-	-
Rhode Island .....	11	17	95	52	(D)	(D)	-	-	-	-	(D)	(D)
South Carolina .....	57	61	18	30	281	(D)	(D)	-	-	(D)	-	-
South Dakota .....	91	161	20	51	830	-	148	13	-	-	-	-
Tennessee .....	25	25	29	48	2,163	-	-	-	-	25	-	-
Texas .....	586	1,260	20	29	692	521	501	136	31	61	10	4,000
Utah .....	280	526	14	34	1,093	219	37	15	234	-	21	3,692
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	65	65	26	40	458	49	(D)	(D)	-	9	-	-
Washington .....	2,886	5,531	67	60	581	3,791	568	208	310	567	87	6,133
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	84	167	18	50	9,056	39	8	-	-	20	100	14,591
Wyoming .....	420	1,631	18	52	366	994	485	81	59	12	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	67	113	23	43	5,686	(D)	(D)	29	(D)	-	57	10,630
Region 02 Mid-Atlantic .....	143	199	18	58	777	119	(D)	7	(D)	42	-	-
Region 03 South Atlantic-Gulf .....	255	682	14	40	3,244	118	115	52	42	148	207	8,201
Region 04 Great Lakes .....	74	97	12	54	783	56	12	18	-	-	11	4,000
Region 05 Ohio .....	62	64	35	50	906	29	10	5	-	20	-	-
Region 06 Tennessee .....	1	(D)	(D)	(D)	(D)	-	-	-	-	(D)	-	-
Region 07 Upper Mississippi .....	88	184	18	50	8,425	30	14	10	-	30	100	14,591
Region 08 Lower Mississippi .....	712	1,809	12	29	2,468	65	51	96	90	706	801	3,237
Region 09 Souris-Red-Rainy .....	8	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)	(D)
Region 10 Missouri .....	1,467	3,873	17	46	760	1,206	1,851	429	210	93	84	6,124
Region 11 Arkansas-White-Red .....	450	866	34	31	2,022	65	264	267	38	67	165	6,277
Region 12 Texas-Gulf .....	462	918	20	28	558	477	317	105	(D)	(D)	(D)	(D)
Region 13 Rio Grande .....	511	825	104	30	3,982	145	129	37	-	-	514	6,122
Region 14 Upper Colorado .....	365	406	19	29	2,236	27	36	204	119	-	20	(D)
Region 15 Lower Colorado .....	233	541	31	61	2,435	55	(D)	51	(D)	261	113	4,234
Region 16 Great Basin .....	316	654	13	44	900	280	33	201	126	3	11	5,091
Region 17 Pacific Northwest .....	5,801	10,280	57	57	848	4,201	1,588	3,231	499	601	160	5,265
Region 18 California .....	3,640	10,016	59	49	1,017	3,283	1,311	3,073	1,422	855	72	5,664
Region 19 Alaska .....	3	3	29	60	300	3	-	-	-	-	-	-
Region 20 Hawaii .....	96	159	64	39	3,691	(D)	(D)	-	-	(D)	104	5,499

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**Table 19. Irrigation Pumps on Farms Other Than for Wells: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Pumps by average operating pressure (see text)											
	For discharge from tailwater pits				For discharge from ponds, lakes, reservoirs, and rivers				For relifting or boosting water			
	Less than 15 psi	15 to 29 psi	30 to 59 psi	60 psi or more	Less than 15 psi	15 to 29 psi	30 to 59 psi	60 psi or more	Less than 15 psi	15 to 29 psi	30 to 59 psi	60 psi or more
United States .....	1,661	14,507	5,871	957	2,168	17,900	51,349	41,244	659	3,507	18,506	9,029
2008 .....	4,300	6,458	8,910	1,941	7,231	12,482	43,112	31,354	2,892	5,145	16,899	9,300
2003 .....												
<b>2008 DATA</b>												
Alabama .....	(D)	-	31	(D)	(D)	(D)	178	522	-	-	17	-
Alaska .....	(D)	-	-	-	-	(D)	-	(D)	-	-	-	3
Arizona .....	(D)	264	(D)	-	4	32	224	55	-	(D)	(D)	421
Arkansas .....	186	1,808	93	23	441	2,897	415	514	-	246	1,232	35
California .....	434	4,896	643	68	334	10,250	11,091	2,859	95	983	4,843	4,017
Colorado .....	18	4,202	130	-	40	70	1,995	412	219	103	802	47
Connecticut .....	-	-	-	-	(D)	96	(D)	(D)	-	-	-	(D)
Delaware .....	-	-	-	(D)	-	13	43	78	-	-	-	(D)
Florida .....	(D)	98	38	(D)	20	440	1,109	124	30	184	158	22
Georgia .....	-	-	240	136	-	143	858	2,386	-	-	155	24
Hawaii .....	-	-	12	-	-	20	127	6	-	17	142	-
Idaho .....	(D)	(D)	1,655	113	(D)	5,770	7,074	-	-	165	2,612	846
Illinois .....	-	-	30	-	-	(D)	(D)	(D)	-	-	-	-
Indiana .....	-	-	(D)	-	3	24	273	237	(D)	(D)	(D)	4
Iowa .....	-	-	11	-	-	8	39	28	-	-	4	-
Kansas .....	152	221	75	-	-	144	370	174	-	29	(D)	(D)
Kentucky .....	(D)	-	(D)	-	14	19	94	369	7	6	19	16
Louisiana .....	(D)	(D)	24	(D)	253	708	42	11	(D)	256	(D)	(D)
Maine .....	-	-	(D)	(D)	-	27	22	216	-	-	(D)	(D)
Maryland .....	-	(D)	(D)	-	36	76	139	310	-	(D)	-	9
Massachusetts .....	-	(D)	(D)	(D)	(D)	(D)	1,210	145	(D)	(D)	(D)	-
Michigan .....	-	-	26	-	26	57	397	1,777	10	-	41	21
Minnesota .....	-	-	10	-	-	12	281	102	-	-	23	-
Mississippi .....	5	83	18	-	15	79	393	24	(D)	137	(D)	(D)
Missouri .....	(D)	-	-	-	48	49	113	487	(D)	(D)	8	9
Montana .....	-	9	367	103	228	655	5,795	1,567	105	10	414	191
Nebraska .....	726	1,762	430	-	226	27	1,017	125	-	53	540	144
Nevada .....	(D)	(D)	79	-	-	(D)	(D)	-	13	-	157	110
New Hampshire .....	-	-	-	(D)	(D)	-	22	(D)	-	-	-	-
New Jersey .....	-	-	(D)	(D)	(D)	(D)	160	329	-	(D)	(D)	(D)
New Mexico .....	10	412	15	62	-	(D)	(D)	437	(D)	106	684	(D)
New York .....	-	-	6	4	8	97	57	274	-	-	39	6
North Carolina .....	-	-	80	214	60	118	950	1,598	-	(D)	(D)	16
North Dakota .....	-	-	(D)	-	18	59	221	77	-	-	12	14
Ohio .....	-	(D)	(D)	-	11	21	71	177	-	3	-	4
Oklahoma .....	-	11	107	37	8	32	185	65	-	(D)	33	(D)
Oregon .....	26	-	346	15	(D)	(D)	2,850	9,480	-	(D)	(D)	750
Pennsylvania .....	-	-	(D)	(D)	12	83	128	467	-	9	-	63
Rhode Island .....	-	-	(D)	-	-	-	33	3	-	(D)	10	(D)
South Carolina .....	-	(D)	-	(D)	6	43	192	255	-	44	(D)	(D)
South Dakota .....	-	-	11	-	32	37	329	107	-	-	146	15
Tennessee .....	-	-	(D)	(D)	-	38	104	201	-	-	25	-
Texas .....	66	627	37	-	25	296	2,579	56	107	694	416	43
Utah .....	3	-	535	12	3	41	1,833	247	12	229	268	17
Vermont .....	-	-	-	-	-	(D)	46	(D)	-	-	-	-
Virginia .....	-	30	(D)	(D)	-	58	80	584	(D)	-	46	(D)
Washington .....	(D)	(D)	95	87	(D)	(D)	7,275	5,944	-	(D)	(D)	1,986
West Virginia .....	-	-	-	-	-	6	17	31	-	-	-	-
Wisconsin .....	-	-	(D)	(D)	-	52	365	985	-	13	126	28
Wyoming .....	-	(D)	346	(D)	84	112	1,472	203	-	91	1,447	93
<b>Water Resources Regions</b>												
Region 01 New England .....	-	(D)	255	(D)	14	51	1,400	458	(D)	(D)	94	(D)
Region 02 Mid-Atlantic .....	-	(D)	59	(D)	60	230	572	1,554	9	12	94	84
Region 03 South Atlantic-Gulf .....	14	132	385	391	43	788	3,342	4,992	38	231	336	77
Region 04 Great Lakes .....	-	-	(D)	(D)	28	135	531	2,306	(D)	(D)	(D)	(D)
Region 05 Ohio .....	-	(D)	(D)	-	26	198	308	737	7	8	34	15
Region 06 Tennessee .....	-	-	(D)	(D)	64	43	197	268	-	-	(D)	-
Region 07 Upper Mississippi .....	-	-	(D)	(D)	38	55	674	1,053	(D)	(D)	135	28
Region 08 Lower Mississippi .....	189	1,713	130	17	440	3,252	706	308	27	544	1,208	30
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	(D)	140	(D)	-	-	(D)	-
Region 10 Missouri .....	749	5,451	1,087	105	588	743	7,931	2,437	109	246	3,036	482
Region 11 Arkansas-White-Red .....	180	890	198	45	288	492	536	525	52	350	395	69
Region 12 Texas-Gulf .....	49	302	42	-	24	145	2,536	56	59	526	329	4
Region 13 Rio Grande .....	(D)	307	(D)	-	-	152	174	159	(D)	(D)	704	-
Region 14 Upper Colorado .....	-	509	266	62	43	35	1,323	490	193	13	168	32
Region 15 Lower Colorado .....	(D)	264	(D)	-	4	32	243	55	-	(D)	(D)	433
Region 16 Great Basin .....	(D)	(D)	408	12	-	42	1,996	435	25	216	288	125
Region 17 Pacific Northwest .....	35	25	2,181	212	174	1,210	17,476	21,505	-	245	6,530	3,505
Region 18 California .....	434	4,896	658	71	334	10,250	11,137	3,855	95	983	4,835	4,103
Region 19 Alaska .....	-	-	-	-	-	(D)	-	(D)	-	-	-	3
Region 20 Hawaii .....	-	-	12	-	-	20	127	6	-	17	142	-





**Table 20. Energy Expenses for On-Farm Pumping of Irrigation Water by Water Source and Type of Energy: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Natural gas													
	Farms	Pumps powered	Acres irrigated by water source		Expenses (\$1,000)	Expenses per acre irrigated <sup>2</sup> (dollars)		Farms with energy expenses of -						
			Water from wells	Surface Water		Water from wells	Surface water	\$1 to \$999	\$1,000 to \$1,999	\$2,000 to \$4,999	\$5,000 to \$9,999	\$10,000 to \$19,999	\$20,000 to \$49,999	\$50,000 or more
United States .....	9,147 2008 .. 11,286 2003 ..	36,176 41,768	4,369,862 4,794,428	288,420 175,760	416,334 281,029	93.03 57.25	43.85 33.67	123 527	273 572	1,936 2,031	1,672 2,296	1,247 2,289	1,853 2,238	2,043 1,333
<b>2008 DATA</b>														
Alabama .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	72	155	16,177	3,963	3,918	200.00	46.96	1	3	1	6	18	43	
Arkansas .....	248	922	90,837	13,692	2,499	25.86	14.66	6	12	87	90	13	36	4
California .....	492	1,119	133,008	46,326	13,934	68.03	148.64	4	5	112	288	14	23	46
Colorado .....	74	365	49,871	23,310	3,377	57.44	50.06	-	4	1	4	16	34	15
Connecticut .....	1	(D)	(D)	(D)	(D)	(D)	(D)	1	-	-	-	-	-	-
Delaware .....	2	(D)	(D)	(D)	(D)	(D)	(D)	-	-	2	-	-	-	-
Florida .....	2	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-	-	2	-
Georgia .....	6	18	3,150	300	423	119.39	156.70	-	-	-	-	3	-	3
Hawaii .....	12	(D)	-	(D)	(D)	-	125.00	12	-	-	-	-	-	-
Idaho .....	19	27	-	12,387	76	-	6.14	-	-	19	-	-	-	-
Illinois .....	14	20	2,026	(D)	(D)	21.04	(D)	2	7	1	4	-	-	-
Indiana .....	13	22	2,920	(D)	(D)	24.20	(D)	-	2	4	6	1	-	-
Iowa .....	2	(D)	(D)	(D)	(D)	(D)	(D)	-	2	-	-	-	-	-
Kansas .....	2,311	9,614	1,407,596	20,638	134,241	95.53	58.76	31	74	229	299	278	577	823
Kentucky .....	8	(D)	(D)	21	(D)	(D)	3.33	7	-	1	-	-	-	-
Louisiana .....	53	80	9,896	6,250	646	42.12	36.74	5	1	18	11	5	13	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	22	22	-	132	7	-	50.00	22	-	-	-	-	-	-
Massachusetts .....	8	(D)	(D)	(D)	(D)	(D)	(D)	-	7	-	-	-	1	-
Michigan .....	4	8	-	264	15	-	56.82	-	-	2	2	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....	4	64	9,940	-	160	16.10	-	-	-	-	-	2	1	1
Missouri .....	10	32	4,450	-	59	13.28	-	2	2	2	2	2	-	-
Montana .....	87	103	-	11,715	161	-	13.72	4	55	21	7	-	-	-
Nebraska .....	2,596	8,391	904,581	6,620	33,809	37.09	-	-	26	923	575	506	483	83
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	272	621	74,043	(D)	6,133	74.72	12.57	6	2	117	63	26	39	19
New York .....	1	(D)	-	(D)	(D)	-	(D)	1	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....	6	9	845	(D)	74	70.12	(D)	-	-	-	3	3	-	-
Ohio .....	1	(D)	(D)	(D)	(D)	(D)	(D)	-	1	-	-	-	-	-
Oklahoma .....	420	1,420	227,830	8,439	21,851	96.48	(D)	6	6	151	35	71	48	103
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	2	(D)	-	(D)	(D)	-	(D)	2	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....	7	11	1,290	-	32	24.57	-	2	-	3	-	2	-	-
Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas .....	2,292	12,998	1,428,378	58,720	194,499	136.06	68.52	-	63	172	280	296	578	903
Utah .....	72	72	180	5,188	156	-	28.81	-	1	71	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	9	9	-	9	(D)	-	100.00	9	-	-	-	-	-	-
Washington .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	1	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-	1	-	-
Wyoming .....	4	16	(D)	(D)	44	(D)	(D)	-	-	-	2	2	-	-
<b>Water Resources Regions</b>														
Region 01 New England .....	9	19	(D)	(D)	29	184.89	(D)	1	7	-	-	-	1	-
Region 02 Mid-Atlantic .....	33	33	-	381	14	-	(D)	31	-	2	-	-	-	-
Region 03 South Atlantic-Gulf .....	8	24	3,600	300	468	116.97	156.70	-	-	-	-	3	2	3
Region 04 Great Lakes .....	14	22	2,270	267	73	(D)	59.18	1	-	6	6	1	-	-
Region 05 Ohio .....	13	13	(D)	257	6	(D)	9.22	9	3	1	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	19	34	3,156	-	(D)	21.87	-	2	9	1	6	1	-	-
Region 08 Lower Mississippi .....	223	741	82,143	19,444	2,487	26.14	22.57	11	9	86	60	10	42	5
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	3,327	10,939	1,194,507	28,171	55,003	45.58	14.38	37	159	979	635	607	687	223
Region 11 Arkansas-White-Red .....	3,494	17,557	2,495,906	53,423	284,587	114.97	33.46	8	75	384	533	490	609	1,395
Region 12 Texas-Gulf .....	1,071	4,737	364,332	35,746	44,577	114.36	68.52	-	-	160	83	102	436	290
Region 13 Rio Grande .....	192	576	73,173	10,960	9,613	128.51	-	6	2	53	60	13	21	37
Region 14 Upper Colorado .....	73	(D)	71,504	1,214	-	-	16.97	-	-	62	-	-	10	1
Region 15 Lower Colorado .....	76	161	17,313	3,963	4,021	191.67	46.96	1	3	-	1	6	22	43
Region 16 Great Basin .....	76	84	180	16,600	172	-	9.76	-	1	75	-	-	-	-
Region 17 Pacific Northwest .....	15	15	-	975	60	-	61.54	-	-	15	-	-	-	-
Region 18 California .....	492	1,119	133,008	46,326	13,934	68.03	148.64	4	5	112	288	14	23	46
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	12	(D)	-	(D)	(D)	-	125.00	12	-	-	-	-	-	-

See footnote(s) at end of table.

--continued

**Table 20. Energy Expenses for On-Farm Pumping of Irrigation Water by Water Source and Type of Energy: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	LP gas, propane, and butane													
	Farms	Pumps powered	Acres irrigated by water source		Expenses (\$1,000)	Expenses per acre irrigated <sup>2</sup> (dollars)		Farms with energy expenses of -						
			Water from wells	Surface Water		Water from wells	Surface water	\$1 to \$999	\$1,000 to \$1,999	\$2,000 to \$4,999	\$5,000 to \$9,999	\$10,000 to \$19,999	\$20,000 to \$49,999	\$50,000 or more
United States ..... 2008 .. 2003 ..	4,960 8,345	12,203 17,786	857,587 1,043,374	122,682 174,169	37,248 34,044	38.72 27.21	45.40 22.68	664 2,690	669 1,829	1,611 2,019	946 1,135	728 250	283 407	59 15
<b>2008 DATA</b>														
Alabama .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	4	8	940	-	126	134.54	-	-	-	-	-	-	4	-
Arkansas .....	268	710	58,564	(D)	1,263	20.83	14.38	94	59	64	18	19	13	1
California .....	80	109	7,640	8,091	996	71.18	55.89	-	-	58	-	5	9	8
Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....	4	7	(D)	117	5	(D)	(D)	1	2	1	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	2	(D)	(D)	-	(D)	(D)	-	-	2	-	-	-	-	-
Georgia .....	31	37	903	2,024	166	31.00	68.18	-	5	20	-	6	-	-
Hawaii .....	2	(D)	-	(D)	(D)	-	(D)	-	-	-	-	-	2	-
Idaho .....	24	33	315	975	65	54.66	49.23	-	9	15	-	-	-	-
Illinois .....	57	113	10,643	(D)	303	28.40	(D)	6	8	25	9	7	2	-
Indiana .....	49	120	10,520	650	256	25.08	(D)	10	23	7	4	2	-	3
Iowa .....	32	43	3,780	78	88	21.70	76.92	7	9	12	1	3	-	-
Kansas .....	501	797	59,214	5,768	4,812	78.88	71.46	134	-	151	103	92	-	21
Kentucky .....	2	(D)	(D)	-	(D)	(D)	-	2	-	-	-	-	-	-
Louisiana .....	35	(D)	(D)	3,004	(D)	30.19	30.19	-	2	15	16	1	1	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	3	4	-	600	20	-	32.50	-	-	-	3	-	-	-
Massachusetts .....	220	593	(D)	6,193	1,083	(D)	(D)	41	62	86	23	6	-	2
Michigan .....	38	45	158	2,371	68	(D)	28.05	25	3	2	8	-	-	-
Minnesota .....	2	(D)	(D)	-	(D)	(D)	-	-	-	2	-	-	-	-
Mississippi .....	100	415	47,775	(D)	1,394	26.48	28.12	16	9	17	26	17	9	6
Missouri .....	497	2,908	222,284	2,214	5,112	22.59	30.06	7	69	130	118	100	67	6
Montana .....	28	36	720	4,920	64	46.67	6.17	20	-	4	4	-	-	-
Nebraska .....	2,455	5,217	373,916	45,437	15,840	39.91	44.40	181	338	900	534	368	132	2
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	5	8	(D)	250	18	(D)	48.24	-	-	3	2	-	-	-
New Mexico .....	22	86	5,496	-	392	71.29	-	-	2	1	10	6	2	1
New York .....	6	(D)	40	(D)	(D)	100.00	(D)	2	4	-	-	-	-	-
North Carolina .....	16	16	64	64	3	-	46.00	16	-	-	-	-	-	-
North Dakota .....	17	23	552	(D)	56	21.74	19.57	2	4	9	-	2	-	-
Ohio .....	2	(D)	(D)	(D)	(D)	-	-	-	-	2	-	-	-	-
Oklahoma .....	145	149	6,997	5,048	336	32.42	21.55	96	12	11	20	4	2	-
Oregon .....	45	47	-	7,528	255	-	33.85	-	-	1	44	-	-	-
Pennsylvania .....	2	(D)	(D)	-	(D)	(D)	-	-	2	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	6	6	-	200	40	-	200.00	-	-	4	-	2	-	-
South Dakota .....	25	38	630	3,740	80	28.57	16.47	-	-	23	2	-	-	-
Tennessee .....	2	(D)	(D)	(D)	(D)	-	(D)	-	-	1	-	-	1	-
Texas .....	129	417	39,460	-	3,741	94.80	-	-	-	-	-	83	37	9
Utah .....	4	4	-	887	12	-	13.37	3	-	-	1	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	2	(D)	-	(D)	(D)	-	(D)	-	-	2	-	-	-	-
Washington .....	10	22	(D)	523	146	339.22	152.16	-	3	1	-	2	4	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	17	(D)	(D)	587	57	(D)	73.62	1	5	10	-	1	-	-
Wyoming .....	71	71	(D)	(D)	148	16.72	21.99	-	37	34	-	-	-	-
<b>Water Resources Regions</b>														
Region 01 New England .....	224	600	435	6,310	1,089	206.86	167.73	42	64	87	23	6	-	2
Region 02 Mid-Atlantic .....	16	28	146	1,070	49	(D)	35.10	-	6	5	5	-	-	-
Region 03 South Atlantic-Gulf .....	55	61	973	2,288	212	31.96	79.08	16	7	24	-	8	-	-
Region 04 Great Lakes .....	57	64	1,100	2,716	99	19.85	28.66	35	8	4	10	-	-	-
Region 05 Ohio .....	34	127	11,372	664	269	24.30	(D)	4	12	7	5	3	-	3
Region 06 Tennessee .....	4	14	(D)	(D)	(D)	(D)	(D)	2	-	1	-	-	1	-
Region 07 Upper Mississippi .....	112	210	15,535	(D)	(D)	28.87	100.74	6	24	57	12	11	2	-
Region 08 Lower Mississippi .....	791	3,735	307,285	(D)	7,131	22.15	23.39	117	119	184	160	118	81	12
Region 09 Souris-Red-Rainy .....	4	(D)	-	500	12	-	24.00	-	-	4	-	-	-	-
Region 10 Missouri .....	2,917	5,789	399,150	65,507	17,528	40.88	33.98	321	380	1,100	570	412	132	2
Region 11 Arkansas-White-Red ....	521	1,127	94,503	6,938	7,439	76.11	35.58	118	28	62	106	154	24	29
Region 12 Texas-Gulf .....	27	124	12,152	-	868	71.43	-	-	-	-	-	1	24	2
Region 13 Rio Grande .....	22	86	5,496	-	392	71.29	-	-	2	1	10	6	2	1
Region 14 Upper Colorado .....	1	(D)	-	(D)	(D)	-	(D)	-	-	-	1	-	-	-
Region 15 Lower Colorado .....	4	8	940	-	126	134.54	-	-	-	-	-	-	4	-
Region 16 Great Basin .....	18	18	-	1,683	51	-	30.25	3	-	15	-	-	-	-
Region 17 Pacific Northwest .....	70	91	(D)	8,351	424	166.51	40.24	-	19	1	44	2	4	-
Region 18 California .....	81	112	7,640	8,491	1,000	71.18	53.73	-	-	59	-	5	9	8
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	2	(D)	-	(D)	(D)	-	(D)	-	-	-	-	2	-	-

See footnote(s) at end of table.

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**Table 20. Energy Expenses for On-Farm Pumping of Irrigation Water by Water Source and Type of Energy: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Gasoline and gasohol														
	Farms	Pumps powered	Acres irrigated by water source		Expenses (\$1,000)	Expenses per acre irrigated <sup>2</sup> (dollars)		Farms with energy expenses of -							
			Water from wells	Surface Water		Water from wells	Surface water	\$1 to \$999	\$1,000 to \$1,999	\$2,000 to \$4,999	\$5,000 to \$9,999	\$10,000 to \$19,999	\$20,000 to \$49,999	\$50,000 or more	
United States .....	3,482	5,188	44,093	59,122	5,929	84.98	39.24	2,842	207	334	11	33	41	14	
2008 .....															
2003 .....	4,065	5,602	57,613	73,016	1,952	11.50	17.80	3,631	225	147	45	14	3	-	
<b>2008 DATA</b>															
Alabama .....	33	42	20	204	9	16.00	43.33	29	4	-	-	-	-	-	
Alaska .....	6	6	12	(D)	2	125.00	100.00	6	-	-	-	-	-	-	
Arizona .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Arkansas .....	17	134	10,940	(D)	633	61.44	-	-	-	-	-	-	16	1	
California .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Connecticut .....	47	(D)	-	366	(D)	-	28.39	46	1	-	-	-	-	-	
Delaware .....	27	(D)	504	138	(D)	9.24	18.48	27	-	-	-	-	-	-	
Florida .....	233	(D)	6,345	-	355	55.93	-	208	19	-	-	-	6	-	
Georgia .....	103	155	-	311	42	-	136.08	103	-	-	-	-	-	-	
Hawaii .....	38	38	-	116	10	-	86.21	36	-	2	-	-	-	-	
Idaho .....	77	77	-	3,388	54	-	15.91	77	-	-	-	-	-	-	
Illinois .....	14	14	83	-	(D)	(D)	-	13	-	1	-	-	-	-	
Indiana .....	4	12	-	(D)	16	-	40.82	-	-	4	-	-	-	-	
Iowa .....	8	(D)	(D)	-	(D)	19.23	-	6	2	-	-	-	-	-	
Kansas .....	22	22	220	-	10	44.50	-	22	-	-	-	-	-	-	
Kentucky .....	116	54	(D)	1,165	51	168.75	36.68	103	7	6	-	-	-	-	
Louisiana .....	2	(D)	(D)	-	(D)	(D)	-	-	-	2	-	-	-	-	
Maine .....	43	55	-	(D)	10	-	27.71	41	-	2	-	-	-	-	
Maryland .....	98	141	1,600	565	105	47.68	50.99	78	12	3	-	5	-	-	
Massachusetts .....	134	(D)	90	(D)	(D)	120.00	78.92	89	38	7	-	-	-	-	
Michigan .....	75	75	760	1,900	68	36.66	21.29	51	11	10	3	-	-	-	
Minnesota .....	29	(D)	(D)	140	(D)	8.33	16.71	29	-	-	-	-	-	-	
Mississippi .....	4	13	1,770	(D)	97	38.11	(D)	-	-	-	-	-	4	-	
Missouri .....	63	156	7,358	190	299	39.78	35.60	38	-	14	2	6	2	1	
Montana .....	45	108	-	5,735	143	-	24.97	-	4	41	-	-	-	-	
Nebraska .....	26	26	-	650	7	-	(D)	26	-	-	-	-	-	-	
Nevada .....	50	50	-	3,250	10	-	3.08	50	-	-	-	-	-	-	
New Hampshire .....	19	33	-	231	6	-	27.53	15	4	-	-	-	-	-	
New Jersey .....	99	106	(D)	686	89	59.52	92.43	83	3	9	2	2	-	-	
New Mexico .....	64	66	1,256	-	61	48.41	-	62	-	-	2	-	-	-	
New York .....	100	155	540	(D)	109	111.82	107.86	60	26	14	-	-	-	-	
North Carolina .....	248	432	64	3,524	327	-	93.64	156	32	51	-	9	-	-	
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ohio .....	90	(D)	(D)	(D)	39	88.92	25.27	86	-	4	-	-	-	-	
Oklahoma .....	23	23	1,200	880	506	400.00	30.00	-	-	11	-	-	12	-	
Oregon .....	13	13	65	-	7	100.00	-	13	-	-	-	-	-	-	
Pennsylvania .....	315	(D)	(D)	1,685	168	120.19	79.88	297	7	11	-	-	-	-	
Rhode Island .....	15	28	37	(D)	11	121.62	57.28	13	-	2	-	-	-	-	
South Carolina .....	109	118	490	394	156	282.65	44.84	60	-	49	-	-	-	-	
South Dakota .....	5	10	5	-	3	600.00	-	5	-	-	-	-	-	-	
Tennessee .....	69	(D)	117	(D)	(D)	82.31	-	53	7	6	-	2	-	1	
Texas .....	581	907	8,559	4,464	1,451	137.54	61.25	558	-	14	-	-	1	8	
Utah .....	176	203	-	7,982	204	-	25.51	167	-	-	-	9	-	-	
Vermont .....	28	48	8	165	9	3.00	51.42	25	3	-	-	-	-	-	
Virginia .....	19	(D)	-	(D)	20	-	77.95	8	9	2	-	-	-	-	
Washington .....	3	18	(D)	1,728	256	-	(D)	-	-	-	-	-	-	3	
West Virginia .....	26	26	10	116	4	-	29.95	26	-	-	-	-	-	-	
Wisconsin .....	95	95	-	597	(D)	-	55.76	77	18	-	-	-	-	-	
Wyoming .....	71	142	-	12,070	301	-	24.90	-	-	71	-	-	-	-	
<b>Water Resources Regions</b>															
Region 01 New England .....	277	378	135	(D)	121	106.52	52.09	220	46	11	-	-	-	-	
Region 02 Mid-Atlantic .....	526	656	3,161	3,629	408	49.78	76.54	449	35	33	2	7	-	-	
Region 03 South Atlantic-Gulf .....	687	1,189	6,919	3,555	828	72.02	94.77	539	48	85	-	9	6	-	
Region 04 Great Lakes .....	237	289	1,054	3,141	173	50.51	39.17	182	36	16	3	-	-	-	
Region 05 Ohio .....	269	341	(D)	2,410	121	134.59	38.54	238	17	14	-	-	-	-	
Region 06 Tennessee .....	89	196	9	(D)	(D)	650.00	85.34	49	17	21	-	2	-	-	
Region 07 Upper Mississippi .....	90	90	633	(D)	(D)	16.75	(D)	89	-	1	-	-	-	-	
Region 08 Lower Mississippi .....	47	218	17,086	(D)	973	55.81	(D)	6	2	5	4	6	22	2	
Region 09 Souris-Red-Rainy .....	10	(D)	-	(D)	1	-	8.00	10	-	-	-	-	-	-	
Region 10 Missouri .....	109	185	263	13,120	322	32.81	23.92	31	6	72	-	-	-	-	
Region 11 Arkansas-White-Red ....	111	187	7,544	1,070	964	123.45	30.99	60	-	33	-	-	12	6	
Region 12 Texas-Gulf .....	562	874	5,639	4,464	1,133	152.51	61.25	558	-	-	-	-	1	3	
Region 13 Rio Grande .....	64	66	1,256	-	61	48.41	-	62	-	-	2	-	-	-	
Region 14 Upper Colorado .....	84	(D)	-	(D)	(D)	-	0.44	84	-	-	-	-	-	-	
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Region 16 Great Basin .....	142	169	-	8,376	212	-	25.35	133	-	-	-	9	-	-	
Region 17 Pacific Northwest .....	134	212	(D)	10,451	453	100.00	31.56	90	-	41	-	-	-	3	
Region 18 California .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Region 19 Alaska .....	6	6	12	(D)	2	125.00	100.00	6	-	-	-	-	-	-	
Region 20 Hawaii .....	38	38	-	116	10	-	86.21	36	-	2	-	-	-	-	

<sup>1</sup> No energy expenses for solar-powered pumps are included.

<sup>2</sup> Expenses are calculated only from records with one source of water.

**Table 21. Pumps On-Farm Powered by Solar and Other Renewable Energy Sources: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms	Pumps powered	Total acres irrigated	Using only solar and other renewable sources <sup>1</sup>					
				For pumped well water only			For pumped surface water only		
				Farms	Pumps powered	Acres irrigated	Farms	Pumps powered	Acres irrigated
United States .....2008 ..	1,405	1,482	25,854	372	431	15,105	1,004	1,004	6,892
.....2003 ..	328	379	16,393	143	143	6,241	182	230	10,146
<b>2008 DATA</b>									
<b>Water Resources Regions</b>									
Region 01 New England .....	10	10	170	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	14	14	70	14	14	70	-	-	-
Region 03 South Atlantic-Gulf .....	6	6	900	6	6	900	-	-	-
Region 04 Great Lakes .....	2	(D)	(D)	-	-	-	2	(D)	(D)
Region 05 Ohio .....	7	(D)	(D)	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi .....	5	55	3,335	5	55	3,335	-	-	-
Region 09 Souris-Red-Rainy .....	5	5	600	5	5	600	-	-	-
Region 10 Missouri .....	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....	-	-	-	-	-	-	-	-	-
Region 12 Texas-Gulf .....	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	3	3	4,770	-	-	-	3	3	4,770
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	1	(D)	(D)	1	(D)	(D)	-	-	-
Region 17 Pacific Northwest .....	517	517	1,609	273	273	1,365	244	244	244
Region 18 California .....	810	819	10,294	68	(D)	(D)	742	(D)	(D)
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	25	36	(D)	-	-	-	13	(D)	174

<sup>1</sup> Rows may not add across. Operations using more than one source of water are only included in the total columns.



**Table 22. Expenses for Irrigation Water from Off-Farm Suppliers: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms	Total cost (\$1,000)	Farms reporting all off-farm water at no cost	Farms by average cost per acre						Farms by average cost per acre-foot					
				Average cost per acre (dollars)	\$1 to \$19	\$20 to \$49	\$50 to \$99	\$100 to \$149	\$150 or more	Average cost per acre-foot <sup>1</sup> (dollars)	\$1 to \$9	\$10 to \$19	\$20 to \$29	\$30 to \$59	\$60 or more
United States ..... 2008 ..	80,500	719,598	13,683	70.00	18,635	19,630	11,723	4,653	12,176	30.24	16,101	12,341	6,891	12,223	19,261
..... 2003 ..	83,019	575,753	18,468	(NA)	23,300	23,135	11,195	1,859	6,967	(NA)	22,670	13,837	6,738	9,833	13,378
<b>2008 DATA</b>															
Alabama .....	86	10	44	45.00	4	-	24	5	9	183.77	-	-	-	-	42
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	1,706	67,615	173	140.00	113	278	350	314	478	28.76	283	302	329	486	133
Arkansas .....	231	71	151	7.00	20	-	-	-	60	4.92	20	-	-	-	60
California .....	20,632	388,946	3,049	143.00	1,623	3,634	2,622	1,816	7,888	48.03	2,586	2,034	652	3,908	8,403
Colorado .....	7,562	14,642	1,785	20.00	1,959	2,281	546	595	396	14.29	1,473	1,123	718	544	1,919
Connecticut .....	15	3	10	21.00	1	1	2	1	-	125.58	-	-	-	-	5
Delaware .....	5	-	5	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	275	231	263	26.00	5	4	3	-	-	14.16	6	1	-	-	5
Georgia .....	41	-	41	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....	688	46,996	319	630.00	2	2	2	23	340	157.75	-	2	-	11	356
Idaho .....	9,366	41,787	1,015	31.00	2,067	4,449	1,347	440	48	15.13	2,208	2,020	1,526	1,479	1,118
Illinois .....	18	(D)	16	(D)	-	-	-	2	-	(D)	-	-	-	-	2
Indiana .....	35	(D)	33	(D)	-	2	-	-	-	(D)	-	-	-	2	-
Iowa .....	34	3	18	11.00	6	-	10	-	-	10.67	10	-	1	-	5
Kansas .....	230	944	76	29.00	29	24	57	44	-	28.58	19	9	22	47	57
Kentucky .....	176	402	17	404.00	21	7	33	26	72	1,111.67	-	7	-	21	138
Louisiana .....	214	70	99	53.00	4	4	54	-	53	73.01	-	-	-	8	107
Maine .....	17	-	17	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	52	1	27	6.00	25	-	-	-	-	13.94	-	25	-	-	-
Massachusetts .....	72	(D)	71	(D)	1	-	-	-	-	(D)	1	-	-	-	-
Michigan .....	22	(D)	20	(D)	2	-	-	-	-	(D)	-	-	-	-	2
Minnesota .....	68	6	52	1.00	16	-	-	-	-	1.88	16	-	-	-	-
Mississippi .....	75	6	10	90.00	-	-	65	-	-	300.00	-	-	-	-	65
Missouri .....	4	4	-	4.00	4	-	-	-	-	8.00	4	-	-	-	-
Montana .....	5,016	14,665	384	17.00	3,168	1,221	78	21	144	12.03	2,418	1,239	130	165	680
Nebraska .....	1,209	9,838	108	27.00	134	653	299	25	-	22.38	54	88	299	438	222
Nevada .....	582	2,429	173	25.00	180	134	80	1	14	10.28	145	193	2	16	53
New Hampshire .....	6	(D)	1	(D)	1	4	-	-	-	(D)	1	-	-	-	4
New Jersey .....	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	4,419	8,184	945	50.00	862	1,636	888	34	54	24.76	740	1,242	343	584	565
New York .....	100	37	38	26.00	50	1	7	4	-	36.84	-	2	6	42	12
North Carolina .....	106	13	21	150.00	-	-	-	-	85	300.00	-	-	-	-	85
North Dakota .....	176	1,139	54	23.00	36	81	5	-	-	17.71	26	34	33	19	10
Ohio .....	19	67	6	19.00	2	11	-	-	-	38.64	-	1	-	12	-
Oklahoma .....	172	8,763	39	219.00	15	23	6	-	89	175.89	3	12	5	62	51
Oregon .....	4,525	16,890	870	30.00	1,364	804	1,138	61	288	15.68	1,086	253	445	763	1,108
Pennsylvania .....	84	(Z)	62	20.00	-	22	-	-	-	100.00	-	-	-	-	22
Rhode Island .....	7	6	1	52.00	4	-	2	-	-	225.81	-	-	-	-	6
South Carolina .....	21	69	3	146.00	5	-	-	-	13	520.59	2	-	-	3	13
South Dakota .....	443	1,109	166	17.00	151	126	-	-	-	15.78	39	103	74	61	-
Tennessee .....	131	33	42	82.00	28	-	33	8	20	143.44	-	-	-	11	78
Texas .....	2,799	18,958	471	38.00	819	771	656	68	14	19.41	169	742	128	716	573
Utah .....	8,523	13,815	1,426	23.00	3,178	2,189	1,009	290	431	10.88	2,789	1,995	598	572	1,143
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	60	3	55	16.00	5	-	-	-	-	22.68	-	-	5	-	-
Washington .....	7,151	53,308	639	62.00	1,076	676	2,223	857	1,680	26.61	531	481	1,311	2,053	2,136
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	22	60	18	133.00	-	-	-	4	-	133.04	-	-	-	-	4
Wyoming .....	3,303	8,459	848	13.00	1,655	592	194	14	-	5.83	1,473	439	264	200	79
<b>Water Resources Regions</b>															
Region 01 New England .....	117	10	100	23.00	7	5	4	1	-	52.53	1	1	-	-	15
Region 02 Mid-Atlantic .....	200	5	146	13.00	32	22	-	-	-	25.68	-	25	5	2	22
Region 03 South Atlantic-Gulf .....	513	322	360	34.00	14	4	23	5	107	19.47	8	1	-	3	141
Region 04 Great Lakes .....	147	40	78	12.00	52	12	5	-	-	33.60	-	3	6	50	10
Region 05 Ohio .....	245	486	51	152.00	21	9	60	32	72	223.84	-	-	-	34	160
Region 06 Tennessee .....	98	14	41	56.00	28	-	12	8	9	173.53	-	-	-	2	55
Region 07 Upper Mississippi .....	78	64	64	27.00	10	-	-	4	-	34.09	9	-	1	-	4
Region 08 Lower Mississippi .....	497	143	232	18.00	18	4	119	-	124	11.78	14	-	-	8	243
Region 09 Souris-Red-Rainy .....	38	14	29	5.00	7	2	-	-	-	6.67	7	-	-	2	-
Region 10 Missouri .....	10,611	38,637	2,066	19.00	4,519	2,855	737	280	154	12.00	3,632	1,725	1,175	959	1,054
Region 11 Arkansas-White-Red .....	2,744	10,823	700	51.00	1,487	269	6	193	89	44.33	206	1,264	5	93	476
Region 12 Texas-Gulf .....	2,081	16,682	118	37.00	539	761	580	68	15	20.58	158	391	124	716	574
Region 13 Rio Grande .....	4,102	10,867	888	41.00	588	1,558	968	47	53	19.17	930	884	347	496	557
Region 14 Upper Colorado .....	6,380	8,755	1,083	16.00	1,999	2,149	571	192	386	9.13	1,772	920	577	566	1,462
Region 15 Lower Colorado .....	2,041	72,485	325	137.00	132	364	423	314	483	28.46	386	374	330	493	133
Region 16 Great Basin .....	7,215	14,751	1,356	26.00	2,525	1,777	821	291	445	11.94	2,344	1,667	393	527	928
Region 17 Pacific Northwest .....	21,668	111,992	2,670	40.00	4,983	5,870	4,759	1,376	2,010	19.28	4,002	3,000	3,274	4,066	4,656
Region 18 California .....	21,037	386,513	3,057	140.00	1,672	3,967	2,633	1,819	7,889	47.90	2,632	2,084	654	4,195	8,415
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	688	46,996	319	630.00	2	2	2	23	340	157.75	-	2	-	11	356

**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Expenses (all types) in survey year									
	Farms	Acres irrigated	Expenses <sup>1</sup> (\$1,000)	Average per farm (dollars)	Farms with expenses of -					
					\$1 to \$999	\$1,000 to \$4,999	\$5,000 to \$14,999	\$15,000 to \$39,999	\$40,000 to \$74,999	\$75,000 or more
United States .....2008 ..	90,952	32,571,110	2,149,006	23,628	29,348	24,496	15,242	8,569	5,936	7,361
.....2003 ..	82,019	26,616,300	1,119,388	13,648	32,192	20,869	12,307	8,648	4,778	3,225
<b>2008 DATA</b>										
Alabama .....	376	40,272	3,878	10,314	128	120	74	31	13	10
Alaska .....	12	303	30	2,531	10	1	-	1	-	-
Arizona .....	1,320	535,019	47,065	35,655	465	346	86	184	76	163
Arkansas .....	2,215	2,915,003	76,825	34,684	87	450	483	610	303	282
California .....	18,820	4,676,909	518,298	27,540	6,565	5,730	2,723	1,226	996	1,580
Colorado .....	4,239	1,452,759	47,963	11,315	1,182	2,028	512	198	102	217
Connecticut .....	81	858	212	2,623	14	61	3	3	-	-
Delaware .....	161	63,182	8,983	55,793	15	28	10	22	48	38
Florida .....	2,841	877,424	60,651	21,348	849	616	912	181	65	218
Georgia .....	2,145	611,266	82,383	38,407	299	331	487	466	251	311
Hawaii .....	418	12,979	8,436	20,182	236	79	78	16	3	6
Idaho .....	6,273	2,371,157	136,451	21,752	2,952	1,382	883	226	261	569
Illinois .....	411	224,443	16,400	39,903	73	107	56	35	55	85
Indiana .....	428	207,209	25,279	59,064	71	59	78	52	85	83
Iowa .....	196	74,477	5,419	27,649	35	44	45	19	29	24
Kansas .....	2,102	1,522,229	65,549	31,184	93	503	425	576	267	238
Kentucky .....	421	19,036	2,321	5,514	173	145	66	24	11	2
Louisiana .....	721	486,809	15,324	21,254	142	174	175	133	52	45
Maine .....	87	12,695	2,092	24,045	59	9	9	6	-	4
Maryland .....	247	48,358	5,217	21,120	101	34	29	34	32	17
Massachusetts .....	409	10,699	4,000	9,779	125	133	102	25	22	2
Michigan .....	1,168	382,190	40,735	34,876	241	323	197	126	114	167
Minnesota .....	744	318,164	31,931	42,918	135	143	88	152	101	125
Mississippi .....	681	1,076,235	24,631	36,169	-	115	170	212	79	105
Missouri .....	971	834,137	20,676	21,294	204	224	188	175	125	55
Montana .....	3,517	975,471	40,096	11,401	1,345	1,239	294	233	324	82
Nebraska .....	5,014	4,103,467	132,999	26,526	371	1,168	1,452	767	724	532
Nevada .....	752	412,818	28,491	37,887	254	98	127	115	36	122
New Hampshire .....	38	246	79	2,090	23	6	9	-	-	-
New Jersey .....	403	40,823	7,791	19,333	161	76	75	46	23	22
New Mexico .....	2,249	520,796	53,482	23,780	1,119	416	289	189	39	197
New York .....	396	14,795	2,721	6,872	141	111	110	22	6	6
North Carolina .....	935	86,027	16,422	17,564	228	251	127	236	36	57
North Dakota .....	186	117,495	8,624	46,365	17	45	26	34	23	41
Ohio .....	202	11,111	721	3,572	127	53	16	2	3	1
Oklahoma .....	661	240,005	16,406	24,819	131	185	159	71	50	65
Oregon .....	5,626	904,861	48,736	8,663	2,389	1,266	1,531	205	96	139
Pennsylvania .....	418	9,585	2,073	4,959	186	127	87	10	4	4
Rhode Island .....	37	435	512	13,832	10	7	11	7	-	2
South Carolina .....	389	53,408	7,665	19,704	127	121	72	16	21	32
South Dakota .....	414	170,236	19,118	46,180	54	94	49	65	72	80
Tennessee .....	329	46,796	6,463	19,645	139	80	32	45	8	25
Texas .....	6,869	3,336,813	258,715	37,664	2,086	1,550	957	622	670	984
Utah .....	5,134	632,911	47,623	9,276	2,526	1,375	508	346	291	88
Vermont .....	46	162	75	1,623	21	25	-	-	-	-
Virginia .....	368	24,175	2,700	7,336	160	122	54	16	7	9
Washington .....	6,658	1,145,374	144,193	21,657	2,445	2,148	944	567	266	288
West Virginia .....	28	365	80	2,840	17	8	1	2	-	-
Wisconsin .....	723	274,574	28,602	39,560	168	118	128	108	70	131
Wyoming .....	2,073	674,549	23,869	11,514	849	622	305	112	77	108
<b>Water Resources Regions</b>										
Region 01 New England .....	666	24,981	6,922	10,394	237	224	134	41	22	8
Region 02 Mid-Atlantic .....	1,616	188,447	27,546	17,046	534	441	299	138	114	90
Region 03 South Atlantic-Gulf .....	6,770	1,666,028	170,783	25,226	1,700	1,448	1,683	928	382	629
Region 04 Great Lakes .....	1,681	489,933	49,098	29,208	450	402	296	177	160	196
Region 05 Ohio .....	984	162,400	13,901	14,127	434	250	138	46	64	52
Region 06 Tennessee .....	300	18,462	2,750	9,168	109	107	27	44	9	4
Region 07 Upper Mississippi .....	1,795	780,682	83,542	46,541	333	332	298	267	219	346
Region 08 Lower Mississippi .....	3,798	4,810,606	124,609	32,809	255	718	870	994	502	459
Region 09 Souris-Red-Rainy .....	132	77,870	5,310	40,228	6	46	13	31	10	26
Region 10 Missouri .....	12,344	6,841,839	271,715	22,012	2,697	3,294	2,401	1,511	1,333	1,108
Region 11 Arkansas-White-Red .....	4,465	3,447,710	182,519	40,878	800	847	884	667	589	678
Region 12 Texas-Gulf .....	5,735	2,043,514	167,208	29,156	2,072	1,427	669	514	438	615
Region 13 Rio Grande .....	1,822	526,744	34,077	18,703	719	476	280	188	24	135
Region 14 Upper Colorado .....	4,323	732,223	43,957	10,168	1,847	1,548	514	158	178	78
Region 15 Lower Colorado .....	1,555	591,902	51,205	32,930	558	431	110	200	81	175
Region 16 Great Basin .....	4,789	961,839	60,858	12,708	1,935	1,444	681	350	163	216
Region 17 Pacific Northwest .....	18,830	4,498,066	323,333	17,171	7,851	5,239	3,080	1,061	646	953
Region 18 California .....	18,917	4,694,582	521,207	27,552	6,565	5,742	2,787	1,237	999	1,587
Region 19 Alaska .....	12	303	30	2,531	10	1	-	1	-	-
Region 20 Hawaii .....	418	12,979	8,436	20,182	236	79	78	16	3	6

See footnote(s) at end of table.

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**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Expenses (all types) in survey year - con.						
	Principal purpose of expenditures			Primary source of funding assistance (see text)			
	Replacement (dollars)	Water conservation (dollars)	New expansion (dollars)	EQIP (farms)	Other USDA programs (farms)	Non-USDA programs (farms)	No funding assistance (farms)
United States .....	1,077,191,890	323,082,578	748,731,627	4,240	1,878	1,343	111,317
2003 ..	467,423,307	171,233,240	480,731,102	1,806	738	608	100,533
<b>2008 DATA</b>							
Alabama .....	1,421,748	80,881	2,375,492	93	41	30	350
Alaska .....	30,375	-	-	-	-	-	12
Arizona .....	17,776,708	16,958,874	12,329,350	102	36	3	1,686
Arkansas .....	36,927,246	17,478,970	22,419,080	160	43	61	3,427
California .....	275,460,914	64,192,643	178,644,295	285	50	91	23,118
Colorado .....	27,961,966	7,166,561	12,834,716	266	49	41	5,532
Connecticut .....	146,077	-	66,350	-	10	-	81
Delaware .....	3,470,331	28,000	5,484,270	43	19	8	175
Florida .....	39,105,128	7,326,324	14,219,328	144	74	3	3,103
Georgia .....	24,716,479	5,797,042	51,869,001	96	79	41	2,951
Hawaii .....	7,657,376	23,600	755,007	2	-	-	489
Idaho .....	93,461,870	19,077,565	23,911,566	94	17	38	7,661
Illinois .....	6,868,672	505,600	9,025,706	-	2	15	534
Indiana .....	4,813,457	648,100	19,817,647	4	7	6	610
Iowa .....	2,290,181	478,700	2,650,398	10	10	4	224
Kansas .....	50,402,997	1,435,560	13,710,898	37	22	6	2,596
Kentucky .....	610,993	48,500	1,661,916	7	20	34	436
Louisiana .....	7,087,056	2,805,163	5,431,829	94	26	14	871
Maine .....	(D)	(D)	1,649,997	-	-	-	93
Maryland .....	2,720,595	209,028	2,286,954	60	18	6	209
Massachusetts .....	1,865,556	1,401,987	732,150	72	17	12	497
Michigan .....	12,114,273	1,119,012	27,501,519	10	25	25	1,563
Minnesota .....	12,610,599	1,452,427	17,867,670	50	27	8	940
Mississippi .....	9,141,213	3,168,291	12,321,585	71	9	76	962
Missouri .....	7,978,380	1,061,772	11,636,324	62	50	18	1,277
Montana .....	13,626,129	14,307,186	12,162,950	162	25	10	3,843
Nebraska .....	67,800,632	30,328,597	34,870,059	129	212	103	6,280
Nevada .....	11,743,138	6,182,035	10,565,844	123	13	-	971
New Hampshire .....	23,621	21,290	34,500	-	7	-	38
New Jersey .....	3,957,472	325,882	3,507,785	90	9	12	370
New Mexico .....	27,776,259	9,498,561	16,207,059	162	13	12	2,649
New York .....	999,695	285,714	1,435,860	3	4	-	479
North Carolina .....	7,447,204	1,298,500	7,676,758	17	52	18	1,359
North Dakota .....	3,247,588	1,295,832	4,080,424	36	-	3	197
Ohio .....	(D)	(D)	178,270	-	-	-	218
Oklahoma .....	8,913,100	3,190,792	4,301,781	33	15	5	803
Oregon .....	22,834,102	12,466,815	13,435,024	112	112	92	5,915
Pennsylvania .....	905,058	292,785	874,994	62	10	-	440
Rhode Island .....	54,400	18,000	439,400	25	-	5	34
South Carolina .....	2,362,171	231,964	5,070,720	88	49	7	427
South Dakota .....	8,192,266	359,470	10,566,617	38	11	11	489
Tennessee .....	1,279,947	66,300	5,117,111	11	-	31	379
Texas .....	131,274,082	36,165,837	91,275,368	524	57	123	9,574
Utah .....	20,184,141	20,869,614	6,569,160	203	396	-	6,391
Vermont .....	(D)	(D)	31,190	12	-	-	40
Virginia .....	1,368,494	320,000	1,011,228	3	2	-	445
Washington .....	73,313,890	28,253,511	42,625,155	450	147	266	7,178
West Virginia .....	(D)	(D)	62,984	-	1	-	31
Wisconsin .....	15,437,648	775,188	12,388,803	17	1	51	965
Wyoming .....	6,836,071	3,993,565	13,039,535	178	91	50	2,405
<b>Water Resources Regions</b>							
Region 01 New England .....	2,489,596	1,505,277	2,927,297	101	34	21	753
Region 02 Mid-Atlantic .....	12,625,624	1,278,923	13,641,088	267	57	26	1,716
Region 03 South Atlantic-Gulf .....	74,681,297	14,725,230	81,376,391	425	291	91	8,282
Region 04 Great Lakes .....	15,758,041	1,376,838	31,963,229	14	29	26	2,210
Region 05 Ohio .....	5,228,496	116,200	8,556,231	12	29	31	1,095
Region 06 Tennessee .....	1,173,511	45,081	1,531,845	15	6	33	338
Region 07 Upper Mississippi .....	31,682,897	3,065,651	48,793,067	71	42	73	2,324
Region 08 Lower Mississippi .....	55,449,282	21,501,163	47,658,235	334	108	180	5,487
Region 09 Souris-Red-Rainy .....	2,232,975	727,896	2,349,280	18	-	2	143
Region 10 Missouri .....	131,062,812	51,765,591	88,886,264	700	375	183	14,703
Region 11 Arkansas-White-Red .....	112,333,087	19,519,609	50,666,258	328	40	80	5,813
Region 12 Texas-Gulf .....	76,839,823	28,077,952	62,289,965	363	45	58	7,934
Region 13 Rio Grande .....	18,026,093	6,009,033	10,042,355	175	7	9	2,115
Region 14 Upper Colorado .....	21,369,413	11,558,440	11,028,804	41	401	40	5,732
Region 15 Lower Colorado .....	19,249,738	17,625,287	14,330,350	120	41	3	1,931
Region 16 Great Basin .....	28,965,906	18,110,085	13,782,321	308	58	-	6,184
Region 17 Pacific Northwest .....	184,328,804	60,661,653	78,342,345	642	267	396	20,842
Region 18 California .....	276,006,744	65,389,069	179,811,295	304	48	91	23,214
Region 19 Alaska .....	30,375	-	-	-	-	-	12
Region 20 Hawaii .....	7,657,376	23,600	755,007	2	-	-	489

See footnote(s) at end of table.

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**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Purchase of equipment and machinery in survey year									
	Farms	Acres irrigated	Expenses <sup>1</sup> (\$1,000)	Average per farm (dollars)	Farms with expenses of -					
					\$1 to \$999	\$1,000 to \$9,999	\$10,000 to \$29,999	\$30,000 to \$74,999	\$75,000 or more	
United States .....2008 ..	81,836	29,280,583	1,491,737	18,228	29,252	31,081	9,351	6,801	5,351	
.....2003 ..	71,422	23,442,100	812,199	11,372	30,795	24,051	8,568	5,927	2,081	
<b>2008 DATA</b>										
Alabama .....	330	35,205	3,044	9,226	132	139	36	13	10	
Alaska .....	12	303	30	2,531	10	1	1	-	-	
Arizona .....	730	423,241	28,804	39,458	233	248	82	53	114	
Arkansas .....	1,791	2,484,338	36,336	20,288	151	637	712	198	93	
California .....	17,448	4,100,782	294,543	16,881	7,462	6,851	1,161	1,066	908	
Colorado .....	3,686	1,224,571	39,797	10,797	1,361	1,774	171	227	153	
Connecticut .....	81	858	201	2,482	14	62	5	-	-	
Delaware .....	150	61,494	8,167	54,446	15	27	19	54	35	
Florida .....	2,488	833,826	40,124	16,127	849	1,069	319	78	173	
Georgia .....	1,869	565,253	46,394	24,823	299	542	581	265	182	
Hawaii .....	416	12,937	7,398	17,783	236	149	23	4	4	
Idaho .....	5,730	2,281,460	115,221	20,108	2,470	2,172	204	336	548	
Illinois .....	387	217,142	14,416	37,251	73	127	42	72	73	
Indiana .....	414	200,284	21,836	52,744	66	114	54	112	68	
Iowa .....	190	72,582	4,726	24,871	35	71	28	35	21	
Kansas .....	1,973	1,405,678	55,686	28,224	142	767	452	400	212	
Kentucky .....	377	18,270	1,763	4,675	171	155	38	12	1	
Louisiana .....	628	420,081	8,132	12,949	197	203	165	47	16	
Maine .....	83	12,569	525	6,327	59	12	8	3	1	
Maryland .....	237	44,069	4,414	18,625	101	37	43	43	13	
Massachusetts .....	400	10,015	2,497	6,243	125	224	33	17	1	
Michigan .....	1,125	370,447	33,096	29,418	244	485	95	149	152	
Minnesota .....	712	309,758	26,139	36,711	133	193	163	118	105	
Mississippi .....	574	894,412	11,814	20,581	-	261	206	72	35	
Missouri .....	847	746,975	15,096	17,823	166	305	228	115	33	
Montana .....	3,014	816,511	34,466	11,435	1,199	1,211	144	381	79	
Nebraska .....	4,561	3,818,239	109,717	24,055	396	1,878	1,007	857	423	
Nevada .....	569	340,314	18,535	32,575	166	137	127	86	53	
New Hampshire .....	38	246	53	1,398	23	15	-	-	-	
New Jersey .....	396	40,657	6,659	16,817	163	114	72	29	18	
New Mexico .....	1,722	408,589	36,959	21,463	901	449	160	42	170	
New York .....	391	14,603	2,232	5,708	172	143	62	8	6	
North Carolina .....	902	83,407	11,848	13,135	260	340	208	57	37	
North Dakota .....	163	108,507	7,389	45,331	12	47	40	26	38	
Ohio .....	197	10,878	614	3,118	136	55	2	3	1	
Oklahoma .....	626	228,989	14,124	22,563	131	287	102	44	62	
Oregon .....	4,924	802,780	41,691	8,467	2,088	2,252	334	125	125	
Pennsylvania .....	411	9,492	1,718	4,181	210	164	29	4	4	
Rhode Island .....	27	420	334	12,381	5	17	3	-	2	
South Carolina .....	373	48,082	5,587	14,977	125	175	22	27	24	
South Dakota .....	377	163,414	15,452	40,987	54	102	66	91	64	
Tennessee .....	303	37,937	3,730	12,309	142	101	37	7	16	
Texas .....	6,349	3,128,691	176,562	27,809	2,365	1,699	805	737	743	
Utah .....	4,770	559,870	30,249	6,342	2,692	1,640	175	194	69	
Vermont .....	46	162	66	1,426	21	25	-	-	-	
Virginia .....	327	23,847	2,222	6,794	160	119	29	12	7	
Washington .....	6,256	1,085,597	112,195	17,934	2,203	2,571	813	408	261	
West Virginia .....	27	360	57	2,109	16	8	3	-	-	
Wisconsin .....	662	261,921	19,641	29,670	167	184	124	97	90	
Wyoming .....	1,727	540,520	19,438	11,255	701	723	118	77	108	
<b>Water Resources Regions</b>										
Region 01 New England .....	643	24,156	3,638	5,658	232	338	49	20	4	
Region 02 Mid-Atlantic .....	1,580	182,071	23,806	15,067	589	566	206	140	79	
Region 03 South Atlantic-Gulf .....	6,003	1,561,560	106,612	17,760	1,734	2,241	1,167	436	425	
Region 04 Great Lakes .....	1,624	473,408	40,153	24,725	453	619	165	216	171	
Region 05 Ohio .....	927	160,396	12,393	13,368	439	301	64	78	45	
Region 06 Tennessee .....	288	17,982	2,166	7,522	112	127	37	8	4	
Region 07 Upper Mississippi .....	1,656	747,654	65,416	39,502	328	459	324	270	275	
Region 08 Lower Mississippi .....	3,210	4,125,170	63,477	19,775	316	1,169	1,193	375	157	
Region 09 Souris-Red-Rainy .....	129	76,598	4,762	36,914	8	46	33	17	25	
Region 10 Missouri .....	10,768	6,243,549	228,256	21,198	2,146	4,372	1,614	1,714	922	
Region 11 Arkansas-White-Red .....	4,045	3,170,063	134,881	33,345	816	1,207	749	756	517	
Region 12 Texas-Gulf .....	5,307	1,902,485	111,137	20,942	2,351	1,480	578	420	478	
Region 13 Rio Grande .....	1,388	408,622	25,132	18,107	589	471	182	39	107	
Region 14 Upper Colorado .....	4,090	542,240	28,739	7,027	2,343	1,505	62	102	78	
Region 15 Lower Colorado .....	877	467,774	31,851	36,318	326	274	98	59	120	
Region 16 Great Basin .....	4,278	817,865	40,605	9,492	1,948	1,741	277	178	134	
Region 17 Pacific Northwest .....	17,047	4,221,495	263,608	15,464	6,814	7,102	1,343	896	892	
Region 18 California .....	17,548	4,124,255	297,678	16,964	7,462	6,913	1,186	1,073	914	
Region 19 Alaska .....	12	303	30	2,531	10	1	1	-	-	
Region 20 Hawaii .....	416	12,937	7,398	17,783	236	149	23	4	4	

See footnote(s) at end of table.

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**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Purchase of equipment and machinery in survey year - con.						
	Principal purpose of expenditures			Primary source of funding assistance (see text)			
	Replacement (farms)	Water conservation (farms)	New expansion (farms)	EQIP (farms)	Other USDA programs (farms)	Non-USDA programs (farms)	No funding assistance (farms)
United States .....	63,282	5,595	12,959	3,109	1,226	978	76,523
2003 ..	51,507	4,102	15,813	1,197	359	371	69,495
<b>2008 DATA</b>							
Alabama .....	238	9	83	59	26	12	233
Alaska .....	12	-	-	-	-	-	12
Arizona .....	583	88	59	71	15	1	643
Arkansas .....	1,373	82	336	69	9	36	1,677
California .....	14,714	951	1,783	212	41	48	17,147
Colorado .....	2,461	218	1,007	180	42	38	3,426
Connecticut .....	48	-	33	-	10	-	71
Delaware .....	83	1	66	37	10	5	98
Florida .....	2,380	28	80	44	72	1	2,371
Georgia .....	1,126	57	686	96	28	26	1,719
Hawaii .....	359	-	57	2	-	-	414
Idaho .....	4,784	431	515	82	12	38	5,598
Illinois .....	280	11	96	-	2	9	376
Indiana .....	244	3	167	3	7	4	400
Iowa .....	135	12	43	10	10	2	168
Kansas .....	1,768	45	160	37	22	1	1,913
Kentucky .....	251	-	126	-	20	27	330
Louisiana .....	505	11	112	28	17	14	569
Maine .....	40	-	43	-	-	-	83
Maryland .....	187	6	44	50	9	5	173
Massachusetts .....	277	71	52	44	5	12	339
Michigan .....	606	40	479	6	25	21	1,073
Minnesota .....	488	80	144	48	25	6	633
Mississippi .....	435	28	111	25	-	34	515
Missouri .....	619	43	185	39	28	10	770
Montana .....	2,329	273	412	129	-	4	2,881
Nebraska .....	3,267	724	570	129	212	103	4,117
Nevada .....	416	116	37	45	6	-	518
New Hampshire .....	22	4	12	-	4	-	34
New Jersey .....	289	8	99	77	3	9	307
New Mexico .....	945	154	623	146	13	4	1,559
New York .....	237	21	133	3	-	-	388
North Carolina .....	660	51	191	1	36	6	859
North Dakota .....	100	28	35	29	-	3	131
Ohio .....	139	2	56	-	-	-	197
Oklahoma .....	477	39	110	28	13	5	580
Oregon .....	3,910	280	734	110	106	63	4,645
Pennsylvania .....	341	5	65	35	8	-	368
Rhode Island .....	14	4	9	11	-	-	16
South Carolina .....	202	10	161	73	4	5	291
South Dakota .....	249	15	113	34	11	6	326
Tennessee .....	158	2	143	10	-	27	266
Texas .....	4,990	329	1,030	396	42	42	5,869
Utah .....	3,597	644	529	111	123	-	4,536
Vermont .....	21	4	21	8	-	-	38
Virginia .....	198	5	124	3	2	-	322
Washington .....	4,943	441	872	425	122	261	5,448
West Virginia .....	23	1	3	-	1	-	26
Wisconsin .....	462	26	174	2	1	41	618
Wyoming .....	1,297	194	236	162	84	49	1,432
<b>Water Resources Regions</b>							
Region 01 New England .....	405	83	155	59	19	12	553
Region 02 Mid-Atlantic .....	1,140	41	399	207	31	19	1,323
Region 03 South Atlantic-Gulf .....	4,612	148	1,243	264	160	44	5,535
Region 04 Great Lakes .....	909	50	665	9	25	22	1,568
Region 05 Ohio .....	633	-	294	5	29	22	871
Region 06 Tennessee .....	174	7	107	9	6	31	242
Region 07 Upper Mississippi .....	1,124	124	408	54	28	56	1,518
Region 08 Lower Mississippi .....	2,419	129	662	125	50	103	2,932
Region 09 Souris-Red-Rainy .....	84	21	24	18	-	1	110
Region 10 Missouri .....	7,818	1,347	1,603	592	343	167	9,666
Region 11 Arkansas-White-Red .....	2,933	297	815	291	28	36	3,690
Region 12 Texas-Gulf .....	4,235	234	838	234	35	16	5,022
Region 13 Rio Grande .....	938	89	361	144	7	-	1,237
Region 14 Upper Colorado .....	3,038	234	818	38	145	38	3,869
Region 15 Lower Colorado .....	698	118	61	78	15	1	783
Region 16 Great Basin .....	3,200	547	531	148	28	-	4,102
Region 17 Pacific Northwest .....	13,764	1,153	2,130	600	234	362	15,851
Region 18 California .....	14,787	973	1,788	232	43	48	17,225
Region 19 Alaska .....	12	-	-	-	-	-	12
Region 20 Hawaii .....	359	-	57	2	-	-	414

See footnote(s) at end of table.

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**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	New well construction or deepening of wells in survey year									
	Farms	Acres irrigated	Expenses <sup>1</sup> (\$1,000)	Average per farm (dollars)	Farms with expenses of -					
					\$1 to \$999	\$1,000 to \$9,999	\$10,000 to \$29,999	\$30,000 to \$74,999	\$75,000 or more	
United States .....2008 ..	9,277	8,975,579	336,247	36,245	279	3,003	2,796	2,135	1,064	
.....2003 ..	8,788	5,775,725	150,788	17,158	197	4,046	3,100	1,101	344	
<b>2008 DATA</b>										
Alabama .....	51	3,495	289	5,662	12	34	1	4	-	
Alaska .....	-	-	-	-	-	-	-	-	-	
Arizona .....	405	122,244	6,157	15,203	109	113	146	25	12	
Arkansas .....	889	1,404,029	15,514	17,451	-	267	420	196	6	
California .....	2,471	1,499,081	145,614	58,929	-	966	408	562	535	
Colorado .....	220	204,960	2,642	12,007	1	142	39	37	1	
Connecticut .....	10	20	11	1,135	-	10	-	-	-	
Delaware .....	54	21,479	645	11,941	-	32	16	6	-	
Florida .....	92	282,066	3,268	35,524	-	18	42	8	24	
Georgia .....	452	188,682	18,334	40,562	-	77	174	165	36	
Hawaii .....	1	(D)	(D)	(D)	-	-	1	-	-	
Idaho .....	155	511,109	9,189	59,282	-	38	20	23	74	
Illinois .....	73	64,596	1,433	19,635	-	17	42	12	2	
Indiana .....	114	74,630	2,089	18,327	4	52	44	10	4	
Iowa .....	41	23,377	637	15,545	-	8	27	6	-	
Kansas .....	192	247,328	6,747	35,140	-	76	45	32	39	
Kentucky .....	19	4,788	240	12,632	-	1	18	-	-	
Louisiana .....	85	76,363	1,512	17,793	-	42	21	21	1	
Maine .....	2	(D)	(D)	(D)	-	-	-	-	2	
Maryland .....	18	7,906	592	32,908	-	2	9	5	2	
Massachusetts .....	7	49	(D)	(D)	-	-	-	7	-	
Michigan .....	162	166,060	4,446	27,446	-	33	90	34	5	
Minnesota .....	180	137,057	5,035	27,971	-	22	99	51	8	
Mississippi .....	240	479,012	4,924	20,515	1	53	131	51	4	
Missouri .....	212	350,917	2,223	10,485	-	118	88	4	2	
Montana .....	112	30,525	1,102	9,844	24	25	59	-	4	
Nebraska .....	621	912,802	14,549	23,428	-	198	192	202	29	
Nevada .....	87	128,550	5,944	68,323	-	7	25	24	31	
New Hampshire .....	-	-	-	-	-	-	-	-	-	
New Jersey .....	21	6,325	313	14,905	-	4	16	1	-	
New Mexico .....	236	196,450	7,543	31,963	-	109	39	56	32	
New York .....	37	995	288	7,770	-	34	2	1	-	
North Carolina .....	168	18,105	797	4,742	85	63	19	1	-	
North Dakota .....	28	21,905	707	25,260	-	7	15	5	1	
Ohio .....	4	380	(D)	(D)	-	-	4	-	-	
Oklahoma .....	88	35,107	1,177	13,373	6	46	28	5	3	
Oregon .....	185	119,495	3,569	19,291	-	24	101	54	6	
Pennsylvania .....	39	934	252	6,464	-	35	4	-	-	
Rhode Island .....	7	75	88	12,571	-	2	5	-	-	
South Carolina .....	90	22,060	1,253	13,925	2	61	11	12	4	
South Dakota .....	76	39,214	2,151	28,298	-	11	50	13	2	
Tennessee .....	51	19,327	2,319	45,479	2	20	10	8	11	
Texas .....	905	1,198,549	38,884	42,965	-	172	240	346	147	
Utah .....	172	69,326	5,770	33,549	32	17	12	102	9	
Vermont .....	-	-	-	-	-	-	-	-	-	
Virginia .....	1	(D)	(D)	(D)	-	-	-	1	-	
Washington .....	52	161,241	13,727	263,977	-	1	10	16	25	
West Virginia .....	2	(D)	(D)	(D)	-	-	2	-	-	
Wisconsin .....	82	72,200	1,717	20,944	1	31	34	13	3	
Wyoming .....	68	40,910	1,706	25,090	-	15	37	16	-	
<b>Water Resources Regions</b>										
Region 01 New England .....	26	(D)	799	30,733	-	12	5	7	2	
Region 02 Mid-Atlantic .....	172	38,429	2,161	12,563	-	107	49	14	2	
Region 03 South Atlantic-Gulf .....	846	513,612	23,939	28,296	99	248	244	191	64	
Region 04 Great Lakes .....	206	190,734	5,013	24,333	2	50	113	35	6	
Region 05 Ohio .....	90	49,307	906	10,066	2	45	39	4	-	
Region 06 Tennessee .....	38	(D)	357	9,385	2	16	19	1	-	
Region 07 Upper Mississippi .....	340	272,008	8,865	26,073	1	67	178	79	15	
Region 08 Lower Mississippi .....	1,258	2,107,558	23,748	18,877	1	389	598	246	24	
Region 09 Souris-Red-Rainy .....	11	20,362	(D)	(D)	-	4	3	3	1	
Region 10 Missouri .....	994	1,214,108	22,991	23,130	24	323	330	265	52	
Region 11 Arkansas-White-Red .....	729	1,082,446	29,620	40,631	6	197	147	253	126	
Region 12 Texas-Gulf .....	706	695,256	21,100	29,887	-	199	253	193	61	
Region 13 Rio Grande .....	154	141,027	4,240	27,531	-	84	38	13	19	
Region 14 Upper Colorado .....	192	23,775	4,757	24,773	1	96	2	93	-	
Region 15 Lower Colorado .....	405	122,244	6,157	15,203	109	113	146	25	12	
Region 16 Great Basin .....	192	202,340	8,692	45,270	32	24	37	58	41	
Region 17 Pacific Northwest .....	443	791,135	26,939	60,811	-	60	186	93	104	
Region 18 California .....	2,474	1,497,291	145,629	58,864	-	969	408	562	535	
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii .....	1	(D)	(D)	(D)	-	-	1	-	-	

See footnote(s) at end of table.

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**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	New well construction or deepening of wells in survey year - con.						
	Principal purpose of expenditures			Primary source of funding assistance (see text)			
	Replacement (farms)	Water conservation (farms)	New expansion (farms)	EQIP (farms)	Other USDA programs (farms)	Non-USDA programs (farms)	No funding assistance (farms)
United States .....	4,880	-	4,397	110	126	184	8,857
2003 ..	3,640	(X)	4,810	73	17	35	8,663
<b>2008 DATA</b>							
Alabama .....	15	-	36	12	11	4	24
Alaska .....	-	-	-	-	-	-	-
Arizona .....	146	-	259	2	-	1	402
Arkansas .....	562	-	327	6	-	11	872
California .....	1,593	-	878	-	5	38	2,428
Colorado .....	206	-	14	14	-	-	206
Connecticut .....	-	-	10	-	-	-	10
Delaware .....	14	-	40	2	3	3	46
Florida .....	48	-	44	-	-	-	92
Georgia .....	81	-	371	-	-	3	449
Hawaii .....	-	-	1	-	-	-	1
Idaho .....	108	-	47	1	-	-	154
Illinois .....	19	-	54	-	-	4	69
Indiana .....	15	-	99	-	-	2	112
Iowa .....	5	-	36	-	-	2	39
Kansas .....	138	-	54	-	-	-	192
Kentucky .....	1	-	18	-	-	-	19
Louisiana .....	50	-	35	14	2	-	69
Maine .....	-	-	2	-	-	2	-
Maryland .....	7	-	11	5	3	-	10
Massachusetts .....	-	-	7	-	-	-	7
Michigan .....	47	-	115	1	-	4	157
Minnesota .....	61	-	119	2	2	-	176
Mississippi .....	101	-	139	5	3	23	209
Missouri .....	58	-	154	-	8	1	203
Montana .....	108	-	4	-	4	-	108
Nebraska .....	345	-	276	-	-	-	621
Nevada .....	37	-	50	-	-	-	87
New Hampshire .....	-	-	-	-	-	-	-
New Jersey .....	10	-	11	4	3	3	11
New Mexico .....	110	-	126	2	-	-	234
New York .....	5	-	32	-	-	-	37
North Carolina .....	114	-	54	-	16	12	140
North Dakota .....	20	-	8	2	-	-	26
Ohio .....	2	-	2	-	-	-	4
Oklahoma .....	27	-	61	3	-	-	85
Oregon .....	48	-	137	-	-	13	172
Pennsylvania .....	1	-	38	25	-	-	14
Rhode Island .....	-	-	7	5	-	-	2
South Carolina .....	7	-	83	-	45	2	43
South Dakota .....	35	-	41	-	-	5	71
Tennessee .....	12	-	39	-	-	2	49
Texas .....	418	-	487	-	10	44	851
Utah .....	169	-	3	-	-	-	172
Vermont .....	-	-	-	-	-	-	-
Virginia .....	-	-	1	-	-	-	1
Washington .....	44	-	8	3	11	-	38
West Virginia .....	-	-	2	-	-	-	2
Wisconsin .....	35	-	47	-	-	5	77
Wyoming .....	58	-	10	2	-	-	66
<b>Water Resources Regions</b>							
Region 01 New England .....	-	-	26	5	-	2	19
Region 02 Mid-Atlantic .....	37	-	135	36	9	6	121
Region 03 South Atlantic-Gulf .....	265	-	581	11	74	19	742
Region 04 Great Lakes .....	58	-	148	1	-	4	201
Region 05 Ohio .....	13	-	77	-	-	-	90
Region 06 Tennessee .....	9	-	29	1	-	2	35
Region 07 Upper Mississippi .....	105	-	235	2	2	11	325
Region 08 Lower Mississippi .....	704	-	554	25	9	36	1,188
Region 09 Souris-Red-Rainy .....	6	-	5	-	-	-	11
Region 10 Missouri .....	613	-	381	5	4	8	977
Region 11 Arkansas-White-Red .....	349	-	380	3	2	26	698
Region 12 Texas-Gulf .....	325	-	381	-	10	18	678
Region 13 Rio Grande .....	97	-	57	15	-	-	139
Region 14 Upper Colorado .....	167	-	25	-	-	-	192
Region 15 Lower Colorado .....	146	-	259	2	-	1	402
Region 16 Great Basin .....	138	-	54	-	-	-	192
Region 17 Pacific Northwest .....	252	-	191	4	11	13	415
Region 18 California .....	1,596	-	878	-	5	38	2,431
Region 19 Alaska .....	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	1	-	-	-	1

See footnote(s) at end of table.

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**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Construction of permanent storage and distribution systems in survey year									
	Farms	Acres irrigated	Expenses <sup>1</sup> (\$1,000)	Average per farm (dollars)	Farms with expenses of -					
					\$1 to \$999	\$1,000 to \$9,999	\$10,000 to \$29,999	\$30,000 to \$74,999	\$75,000 or more	
United States .....2008 ..	9,826	5,667,412	133,815	13,619	3,120	4,303	1,395	594	414	
.....2003 ..	10,419	3,543,163	66,494	6,382	4,575	4,590	936	156	162	
<b>2008 DATA</b>										
Alabama .....	44	7,906	416	9,444	6	28	7	3	-	
Alaska .....	-	-	-	-	-	-	-	-	-	
Arizona .....	352	101,503	3,229	9,173	144	161	20	22	5	
Arkansas .....	389	513,133	8,212	21,112	6	187	126	49	21	
California .....	656	919,542	21,571	32,882	4	451	74	67	60	
Colorado .....	983	482,824	3,460	3,520	518	402	41	12	10	
Connecticut .....	-	-	-	-	-	-	-	-	-	
Delaware .....	13	1,859	47	3,577	-	13	-	-	-	
Florida .....	263	359,537	8,658	32,921	66	80	55	30	32	
Georgia .....	395	86,586	12,803	32,413	52	23	139	134	47	
Hawaii .....	14	(D)	(D)	(D)	12	-	-	1	1	
Idaho .....	973	574,176	5,678	5,836	419	382	158	10	4	
Illinois .....	14	9,945	79	5,643	-	12	2	-	-	
Indiana .....	19	13,060	330	17,389	2	15	-	-	2	
Iowa .....	2	(D)	(D)	(D)	-	-	2	-	-	
Kansas .....	79	52,152	1,480	18,731	44	7	23	-	5	
Kentucky .....	76	3,635	259	3,404	14	52	10	-	-	
Louisiana .....	37	32,765	290	7,835	-	26	10	1	-	
Maine .....	7	(D)	782	111,729	-	-	4	-	3	
Maryland .....	22	8,749	146	6,632	3	15	4	-	-	
Massachusetts .....	79	(D)	568	7,188	-	51	27	1	-	
Michigan .....	133	28,898	1,653	12,432	-	90	31	3	9	
Minnesota .....	27	15,180	94	3,492	-	25	2	-	-	
Mississippi .....	78	175,799	1,025	13,142	1	33	37	5	2	
Missouri .....	92	105,760	330	3,590	38	52	2	-	-	
Montana .....	573	201,089	3,195	5,575	343	128	96	4	2	
Nebraska .....	165	394,154	1,715	10,392	-	25	140	-	-	
Nevada .....	247	90,690	2,018	8,171	113	35	90	4	5	
New Hampshire .....	4	(D)	25	6,250	-	4	-	-	-	
New Jersey .....	22	5,138	622	28,273	-	9	6	3	4	
New Mexico .....	267	90,346	1,804	6,756	132	83	46	3	3	
New York .....	16	598	147	9,188	6	2	8	-	-	
North Carolina .....	203	16,806	2,805	13,816	-	149	36	2	16	
North Dakota .....	15	5,552	133	8,898	7	2	4	2	-	
Ohio .....	2	(D)	(D)	(D)	-	-	2	-	-	
Oklahoma .....	27	12,184	223	8,260	-	25	2	-	-	
Oregon .....	593	173,842	1,732	2,920	442	114	28	9	-	
Pennsylvania .....	35	1,592	81	2,309	26	5	4	-	-	
Rhode Island .....	5	35	(D)	(D)	-	5	-	-	-	
South Carolina .....	56	7,729	210	3,757	2	44	8	2	-	
South Dakota .....	40	17,625	1,099	27,464	3	29	-	6	2	
Tennessee .....	21	2,419	90	4,281	4	15	1	1	-	
Texas .....	1,022	535,800	28,150	27,544	-	708	33	145	136	
Utah .....	859	138,540	3,866	4,501	391	416	23	19	10	
Vermont .....	4	4	(D)	(D)	-	4	-	-	-	
Virginia .....	66	6,089	(D)	(D)	-	57	5	4	-	
Washington .....	187	203,116	7,562	40,440	23	106	23	20	15	
West Virginia .....	1	(D)	(D)	(D)	1	-	-	-	-	
Wisconsin .....	101	16,193	4,897	48,484	-	8	42	31	20	
Wyoming .....	548	236,677	1,236	2,255	298	225	24	1	-	
<b>Water Resources Regions</b>										
Region 01 New England .....	95	11,938	1,390	14,631	-	60	31	1	3	
Region 02 Mid-Atlantic .....	111	21,041	1,049	9,452	35	49	18	5	4	
Region 03 South Atlantic-Gulf .....	1,010	482,785	25,077	24,829	126	367	249	173	95	
Region 04 Great Lakes .....	156	37,856	1,910	12,243	-	104	39	4	9	
Region 05 Ohio .....	89	5,029	373	4,190	16	58	15	-	-	
Region 06 Tennessee .....	14	(D)	70	5,011	3	10	-	1	-	
Region 07 Upper Mississippi .....	158	43,894	5,303	33,562	2	61	43	30	22	
Region 08 Lower Mississippi .....	469	789,563	9,462	20,174	7	219	166	54	23	
Region 09 Souris-Red-Rainy .....	6	3,720	(D)	(D)	-	3	1	2	-	
Region 10 Missouri .....	1,561	910,336	8,356	5,353	868	420	245	14	14	
Region 11 Arkansas-White-Red .....	384	341,703	6,504	16,938	72	200	20	86	6	
Region 12 Texas-Gulf .....	863	326,313	23,134	26,807	-	644	28	54	137	
Region 13 Rio Grande .....	239	134,303	1,643	6,876	87	119	20	12	1	
Region 14 Upper Colorado .....	851	329,095	3,633	4,269	376	406	57	6	6	
Region 15 Lower Colorado .....	387	125,660	3,846	9,939	144	185	26	26	6	
Region 16 Great Basin .....	1,145	202,326	6,001	5,241	433	578	99	27	8	
Region 17 Pacific Northwest .....	1,620	986,770	13,963	8,619	935	367	264	35	19	
Region 18 California .....	654	907,160	21,302	32,571	4	453	74	63	60	
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii .....	14	(D)	(D)	(D)	12	-	-	1	1	

See footnote(s) at end of table.

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**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Construction of permanent storage and distribution systems in survey year - con.						
	Principal purpose of expenditures			Primary source of funding assistance (see text)			
	Replacement (farms)	Water conservation (farms)	New expansion (farms)	EQIP (farms)	Other USDA programs (farms)	Non-USDA programs (farms)	No funding assistance (farms)
United States ..... 2008 ..	3,808	3,952	2,066	479	257	71	9,019
..... 2003 ..	3,456	2,923	4,040	291	132	150	9,846
<b>2008 DATA</b>							
Alabama .....	16	1	27	4	4	2	34
Alaska .....	-	-	-	-	-	-	-
Arizona .....	95	241	16	15	3	-	334
Arkansas .....	46	308	35	38	32	8	311
California .....	261	342	53	46	4	5	601
Colorado .....	657	289	37	34	7	3	939
Connecticut .....	-	-	-	-	-	-	-
Delaware .....	3	5	5	2	3	-	8
Florida .....	99	144	20	75	-	2	186
Georgia .....	8	142	245	-	51	6	338
Hawaii .....	1	12	1	-	-	-	14
Idaho .....	544	422	7	5	4	-	964
Illinois .....	9	-	5	-	-	2	12
Indiana .....	9	-	10	-	-	-	19
Iowa .....	2	-	-	-	-	-	2
Kansas .....	6	7	66	-	-	-	79
Kentucky .....	7	13	56	7	-	7	62
Louisiana .....	23	12	2	7	-	-	30
Maine .....	-	-	7	-	-	2	5
Maryland .....	7	5	10	4	2	1	15
Massachusetts .....	44	18	17	7	7	-	65
Michigan .....	35	4	94	-	-	-	133
Minnesota .....	25	-	2	-	-	-	27
Mississippi .....	35	31	12	14	2	4	58
Missouri .....	16	40	36	4	-	-	88
Montana .....	122	439	12	29	21	2	521
Nebraska .....	76	89	-	-	-	-	165
Nevada .....	220	12	15	59	5	-	183
New Hampshire .....	1	-	3	-	3	-	1
New Jersey .....	15	4	3	2	3	-	17
New Mexico .....	111	154	2	10	-	-	257
New York .....	3	4	9	-	4	-	12
North Carolina .....	153	2	48	16	-	-	187
North Dakota .....	9	2	4	-	-	-	15
Ohio .....	-	-	2	-	-	-	2
Oklahoma .....	6	18	3	-	-	-	27
Oregon .....	184	365	44	2	3	3	585
Pennsylvania .....	1	7	27	2	2	-	31
Rhode Island .....	-	-	5	-	-	-	5
South Carolina .....	2	2	52	-	-	-	56
South Dakota .....	27	6	7	2	-	-	38
Tennessee .....	4	10	7	1	-	-	20
Texas .....	133	170	719	75	-	24	923
Utah .....	291	481	87	6	90	-	763
Vermont .....	-	-	4	4	-	-	-
Virginia .....	6	-	60	-	-	-	66
Washington .....	77	56	54	3	-	-	184
West Virginia .....	1	-	-	-	-	-	1
Wisconsin .....	54	13	34	-	-	-	101
Wyoming .....	364	82	102	6	7	-	535
<b>Water Resources Regions</b>							
Region 01 New England .....	45	18	32	7	10	2	76
Region 02 Mid-Atlantic .....	29	25	57	14	10	1	86
Region 03 South Atlantic-Gulf .....	280	292	438	95	55	10	850
Region 04 Great Lakes .....	41	4	111	-	4	-	152
Region 05 Ohio .....	13	20	56	7	-	9	73
Region 06 Tennessee .....	3	2	9	2	-	-	12
Region 07 Upper Mississippi .....	90	13	55	-	-	-	158
Region 08 Lower Mississippi .....	117	279	73	62	34	12	361
Region 09 Souris-Red-Rainy .....	4	-	2	-	-	-	6
Region 10 Missouri .....	762	607	192	56	28	2	1,475
Region 11 Arkansas-White-Red .....	150	209	25	13	3	-	368
Region 12 Texas-Gulf .....	67	81	715	74	-	24	765
Region 13 Rio Grande .....	73	157	9	11	-	3	225
Region 14 Upper Colorado .....	472	368	11	2	88	-	761
Region 15 Lower Colorado .....	126	245	16	21	8	-	358
Region 16 Great Basin .....	705	338	102	60	13	-	1,072
Region 17 Pacific Northwest .....	573	938	109	10	4	3	1,603
Region 18 California .....	257	344	53	45	-	5	604
Region 19 Alaska .....	-	-	-	-	-	-	-
Region 20 Hawaii .....	1	12	1	-	-	-	14

See footnote(s) at end of table.

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**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Land clearing and leveling in survey year								
	Farms	Acres irrigated	Expenses <sup>1</sup> (\$1,000)	Average per farm (dollars)	Farms with expenses of -				
					\$1 to \$999	\$1,000 to \$9,999	\$10,000 to \$29,999	\$30,000 to \$74,999	\$75,000 or more
United States .....2008 ..	10,327	6,588,691	141,998	13,750	3,121	3,764	2,216	868	358
.....2003 ..	9,257	4,598,419	75,591	8,166	3,336	3,958	1,471	347	145
<b>2008 DATA</b>									
Alabama .....	56	4,311	92	1,642	20	34	2	-	-
Alaska .....	-	-	-	-	-	-	-	-	-
Arizona .....	317	189,744	8,093	25,530	49	156	40	47	25
Arkansas .....	471	843,404	15,571	33,060	9	102	154	171	35
California .....	1,272	982,856	47,605	37,425	5	304	455	344	164
Colorado .....	765	280,136	1,279	1,672	536	210	13	6	-
Connecticut .....	-	-	-	-	-	-	-	-	-
Delaware .....	19	5,234	98	5,169	8	9	-	2	-
Florida .....	364	424,772	7,653	21,024	-	283	23	26	32
Georgia .....	351	105,466	4,352	12,398	-	217	116	8	10
Hawaii .....	33	(D)	(D)	(D)	13	4	15	1	-
Idaho .....	685	491,904	2,523	3,683	161	486	31	7	-
Illinois .....	40	12,438	265	6,628	15	19	4	2	-
Indiana .....	53	44,751	497	9,374	1	39	11	1	1
Iowa .....	2	(D)	(D)	(D)	-	2	-	-	-
Kansas .....	28	17,395	252	9,000	-	5	23	-	-
Kentucky .....	19	1,556	58	3,037	13	5	-	1	-
Louisiana .....	202	143,584	5,337	26,419	57	52	43	28	22
Maine .....	4	(D)	245	61,250	-	-	3	-	1
Maryland .....	7	3,536	56	7,971	-	5	2	-	-
Massachusetts .....	61	(D)	474	7,769	7	38	16	-	-
Michigan .....	116	65,367	978	8,427	4	85	21	5	1
Minnesota .....	41	40,677	316	7,709	-	28	12	1	-
Mississippi .....	212	419,779	6,831	32,223	1	55	84	44	28
Missouri .....	200	259,376	2,783	13,917	40	59	76	24	1
Montana .....	202	96,767	902	4,466	25	161	12	4	-
Nebraska .....	407	519,752	2,890	7,101	25	261	121	-	-
Nevada .....	138	100,886	1,411	10,226	11	66	56	4	1
New Hampshire .....	-	-	-	-	-	-	-	-	-
New Jersey .....	19	3,022	36	1,874	13	4	2	-	-
New Mexico .....	516	182,239	3,230	6,261	189	255	43	25	4
New York .....	38	852	52	1,368	30	7	1	-	-
North Carolina .....	36	9,901	755	20,972	-	15	19	-	2
North Dakota .....	13	14,837	200	15,421	-	4	9	-	-
Ohio .....	9	9	16	1,800	-	9	-	-	-
Oklahoma .....	80	23,325	764	9,551	11	44	20	4	1
Oregon .....	246	65,663	723	2,937	186	44	10	3	3
Pennsylvania .....	24	156	13	526	23	1	-	-	-
Rhode Island .....	14	82	(D)	(D)	-	14	-	-	-
South Carolina .....	27	6,688	409	15,148	-	22	-	4	1
South Dakota .....	25	16,580	284	11,372	-	12	13	-	-
Tennessee .....	26	6,501	261	10,026	9	6	8	3	-
Texas .....	1,383	613,879	11,187	8,089	895	113	298	59	18
Utah .....	907	171,495	6,450	7,111	313	272	313	9	-
Vermont .....	2	(D)	(D)	(D)	-	2	-	-	-
Virginia .....	4	2,880	(D)	(D)	-	2	2	-	-
Washington .....	539	234,072	3,893	7,222	317	145	54	16	7
West Virginia .....	-	-	-	-	-	-	-	-	-
Wisconsin .....	78	82,343	1,465	18,783	18	18	22	19	1
Wyoming .....	276	87,756	1,278	4,631	117	90	69	-	-
<b>Water Resources Regions</b>									
Region 01 New England .....	79	10,030	771	9,765	7	52	19	-	1
Region 02 Mid-Atlantic .....	110	15,434	296	2,693	74	28	6	2	-
Region 03 South Atlantic-Gulf .....	825	549,903	13,253	16,065	16	567	159	38	45
Region 04 Great Lakes .....	172	82,829	1,266	7,362	17	116	32	6	1
Region 05 Ohio .....	38	12,823	177	4,650	14	21	1	2	-
Region 06 Tennessee .....	27	(D)	104	3,861	12	11	3	1	-
Region 07 Upper Mississippi .....	157	149,435	2,218	14,128	20	77	37	21	2
Region 08 Lower Mississippi .....	965	1,511,214	26,921	27,897	68	241	343	244	69
Region 09 Souris-Red-Rainy .....	9	10,796	(D)	(D)	-	7	2	-	-
Region 10 Missouri .....	1,066	806,670	6,024	5,651	285	525	249	7	-
Region 11 Arkansas-White-Red .....	426	479,748	7,691	18,054	42	187	139	40	18
Region 12 Texas-Gulf .....	1,167	384,343	8,736	7,486	837	52	200	60	18
Region 13 Rio Grande .....	459	131,686	2,290	4,990	242	150	49	15	3
Region 14 Upper Colorado .....	886	220,373	3,974	4,486	489	202	191	3	1
Region 15 Lower Colorado .....	386	192,779	8,286	21,467	54	220	40	47	25
Region 16 Great Basin .....	759	240,190	4,827	6,359	248	318	182	10	1
Region 17 Pacific Northwest .....	1,486	796,415	7,170	4,825	678	677	94	27	10
Region 18 California .....	1,277	987,806	47,632	37,300	5	309	455	344	164
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	33	(D)	(D)	(D)	13	4	15	1	-

See footnote(s) at end of table.

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**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Land clearing and leveling in survey year - con.						
	Principal purpose of expenditures			Primary source of funding assistance (see text)			
	Replacement (farms)	Water conservation (farms)	New expansion (farms)	EQIP (farms)	Other USDA programs (farms)	Non-USDA programs (farms)	No funding assistance (farms)
United States .....	-	6,073	4,254	332	162	53	9,780
2003 ..	(X)	2,841	5,248	203	76	29	8,949
<b>2008 DATA</b>							
Alabama .....	-	18	38	12	-	4	40
Alaska .....	-	-	-	-	-	-	-
Arizona .....	-	259	58	12	18	1	286
Arkansas .....	-	350	121	47	2	6	416
California .....	-	732	540	27	-	-	1,245
Colorado .....	-	672	93	11	-	-	754
Connecticut .....	-	-	-	-	-	-	-
Delaware .....	-	-	19	1	3	-	15
Florida .....	-	70	294	18	2	-	344
Georgia .....	-	9	342	-	-	6	345
Hawaii .....	-	2	31	-	-	-	33
Idaho .....	-	568	117	-	1	-	684
Illinois .....	-	2	38	-	-	-	40
Indiana .....	-	1	52	-	-	-	53
Iowa .....	-	-	2	-	-	-	2
Kansas .....	-	-	28	-	-	-	28
Kentucky .....	-	-	19	-	-	-	19
Louisiana .....	-	145	57	45	7	-	150
Maine .....	-	-	4	-	-	-	4
Maryland .....	-	-	7	1	2	-	4
Massachusetts .....	-	61	-	14	5	-	42
Michigan .....	-	4	112	-	-	-	116
Minnesota .....	-	1	40	-	-	2	39
Mississippi .....	-	82	130	27	4	15	166
Missouri .....	-	73	127	16	12	3	169
Montana .....	-	110	92	-	-	4	198
Nebraska .....	-	92	315	-	-	-	407
Nevada .....	-	81	57	13	2	-	123
New Hampshire .....	-	-	-	-	-	-	-
New Jersey .....	-	15	4	-	-	-	19
New Mexico .....	-	463	53	2	-	7	507
New York .....	-	5	33	-	-	-	38
North Carolina .....	-	11	25	-	-	-	36
North Dakota .....	-	-	13	2	-	-	11
Ohio .....	-	-	9	-	-	-	9
Oklahoma .....	-	75	5	2	2	-	76
Oregon .....	-	198	48	-	3	-	243
Pennsylvania .....	-	24	-	-	-	-	24
Rhode Island .....	-	-	14	4	-	-	10
South Carolina .....	-	1	26	8	-	-	19
South Dakota .....	-	9	16	2	-	-	23
Tennessee .....	-	1	25	-	-	1	25
Texas .....	-	715	668	53	-	-	1,330
Utah .....	-	794	113	15	96	-	796
Vermont .....	-	2	-	-	-	-	2
Virginia .....	-	-	4	-	-	-	4
Washington .....	-	382	157	-	3	2	534
West Virginia .....	-	-	-	-	-	-	-
Wisconsin .....	-	2	76	-	-	1	77
Wyoming .....	-	44	232	-	-	1	275
<b>Water Resources Regions</b>							
Region 01 New England .....	-	61	18	18	5	-	56
Region 02 Mid-Atlantic .....	-	43	67	2	5	-	103
Region 03 South Atlantic-Gulf .....	-	111	714	36	2	10	777
Region 04 Great Lakes .....	-	8	164	-	-	-	172
Region 05 Ohio .....	-	1	37	-	-	-	38
Region 06 Tennessee .....	-	-	27	2	-	-	25
Region 07 Upper Mississippi .....	-	15	142	-	12	2	143
Region 08 Lower Mississippi .....	-	574	391	119	13	24	809
Region 09 Souris-Red-Rainy .....	-	1	8	-	-	1	8
Region 10 Missouri .....	-	393	673	9	-	6	1,051
Region 11 Arkansas-White-Red .....	-	207	219	21	2	-	403
Region 12 Texas-Gulf .....	-	710	457	53	-	-	1,114
Region 13 Rio Grande .....	-	322	137	5	-	6	448
Region 14 Upper Colorado .....	-	803	83	-	84	1	801
Region 15 Lower Colorado .....	-	323	63	17	18	1	350
Region 16 Great Basin .....	-	604	155	23	14	-	722
Region 17 Pacific Northwest .....	-	1,163	323	-	7	2	1,477
Region 18 California .....	-	732	545	27	-	-	1,250
Region 19 Alaska .....	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	2	31	-	-	-	33

See footnote(s) at end of table.

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**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Computers, control panels, and software for irrigation water management in survey year									
	Farms	Acres irrigated	Expenses <sup>1</sup> (\$1,000)	Average per farm (dollars)	Farms with expenses of -					
					\$1 to \$999	\$1,000 to \$9,999	\$10,000 to \$29,999	\$30,000 to \$74,999	\$75,000 or more	
United States .....2008 ..	7,512	5,939,544	45,209	6,018	1,737	4,732	760	218	65	
.....2003 ..	3,799	2,274,736	14,316	3,768	1,267	2,214	212	102	4	
<b>2008 DATA</b>										
Alabama .....	33	1,698	37	1,133	19	14	-	-	-	
Alaska .....	-	-	-	-	-	-	-	-	-	
Arizona .....	23	51,605	781	33,964	-	8	5	7	3	
Arkansas .....	151	216,813	1,192	7,893	68	32	46	-	5	
California .....	1,697	619,545	8,965	5,283	543	955	117	75	7	
Colorado .....	234	242,748	785	3,355	92	126	12	4	-	
Connecticut .....	-	-	-	-	-	-	-	-	-	
Delaware .....	9	4,184	26	2,900	2	7	-	-	-	
Florida .....	117	279,897	948	8,101	-	87	27	3	-	
Georgia .....	100	75,220	500	5,005	32	45	23	-	-	
Hawaii .....	27	1,581	(D)	(D)	23	4	-	-	-	
Idaho .....	267	603,302	3,841	14,384	14	146	43	58	6	
Illinois .....	37	34,578	206	5,578	7	25	4	1	-	
Indiana .....	27	36,974	527	19,504	3	15	5	3	1	
Iowa .....	13	7,797	34	2,615	2	11	-	-	-	
Kansas .....	389	313,670	1,385	3,560	66	271	50	2	-	
Kentucky .....	6	(D)	2	400	6	-	-	-	-	
Louisiana .....	53	265	53	1,000	-	53	-	-	-	
Maine .....	1	(D)	(D)	(D)	-	-	-	1	-	
Maryland .....	9	2,655	8	927	3	6	-	-	-	
Massachusetts .....	51	(D)	(D)	(D)	38	8	2	2	1	
Michigan .....	87	84,899	562	6,461	11	55	19	2	-	
Minnesota .....	65	64,024	347	5,340	4	44	17	-	-	
Mississippi .....	14	33,652	38	2,686	1	12	1	-	-	
Missouri .....	56	150,792	244	4,355	2	47	7	-	-	
Montana .....	139	81,362	431	3,104	80	32	27	-	-	
Nebraska .....	970	870,088	4,129	4,257	213	670	87	-	-	
Nevada .....	66	55,024	582	8,826	13	43	7	-	3	
New Hampshire .....	3	9	1	430	3	-	-	-	-	
New Jersey .....	23	6,115	161	7,004	4	15	2	2	-	
New Mexico .....	95	167,033	3,945	41,526	-	47	7	27	14	
New York .....	4	270	3	750	3	1	-	-	-	
North Carolina .....	137	15,644	218	1,592	89	47	1	-	-	
North Dakota .....	17	18,935	194	11,388	3	8	4	1	1	
Ohio .....	6	2,210	17	2,833	2	4	-	-	-	
Oklahoma .....	35	21,733	117	3,356	4	31	-	-	-	
Oregon .....	283	107,884	1,022	3,610	44	222	13	4	-	
Pennsylvania .....	3	72	9	3,000	-	3	-	-	-	
Rhode Island .....	11	114	22	2,000	5	5	1	-	-	
South Carolina .....	25	10,905	206	8,224	8	9	7	1	-	
South Dakota .....	31	29,518	133	4,283	2	27	2	-	-	
Tennessee .....	20	3,134	64	3,184	4	15	1	-	-	
Texas .....	619	911,977	3,932	6,352	137	348	128	-	6	
Utah .....	282	83,615	1,287	4,565	3	271	7	1	-	
Vermont .....	-	-	-	-	-	-	-	-	-	
Virginia .....	52	2,821	30	581	49	2	1	-	-	
Washington .....	1,007	537,839	6,816	6,768	33	880	56	22	16	
West Virginia .....	2	(D)	(D)	(D)	2	-	-	-	-	
Wisconsin .....	111	105,263	881	7,936	23	59	25	2	2	
Wyoming .....	105	69,555	211	2,011	77	22	6	-	-	
<b>Water Resources Regions</b>										
Region 01 New England .....	66	12,540	324	4,910	46	13	3	3	1	
Region 02 Mid-Atlantic .....	93	16,067	233	2,504	55	33	3	2	-	
Region 03 South Atlantic-Gulf .....	405	382,405	1,902	4,697	146	197	58	4	-	
Region 04 Great Lakes .....	121	109,161	756	6,247	11	78	30	2	-	
Region 05 Ohio .....	23	8,867	53	2,296	11	12	-	-	-	
Region 06 Tennessee .....	25	1,784	53	2,118	10	14	1	-	-	
Region 07 Upper Mississippi .....	199	210,258	1,740	8,744	34	118	38	6	3	
Region 08 Lower Mississippi .....	207	368,661	1,002	4,839	13	140	54	-	-	
Region 09 Souris-Red-Rainy .....	8	11,157	(D)	(D)	2	2	3	1	-	
Region 10 Missouri .....	1,572	1,281,721	6,087	3,872	456	944	170	1	1	
Region 11 Arkansas-White-Red .....	677	763,230	3,823	5,647	232	379	54	2	10	
Region 12 Texas-Gulf .....	357	509,752	3,101	8,685	42	216	86	2	11	
Region 13 Rio Grande .....	66	97,605	772	11,700	5	46	9	3	3	
Region 14 Upper Colorado .....	195	105,363	2,854	14,636	1	168	-	25	1	
Region 15 Lower Colorado .....	40	62,845	1,065	26,630	-	23	5	7	5	
Region 16 Great Basin .....	176	130,797	734	4,169	16	142	15	2	1	
Region 17 Pacific Northwest .....	1,551	1,247,977	11,654	7,514	86	1,245	115	83	22	
Region 18 California .....	1,704	617,773	8,967	5,262	548	958	116	75	7	
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii .....	27	1,581	(D)	(D)	23	4	-	-	-	

See footnote(s) at end of table.

--continued

**Table 23. Expenditures for Irrigation Equipment, Facilities, Land Improvement, and Computer Technology: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Computers, control panels, and software for irrigation water management in survey year - con.						
	Principal purpose of expenditures			Primary source of funding assistance (see text)			
	Replacement (farms)	Water conservation (farms)	New expansion (farms)	EQIP (farms)	Other USDA programs (farms)	Non-USDA programs (farms)	No funding assistance (farms)
United States .....	2,370	2,642	2,500	210	107	57	7,138
2003 ..	1,206	737	1,856	42	154	23	3,580
<b>2008 DATA</b>							
Alabama .....	19	-	14	6	-	8	19
Alaska .....	-	-	-	-	-	-	-
Arizona .....	6	14	3	2	-	-	21
Arkansas .....	43	25	83	-	-	-	151
California .....	277	232	1,188	-	-	-	1,697
Colorado .....	75	117	42	27	-	-	207
Connecticut .....	-	-	-	-	-	-	-
Delaware .....	-	-	9	1	-	-	8
Florida .....	45	57	15	7	-	-	110
Georgia .....	40	8	52	-	-	-	100
Hawaii .....	25	-	2	-	-	-	27
Idaho .....	205	41	21	6	-	-	261
Illinois .....	22	1	14	-	-	-	37
Indiana .....	8	9	10	1	-	-	26
Iowa .....	8	2	3	-	-	-	13
Kansas .....	230	99	60	-	-	5	384
Kentucky .....	-	-	6	-	-	-	6
Louisiana .....	-	-	53	-	-	-	53
Maine .....	-	1	-	-	-	-	1
Maryland .....	6	3	-	-	2	-	7
Massachusetts .....	-	49	2	7	-	-	44
Michigan .....	42	20	25	3	-	-	84
Minnesota .....	23	15	27	-	-	-	65
Mississippi .....	9	3	2	-	-	-	14
Missouri .....	13	9	34	3	2	4	47
Montana .....	100	14	25	4	-	-	135
Nebraska .....	196	555	219	-	-	-	970
Nevada .....	22	31	13	6	-	-	60
New Hampshire .....	-	3	-	-	-	-	3
New Jersey .....	5	18	-	7	-	-	16
New Mexico .....	39	13	43	2	-	1	92
New York .....	4	-	-	-	-	-	4
North Carolina .....	29	106	2	-	-	-	137
North Dakota .....	10	1	6	3	-	-	14
Ohio .....	5	-	1	-	-	-	6
Oklahoma .....	24	-	11	-	-	-	35
Oregon .....	217	24	42	-	-	13	270
Pennsylvania .....	3	-	-	-	-	-	3
Rhode Island .....	5	1	5	5	-	5	1
South Carolina .....	5	7	13	7	-	-	18
South Dakota .....	7	11	13	-	-	-	31
Tennessee .....	10	2	8	-	-	1	19
Texas .....	213	168	238	-	5	13	601
Utah .....	89	171	22	71	87	-	124
Vermont .....	-	-	-	-	-	-	-
Virginia .....	9	-	43	-	-	-	52
Washington .....	157	775	75	19	11	3	974
West Virginia .....	-	-	2	-	-	-	2
Wisconsin .....	55	26	30	15	-	4	92
Wyoming .....	70	11	24	8	-	-	97
<b>Water Resources Regions</b>							
Region 01 New England .....	5	54	7	12	-	5	49
Region 02 Mid-Atlantic .....	18	21	54	8	2	-	83
Region 03 South Atlantic-Gulf .....	136	178	91	19	-	8	378
Region 04 Great Lakes .....	64	24	33	4	-	-	117
Region 05 Ohio .....	12	2	9	-	-	-	23
Region 06 Tennessee .....	19	-	6	1	-	-	24
Region 07 Upper Mississippi .....	80	42	77	15	-	4	180
Region 08 Lower Mississippi .....	61	32	114	3	2	5	197
Region 09 Souris-Red-Rainy .....	2	4	2	-	-	-	8
Region 10 Missouri .....	532	720	320	38	-	-	1,534
Region 11 Arkansas-White-Red .....	239	161	277	-	5	18	654
Region 12 Texas-Gulf .....	145	107	105	2	-	-	355
Region 13 Rio Grande .....	48	9	9	-	-	-	66
Region 14 Upper Colorado .....	81	86	28	1	84	1	109
Region 15 Lower Colorado .....	20	15	5	2	-	-	38
Region 16 Great Basin .....	31	115	30	77	3	-	96
Region 17 Pacific Northwest .....	576	832	143	28	11	16	1,496
Region 18 California .....	276	240	1,188	-	-	-	1,704
Region 19 Alaska .....	-	-	-	-	-	-	-
Region 20 Hawaii .....	25	-	2	-	-	-	27

<sup>1</sup> May not add due to rounding.

**Table 24. Expenses for Maintenance and Repairs of Irrigation Equipment and Facilities: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms	Acres irrigated	Total expenses (\$1,000)	Average expenses		Farms with expenses of -							
				Per farm (dollars)	Per acre irrigated (dollars)	\$1 to \$999	\$1,000 to \$4,999	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$19,999	\$20,000 to \$29,999	\$30,000 or more	
United States .....	126,629	45,097,612	820,568	6,480	18.20	59,639	36,666	11,020	6,326	2,845	4,042	6,091	
2003 .....	116,760	39,968,510	490,447	4,200	12.27	60,744	34,512	10,176	4,613	1,670	2,151	2,894	
<b>2008 DATA</b>													
Alabama .....	412	62,273	1,212	2,943	19.47	207	124	47	13	10	9	2	
Alaska .....	18	1,413	19	1,040	13.25	11	6	1	-	-	-	-	
Arizona .....	1,523	661,234	16,280	10,690	24.62	617	568	74	54	28	55	127	
Arkansas .....	2,646	3,649,217	35,097	13,264	9.62	262	803	432	401	220	236	292	
California .....	28,478	5,946,668	209,734	7,365	35.27	15,511	7,588	1,270	1,411	421	732	1,545	
Colorado .....	5,723	2,162,881	25,360	4,431	11.73	2,395	2,198	559	197	103	121	150	
Connecticut .....	76	1,912	81	1,067	42.41	36	39	1	-	-	-	-	
Delaware .....	246	90,146	1,545	6,282	17.14	77	90	29	19	8	13	10	
Florida .....	3,661	1,106,703	30,312	8,280	27.39	1,612	1,171	292	184	40	152	210	
Georgia .....	2,693	877,354	18,118	6,728	20.65	880	869	339	254	99	137	115	
Hawaii .....	437	24,829	4,435	10,148	178.61	281	135	8	2	2	2	7	
Idaho .....	8,838	2,904,650	50,697	5,736	17.45	5,174	1,917	813	223	94	175	442	
Illinois .....	827	391,431	3,304	3,995	8.44	343	292	109	35	15	14	19	
Indiana .....	701	316,411	3,428	4,890	10.83	221	284	123	20	17	19	17	
Iowa .....	327	124,230	1,023	3,127	8.23	153	128	24	6	7	4	5	
Kansas .....	2,958	2,079,701	39,299	13,286	18.90	591	897	402	383	160	180	345	
Kentucky .....	419	21,584	581	1,387	26.92	288	97	15	11	8	-	-	
Louisiana .....	1,037	708,058	6,557	6,323	9.26	170	472	165	103	52	42	33	
Maine .....	125	15,229	414	3,316	27.21	100	18	2	1	-	-	4	
Maryland .....	395	75,492	2,150	5,444	28.48	202	103	42	9	11	14	14	
Massachusetts .....	520	14,190	2,520	4,845	177.56	260	145	31	50	3	14	17	
Michigan .....	1,542	474,909	6,558	4,253	13.81	830	408	135	61	23	46	39	
Minnesota .....	1,115	442,518	6,556	5,880	14.82	350	464	123	86	23	38	31	
Mississippi .....	1,063	1,376,502	10,909	10,262	7.92	236	334	165	119	70	57	82	
Missouri .....	1,328	1,084,144	8,070	6,077	7.44	417	446	213	83	46	81	42	
Montana .....	6,068	1,481,824	10,876	1,792	7.34	4,013	1,486	324	86	53	75	31	
Nebraska .....	10,864	6,968,389	57,942	5,333	8.31	2,999	4,384	1,709	727	333	399	313	
Nevada .....	898	551,393	7,900	8,798	14.33	195	336	146	49	22	117	33	
New Hampshire .....	45	498	33	738	66.72	33	12	-	-	-	-	-	
New Jersey .....	416	53,617	2,239	5,381	41.75	153	154	55	19	6	17	12	
New Mexico .....	2,935	629,827	20,598	7,018	32.70	1,663	808	84	71	80	112	117	
New York .....	240	15,828	892	3,716	56.35	87	127	4	13	2	4	3	
North Carolina .....	1,394	129,486	5,395	3,870	41.66	611	419	213	62	17	65	7	
North Dakota .....	394	193,125	2,653	6,735	13.74	104	165	60	25	14	15	11	
Ohio .....	203	13,832	361	1,781	26.13	167	24	8	-	-	3	1	
Oklahoma .....	965	395,695	6,800	7,047	17.19	341	345	103	34	40	46	56	
Oregon .....	7,146	1,372,879	26,787	3,749	19.51	4,231	1,376	977	158	93	70	241	
Pennsylvania .....	515	11,310	379	736	33.53	421	74	14	5	-	1	-	
Rhode Island .....	36	429	36	992	83.22	19	17	-	-	-	-	-	
South Carolina .....	491	81,992	1,425	2,902	17.38	302	123	28	16	3	8	11	
South Dakota .....	737	267,247	3,133	4,251	11.72	289	266	59	79	16	21	7	
Tennessee .....	258	41,520	458	1,774	11.02	185	53	11	2	2	3	2	
Texas .....	7,887	4,631,771	116,829	14,813	25.22	2,131	1,908	814	616	490	624	1,304	
Utah .....	5,930	740,541	11,255	1,898	15.20	4,220	1,275	197	82	50	47	59	
Vermont .....	41	292	33	804	112.84	29	10	2	-	-	-	-	
Virginia .....	432	37,395	811	1,877	21.68	263	146	6	8	-	4	5	
Washington .....	8,199	1,516,953	45,570	5,558	30.04	4,557	2,179	497	418	113	187	248	
West Virginia .....	28	206	19	689	93.59	21	5	2	-	-	-	-	
Wisconsin .....	810	352,638	6,022	7,434	17.08	264	285	108	44	19	38	52	
Wyoming .....	2,589	995,246	7,862	3,037	7.90	1,117	1,093	185	87	32	45	30	
<b>Water Resources Regions</b>													
Region 01 New England .....	811	32,380	3,089	3,809	95.41	454	234	34	51	3	14	21	
Region 02 Mid-Atlantic .....	1,958	268,499	7,406	3,783	27.58	1,050	566	153	70	26	53	40	
Region 03 South Atlantic-Gulf .....	8,855	2,252,192	56,374	6,366	25.03	3,759	2,781	909	524	166	371	345	
Region 04 Great Lakes .....	2,037	632,754	8,740	4,291	13.81	1,040	589	190	75	32	61	50	
Region 05 Ohio .....	1,107	235,943	2,809	2,537	11.90	671	292	78	27	14	11	14	
Region 06 Tennessee .....	299	35,021	605	2,024	17.28	181	86	20	5	3	2	2	
Region 07 Upper Mississippi .....	2,722	1,147,725	15,028	5,521	13.09	961	1,032	347	138	66	85	93	
Region 08 Lower Mississippi .....	5,059	6,231,906	55,089	10,889	8.84	664	1,751	898	631	339	374	402	
Region 09 Souris-Red-Rainy .....	267	129,974	2,285	8,558	17.58	68	100	39	29	8	9	14	
Region 10 Missouri .....	21,634	11,109,760	101,261	4,681	9.11	8,036	7,813	2,914	1,172	538	630	531	
Region 11 Arkansas-White-Red .....	5,978	4,463,210	82,722	13,838	18.53	1,396	1,798	722	508	305	507	742	
Region 12 Texas-Gulf .....	6,173	3,034,591	84,614	13,707	27.88	1,732	1,520	532	536	454	408	991	
Region 13 Rio Grande .....	2,910	802,845	20,375	7,002	25.38	1,608	838	80	99	48	106	131	
Region 14 Upper Colorado .....	5,421	885,194	7,259	1,339	8.20	3,271	1,899	132	64	22	24	9	
Region 15 Lower Colorado .....	1,735	724,080	17,082	9,846	23.59	763	589	109	55	28	57	134	
Region 16 Great Basin .....	5,173	1,203,586	22,046	4,262	18.32	3,288	1,113	275	126	66	158	147	
Region 17 Pacific Northwest .....	25,409	5,863,068	118,741	4,673	20.25	14,877	5,890	2,243	794	300	433	872	
Region 18 California .....	28,626	6,018,642	210,588	7,357	34.99	15,528	7,634	1,336	1,420	425	737	1,546	
Region 19 Alaska .....	18	1,413	19	1,040	13.25	11	6	1	-	-	-	-	
Region 20 Hawaii .....	437	24,829	4,435	10,148	178.61	281	135	8	2	2	2	7	



**Table 26. Farms with Diminished Crop Yields Resulting from Irrigation Interruption by Cause: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Total <sup>1</sup>		Shortage of surface water		Shortage of ground water		Irrigation equipment failure	
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States .....2008 ..	33,052	8,997,812	17,337	4,074,095	3,479	1,755,337	7,737	3,624,169
.....2003 ..	39,887	10,192,594	28,955	6,026,318	5,416	2,282,297	6,513	2,818,897
<b>2008 DATA</b>								
Alabama .....	91	15,408	40	8,982	6	(D)	24	4,891
Alaska .....	-	-	-	-	-	-	-	-
Arizona .....	387	65,440	146	24,202	49	7,804	36	45,499
Arkansas .....	401	555,666	138	163,406	49	74,601	156	247,953
California .....	6,316	1,381,662	3,325	1,053,655	630	529,251	595	331,834
Colorado .....	2,203	757,861	1,360	499,212	300	114,325	218	110,531
Connecticut .....	14	51	14	(D)	-	-	-	-
Delaware .....	61	29,609	21	10,926	3	1,196	36	19,192
Florida .....	628	187,620	39	38,744	8	9,638	282	37,169
Georgia .....	858	182,275	486	81,385	6	2,958	218	94,208
Hawaii .....	183	77,895	89	77,371	16	69,110	20	(D)
Idaho .....	1,513	467,816	1,076	254,264	221	88,311	279	180,996
Illinois .....	68	20,199	7	490	14	868	29	12,570
Indiana .....	92	42,269	14	6,258	3	4,215	73	37,955
Iowa .....	53	13,318	9	1,875	5	65	27	9,986
Kansas .....	566	391,628	130	40,786	130	143,078	286	249,056
Kentucky .....	187	4,159	88	2,355	30	419	32	718
Louisiana .....	67	51,922	16	14,331	4	1,320	36	29,455
Maine .....	3	45	-	-	-	-	-	-
Maryland .....	50	18,718	12	4,622	4	390	25	14,488
Massachusetts .....	12	850	12	850	-	-	-	-
Michigan .....	240	68,150	25	6,978	3	1,248	89	46,727
Minnesota .....	142	45,794	18	8,100	-	-	80	24,162
Mississippi .....	113	59,893	16	9,010	2	(D)	30	49,412
Missouri .....	101	59,591	17	18,472	11	2,404	83	36,351
Montana .....	1,947	463,440	1,585	362,461	6	5,242	418	154,575
Nebraska .....	1,384	658,797	51	67,950	240	82,246	660	333,585
Nevada .....	712	289,291	600	236,792	8	11,210	90	22,775
New Hampshire .....	5	(D)	-	-	3	3	-	-
New Jersey .....	64	8,594	17	3,893	4	65	13	1,862
New Mexico .....	1,882	240,521	1,194	70,660	135	46,684	103	112,834
New York .....	18	1,199	5	144	-	-	3	51
North Carolina .....	185	23,704	132	17,167	24	800	40	5,610
North Dakota .....	93	25,644	31	9,175	4	496	40	11,191
Ohio .....	21	923	6	542	2	(D)	15	523
Oklahoma .....	243	58,923	59	17,770	10	6,586	127	23,840
Oregon .....	2,783	287,719	1,331	187,180	177	28,823	644	62,902
Pennsylvania .....	151	2,028	101	877	48	66	12	659
Rhode Island .....	2	(D)	2	(D)	-	-	-	-
South Carolina .....	129	21,234	45	10,085	20	2,763	40	11,676
South Dakota .....	115	28,085	26	4,635	-	-	27	13,162
Tennessee .....	67	6,857	20	1,010	10	141	17	(D)
Texas .....	3,926	1,386,835	1,622	99,068	1,059	393,291	1,815	995,465
Utah .....	3,015	342,545	2,493	271,806	81	33,728	332	84,839
Vermont .....	-	-	-	-	-	-	-	-
Virginia .....	117	8,578	35	4,894	1	(D)	55	2,464
Washington .....	974	269,477	253	131,168	132	66,985	505	102,313
West Virginia .....	6	50	-	-	5	10	1	(D)
Wisconsin .....	99	69,414	14	4,596	2	(D)	51	54,265
Wyoming .....	765	306,012	617	245,999	14	21,650	75	42,808
<b>Water Resources Regions</b>								
Region 01 New England .....	36	1,049	28	981	3	3	-	-
Region 02 Mid-Atlantic .....	335	65,103	159	23,416	37	1,709	96	38,436
Region 03 South Atlantic-Gulf .....	2,033	432,055	765	160,026	59	16,659	644	152,761
Region 04 Great Lakes .....	330	88,574	40	9,298	7	1,732	133	61,415
Region 05 Ohio .....	293	23,601	103	8,046	67	(D)	72	17,919
Region 06 Tennessee .....	75	4,725	38	(D)	6	(D)	31	(D)
Region 07 Upper Mississippi .....	256	137,018	38	15,498	17	5,083	131	93,651
Region 08 Lower Mississippi .....	456	653,593	151	195,995	64	78,319	238	350,424
Region 09 Souris-Red-Rainy .....	65	16,550	2	(D)	-	-	50	7,900
Region 10 Missouri .....	4,466	1,642,553	2,221	722,238	449	185,228	1,255	619,666
Region 11 Arkansas-White-Red .....	2,185	1,002,744	1,106	252,446	279	236,937	778	501,623
Region 12 Texas-Gulf .....	3,578	1,175,482	1,624	100,568	1,022	350,921	1,501	814,425
Region 13 Rio Grande .....	1,563	172,568	827	88,151	150	36,341	105	30,170
Region 14 Upper Colorado .....	1,797	410,245	1,151	271,733	5	5,920	167	95,017
Region 15 Lower Colorado .....	552	76,827	236	31,347	49	7,804	36	45,499
Region 16 Great Basin .....	2,911	561,686	2,475	437,997	131	70,189	369	96,338
Region 17 Pacific Northwest .....	5,211	1,080,701	2,970	639,103	507	172,168	1,356	353,820
Region 18 California .....	6,727	1,374,843	3,314	1,035,975	611	515,951	755	340,599
Region 19 Alaska .....	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	183	77,895	89	77,371	16	69,110	20	(D)

See footnote(s) at end of table.

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**Table 26. Farms with Diminished Crop Yields Resulting from Irrigation Interruption by Cause: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Energy price increases or energy shortage		Poor water quality		Loss of water rights		Cost of purchased water		Other	
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States ..... 2008 ..	3,403	1,175,609	632	240,225	483	172,443	2,562	397,309	6,767	1,120,710
..... 2003 ..	1,934	961,004	877	230,020	376	192,271	1,705	350,803	2,952	924,927
<b>2008 DATA</b>										
Alabama .....	23	4,412	5	15	1	(D)	23	(D)	18	4,137
Alaska .....	-	-	-	-	-	-	-	-	-	-
Arizona .....	10	11,984	-	-	4	160	114	10,564	157	685
Arkansas .....	92	148,768	11	15,550	-	-	25	36,000	74	82,713
California .....	283	123,769	77	69,480	125	57,466	1,727	104,854	1,613	178,376
Colorado .....	56	38,745	7	12,892	27	26,205	67	45,293	498	120,748
Connecticut .....	-	-	1	(D)	-	-	-	-	-	-
Delaware .....	10	1,906	-	-	-	-	-	-	8	1,952
Florida .....	83	14,706	18	29,743	2	(D)	-	-	233	88,826
Georgia .....	311	55,321	52	416	-	-	4	1,200	77	13,080
Hawaii .....	2	(D)	11	11	-	-	23	23	45	1,002
Idaho .....	55	46,901	8	5,540	5	(D)	76	20,762	118	43,514
Illinois .....	22	4,839	-	-	-	-	-	-	3	1,922
Indiana .....	15	1,518	-	-	-	-	-	-	18	2,856
Iowa .....	2	(D)	-	-	-	-	-	-	18	4,773
Kansas .....	117	61,812	85	27,584	44	2,332	44	2,332	103	59,695
Kentucky .....	18	852	-	-	-	-	25	308	29	(D)
Louisiana .....	6	6,842	10	3,684	-	-	1	(D)	11	5,490
Maine .....	3	(D)	-	-	-	-	-	-	-	-
Maryland .....	12	3,556	-	-	-	-	-	-	4	687
Massachusetts .....	-	-	-	-	-	-	-	-	-	-
Michigan .....	58	8,581	-	-	-	-	-	-	97	16,067
Minnesota .....	10	4,430	-	-	1	(D)	-	-	37	9,584
Mississippi .....	76	10,220	-	-	-	-	66	198	4	7,290
Missouri .....	21	9,039	9	720	9	720	9	720	17	4,524
Montana .....	70	56,652	12	11,496	20	18,208	12	9,280	249	49,070
Nebraska .....	264	81,410	-	-	-	-	26	19,240	290	134,886
Nevada .....	41	15,350	49	1,960	6	1,200	1	(D)	98	31,639
New Hampshire .....	-	-	-	-	-	-	-	-	2	(D)
New Jersey .....	10	1,256	-	-	-	-	-	-	31	4,676
New Mexico .....	202	22,126	62	744	-	-	6	2,400	473	22,466
New York .....	-	-	-	-	-	-	-	-	10	1,004
North Carolina .....	32	1,712	-	-	-	-	-	-	41	2,255
North Dakota .....	24	9,126	2	(D)	-	-	-	-	9	1,930
Ohio .....	2	(D)	-	-	-	-	-	-	4	206
Oklahoma .....	39	17,672	2	(D)	-	-	7	4,158	42	8,637
Oregon .....	155	16,055	-	-	2	(D)	-	-	952	42,076
Pennsylvania .....	6	326	-	-	-	-	-	-	11	243
Rhode Island .....	2	(D)	-	-	-	-	-	-	-	-
South Carolina .....	62	4,030	-	-	1	(D)	-	-	8	950
South Dakota .....	5	1,530	5	1,530	-	-	-	-	78	11,713
Tennessee .....	3	(D)	9	131	-	-	16	40	4	(D)
Texas .....	925	240,355	28	45,256	5	9,195	157	115,190	417	64,042
Utah .....	20	15,800	10	3,686	3	7,611	19	7,758	365	24,469
Vermont .....	-	-	-	-	-	-	-	-	-	-
Virginia .....	12	3,964	-	-	-	-	-	-	27	1,615
Washington .....	112	11,210	110	7,172	213	23,260	107	4,922	406	36,466
West Virginia .....	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	30	17,111	-	-	-	-	-	-	22	2,831
Wyoming .....	102	29,695	49	1,470	15	9,360	7	5,740	46	26,550
<b>Water Resources Regions</b>										
Region 01 New England .....	5	125	1	(D)	-	-	-	-	2	(D)
Region 02 Mid-Atlantic .....	47	10,753	-	-	-	-	-	-	71	9,052
Region 03 South Atlantic-Gulf .....	572	79,561	70	30,159	3	5,456	88	1,668	384	107,518
Region 04 Great Lakes .....	81	12,916	-	-	-	-	-	-	134	19,416
Region 05 Ohio .....	21	(D)	9	131	-	-	25	308	36	(D)
Region 06 Tennessee .....	9	1,283	5	(D)	1	(D)	21	55	7	2,093
Region 07 Upper Mississippi .....	54	23,563	-	-	1	(D)	-	-	46	13,763
Region 08 Lower Mississippi .....	114	158,464	30	19,954	9	(D)	35	40,862	64	64,934
Region 09 Souris-Red-Rainy .....	7	4,650	-	-	-	-	-	-	6	1,800
Region 10 Missouri .....	455	175,628	129	27,013	87	37,570	116	55,695	801	264,943
Region 11 Arkansas-White-Red .....	257	176,571	95	29,847	3	3,555	68	52,638	222	138,281
Region 12 Texas-Gulf .....	892	190,198	28	45,256	5	9,195	115	81,390	408	53,842
Region 13 Rio Grande .....	67	15,371	-	-	-	-	-	-	474	23,786
Region 14 Upper Colorado .....	10	4,233	9	3,186	15	14,391	19	7,030	507	62,744
Region 15 Lower Colorado .....	134	14,526	-	-	4	160	114	10,564	170	3,505
Region 16 Great Basin .....	78	44,428	50	2,460	6	1,200	20	9,658	280	46,838
Region 17 Pacific Northwest .....	315	69,555	118	12,712	224	41,400	191	32,564	1,235	125,210
Region 18 California .....	283	123,769	77	69,480	125	57,466	1,727	104,854	1,875	180,472
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	2	(D)	11	11	-	-	23	23	45	1,002

<sup>1</sup> Detail may not add to total because respondents could check more than one cause.

**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Corn for grain or seed										
	Irrigated					Non-irrigated					
	Farms	Acres harvested	Average yield per acre (bushels)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (bushels)
1 to 99 acres				100 to 249 acres	250 to 499 acres	500 to 999 acres	1,000 acres or more				
United States .....	33,571	11,991,515	181	8,281	10,720	7,539	4,610	2,421	19,045	5,075,025	129
2008 ..	32,231	9,747,474	178	10,798	9,406	6,153	4,218	1,656	18,273	4,882,482	106
<b>2008 DATA</b>											
Alabama .....	140	24,111	173	69	34	26	8	3	133	54,460	102
Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	40	13,987	182	10	17	6	5	2	-	-	-
Arkansas .....	960	381,321	163	217	267	211	181	84	181	22,857	120
California .....	433	122,554	177	70	293	36	17	17	4	600	138
Colorado .....	2,337	796,040	174	696	672	567	238	164	257	87,610	56
Connecticut .....	-	-	-	-	-	-	-	-	20	(D)	(D)
Delaware .....	223	49,381	190	83	74	40	24	2	191	51,463	105
Florida .....	72	9,899	155	45	14	10	1	2	7	1,837	74
Georgia .....	1,174	155,035	171	675	313	135	45	6	257	20,179	56
Hawaii .....	10	2,037	(D)	1	5	4	-	-	-	-	-
Idaho .....	540	72,800	179	338	136	40	22	4	-	-	-
Illinois .....	875	309,187	190	169	325	177	144	60	818	409,642	177
Indiana .....	778	244,574	176	178	289	171	98	42	808	459,093	159
Iowa .....	430	107,979	171	100	204	77	34	15	428	205,225	163
Kansas .....	2,896	1,368,126	191	400	941	696	512	347	1,454	475,908	84
Kentucky .....	76	14,099	174	30	28	13	4	1	198	64,366	136
Louisiana .....	470	212,824	161	126	84	114	83	63	278	126,755	136
Maine .....	-	-	-	-	-	-	-	-	1	(D)	(D)
Maryland .....	231	36,981	188	112	77	28	12	2	284	50,911	113
Massachusetts .....	5	(D)	(D)	5	-	-	-	-	-	-	-
Michigan .....	778	248,790	175	328	211	108	70	61	742	258,096	130
Minnesota .....	1,071	254,960	174	345	458	166	64	38	893	272,178	147
Mississippi .....	522	351,869	175	22	129	135	137	99	218	91,718	138
Missouri .....	1,057	361,275	172	250	331	267	133	76	579	140,825	142
Montana .....	162	28,653	150	58	69	24	7	4	-	-	-
Nebraska .....	12,530	5,058,195	184	1,965	4,130	3,243	2,152	1,040	8,525	1,230,756	129
Nevada .....	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	2	(D)	(D)	2	-	-	-	-	-	-	-
New Jersey .....	43	5,620	178	22	15	6	-	-	34	4,263	105
New Mexico .....	88	(D)	191	24	19	19	15	11	5	860	39
New York .....	9	375	198	9	-	-	-	-	32	20,250	153
North Carolina .....	210	24,738	127	163	13	18	16	-	294	82,803	56
North Dakota .....	311	90,271	156	88	96	82	28	17	232	162,710	131
Ohio .....	23	7,260	162	6	9	5	2	1	108	33,585	127
Oklahoma .....	211	95,182	188	21	88	44	33	25	44	18,012	78
Oregon .....	291	32,584	209	195	72	17	4	3	-	-	-
Pennsylvania .....	16	912	138	14	2	-	-	-	259	26,300	145
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	158	35,411	162	63	48	26	15	6	139	48,228	54
South Dakota .....	669	175,593	173	175	272	155	46	21	605	301,760	134
Tennessee .....	72	17,794	190	26	22	14	7	3	115	46,858	121
Texas .....	1,998	954,026	184	252	532	664	375	175	280	110,317	47
Utah .....	296	26,848	152	253	25	13	5	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	86	12,729	181	51	22	6	6	1	127	39,380	116
Washington .....	402	87,919	185	161	142	65	24	10	2	(D)	(D)
West Virginia .....	2	(D)	(D)	-	2	-	-	-	8	542	136
Wisconsin .....	479	105,809	166	192	160	84	29	14	483	153,058	127
Wyoming .....	395	39,896	145	272	80	27	14	2	2	(D)	(D)
<b>Water Resources Regions</b>											
Region 01 New England .....	7	134	109	7	-	-	-	-	21	450	104
Region 02 Mid-Atlantic .....	587	104,218	189	275	186	79	42	5	835	160,795	117
Region 03 South Atlantic-Gulf .....	1,761	244,887	164	1,024	432	208	83	14	842	182,925	63
Region 04 Great Lakes .....	1,098	330,435	174	430	336	163	95	74	1,177	397,563	129
Region 05 Ohio .....	554	156,931	176	114	248	114	58	20	744	418,479	159
Region 06 Tennessee .....	55	15,763	187	13	18	13	7	4	74	(D)	106
Region 07 Upper Mississippi .....	2,616	734,442	179	765	971	487	269	124	2,359	919,326	160
Region 08 Lower Mississippi .....	2,483	1,159,644	169	484	641	577	469	312	1,005	315,202	137
Region 09 Souris-Red-Rainy .....	228	64,333	163	49	95	55	16	13	213	102,475	135
Region 10 Missouri .....	17,097	6,541,812	182	3,168	5,683	4,290	2,648	1,308	10,553	2,194,662	124
Region 11 Arkansas-White-Red .....	3,736	1,839,620	193	621	1,101	913	634	467	966	226,333	79
Region 12 Texas-Gulf .....	1,040	376,884	151	141	275	372	212	40	250	104,218	(D)
Region 13 Rio Grande .....	78	8,980	(D)	53	21	4	-	-	-	-	-
Region 14 Upper Colorado .....	230	53,182	184	121	22	82	3	2	-	-	-
Region 15 Lower Colorado .....	44	17,621	179	10	17	8	5	4	-	-	-
Region 16 Great Basin .....	273	23,995	151	237	22	12	2	-	-	-	-
Region 17 Pacific Northwest .....	1,241	194,043	186	698	354	122	50	17	2	(D)	(D)
Region 18 California .....	433	122,554	177	70	293	36	17	17	4	600	138
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	10	2,037	(D)	1	5	4	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Corn for silage or greenchop										
	Irrigated							Non-irrigated			
	Farms	Acres harvested	Average yield per acre (tons, green)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (tons, green)
1 to 24 acres				25 to 49 acres	50 to 99 acres	100 to 249 acres	250 acres or more				
United States ..... 2008 ..	9,135	1,633,540	25	1,692	1,820	1,597	2,112	1,914	2,603	253,298	16
..... 2003 ..	10,111	1,311,674	25	1,711	1,856	2,635	2,612	1,297	3,378	326,468	13
<b>2008 DATA</b>											
Alabama .....	9	1,269	18	2	-	1	4	2	5	368	14
Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	81	30,591	28	-	3	12	31	35	-	-	-
Arkansas .....	1	(D)	(D)	1	-	-	-	-	-	-	-
California .....	1,684	530,406	27	5	142	218	582	737	54	10,800	15
Colorado .....	848	92,563	23	102	146	389	106	105	20	1,720	8
Connecticut .....	-	-	-	-	-	-	-	-	12	(D)	(D)
Delaware .....	17	750	21	7	4	2	4	-	15	721	13
Florida .....	169	30,670	18	66	18	29	17	39	2	(D)	(D)
Georgia .....	186	26,147	22	66	5	38	53	24	154	9,839	13
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	1,391	253,615	27	222	496	120	247	306	61	244	17
Illinois .....	11	766	14	-	8	1	2	-	24	340	14
Indiana .....	55	8,417	21	10	14	8	17	6	108	8,645	20
Iowa .....	11	1,730	24	2	-	3	5	1	30	5,951	13
Kansas .....	394	75,978	22	52	69	61	129	83	230	19,111	18
Kentucky .....	9	114	25	7	-	2	-	-	27	448	16
Louisiana .....	4	120	10	-	4	-	-	-	4	384	15
Maine .....	-	-	-	-	-	-	-	-	1	(D)	(D)
Maryland .....	16	2,096	27	7	-	4	2	3	40	3,220	16
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	99	18,379	22	2	9	27	24	37	119	62,980	15
Minnesota .....	183	10,673	20	62	59	34	24	4	277	29,514	17
Mississippi .....	-	-	-	-	-	-	-	-	2	(D)	(D)
Missouri .....	29	4,019	18	-	14	-	10	5	8	536	13
Montana .....	297	40,377	22	4	74	99	67	53	-	-	-
Nebraska .....	1,115	89,346	22	575	171	198	112	59	524	20,430	17
Nevada .....	34	5,880	27	-	14	2	10	8	-	-	-
New Hampshire .....	5	61	27	5	-	-	-	-	1	(D)	(D)
New Jersey .....	4	746	24	-	2	-	-	2	12	872	15
New Mexico .....	281	86,730	26	107	3	9	66	96	2	(D)	(D)
New York .....	4	12	25	4	-	-	-	7	-	5,076	14
North Carolina .....	25	1,830	27	-	16	-	9	-	34	6,910	16
North Dakota .....	60	4,946	19	6	12	24	15	3	78	10,022	9
Ohio .....	4	635	23	1	-	-	3	-	26	1,347	14
Oklahoma .....	49	12,665	17	2	4	4	34	5	-	-	-
Oregon .....	166	18,977	28	3	50	42	55	16	16	1,720	19
Pennsylvania .....	7	511	24	-	4	2	1	-	164	4,288	19
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	35	4,519	15	5	5	7	15	3	26	7,765	11
South Dakota .....	61	4,595	18	19	19	13	4	6	149	8,755	14
Tennessee .....	17	1,572	21	-	9	1	6	1	19	3,249	18
Texas .....	324	108,226	25	-	6	37	167	114	4	1,016	13
Utah .....	751	51,380	22	252	230	85	153	31	21	645	12
Vermont .....	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	64	3,287	25	16	20	25	3	-	47	3,109	15
Washington .....	355	67,413	29	41	135	24	77	78	131	3,696	26
West Virginia .....	2	(D)	(D)	1	1	-	-	-	8	175	13
Wisconsin .....	119	12,442	21	24	18	38	23	16	141	17,366	17
Wyoming .....	159	29,027	24	14	36	38	35	36	-	-	-
<b>Water Resources Regions</b>											
Region 01 New England .....	5	61	27	5	-	-	-	-	14	796	19
Region 02 Mid-Atlantic .....	112	7,402	25	34	30	33	10	5	234	12,099	17
Region 03 South Atlantic-Gulf .....	424	64,435	20	139	44	75	98	68	217	25,574	13
Region 04 Great Lakes .....	149	22,893	22	20	13	37	37	42	229	76,878	15
Region 05 Ohio .....	33	2,271	21	8	13	4	8	-	139	5,392	19
Region 06 Tennessee .....	11	1,323	21	-	4	-	6	1	16	2,930	18
Region 07 Upper Mississippi .....	296	26,761	20	66	96	70	42	22	394	41,952	16
Region 08 Lower Mississippi .....	19	1,855	18	1	8	-	10	-	9	644	14
Region 09 Souris-Red-Rainy .....	25	1,494	20	13	2	2	8	-	58	5,354	18
Region 10 Missouri .....	2,477	263,062	22	690	443	723	362	259	921	49,910	14
Region 11 Arkansas-White-Red .....	475	121,955	24	82	34	71	168	120	83	13,508	19
Region 12 Texas-Gulf .....	313	97,872	24	-	1	24	188	100	6	1,156	13
Region 13 Rio Grande .....	191	48,162	27	107	1	8	20	55	-	-	-
Region 14 Upper Colorado .....	183	11,943	23	25	79	61	5	13	3	150	12
Region 15 Lower Colorado .....	81	30,591	28	-	3	12	31	35	-	-	-
Region 16 Great Basin .....	806	58,129	23	242	283	82	163	36	79	739	14
Region 17 Pacific Northwest .....	1,848	342,625	28	255	624	177	371	421	147	5,416	24
Region 18 California .....	1,687	530,706	27	5	142	218	585	737	54	10,800	15
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sorghum for grain or seed										
	Irrigated							Non-irrigated			
	Farms	Acres harvested	Average yield per acre (bushels)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (bushels)
1 to 49 acres				50 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more				
United States .....	2008 .. 4,118	1,042,392	77	372	1,020	1,384	584	758	4,490	1,512,558	54
	2003 .. 6,134	1,108,375	75	1,944	1,277	1,514	863	536	6,298	1,630,609	43
<b>2008 DATA</b>											
Alabama .....	-	-	-	-	-	-	-	-	7	725	41
Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	80	24,328	93	-	13	37	19	11	-	-	-
Arkansas .....	290	65,738	101	40	31	127	45	47	168	37,395	75
California .....	39	14,620	104	4	10	-	19	6	-	-	-
Colorado .....	103	8,308	52	66	21	15	-	1	54	42,332	33
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	3	131	46
Florida .....	2	(D)	(D)	-	2	-	-	-	2	(D)	(D)
Georgia .....	45	8,201	43	21	3	7	9	5	116	7,539	41
Hawaii .....	1	(D)	(D)	1	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	4	103	114	4	-	-	-	-	38	2,779	78
Indiana .....	1	(D)	(D)	-	-	-	-	1	11	1,139	60
Iowa .....	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	779	107,525	99	127	212	331	77	32	1,760	641,319	72
Kentucky .....	-	-	-	-	-	-	-	-	1	(D)	(D)
Louisiana .....	18	4,833	79	-	7	5	3	3	67	26,246	82
Maine .....	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	36	1,418	64
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	3	918	32
Mississippi .....	25	3,895	77	4	4	14	2	1	99	30,703	59
Missouri .....	70	3,135	104	48	15	6	1	-	103	23,052	92
Montana .....	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	172	12,100	109	-	144	28	-	-	477	49,854	68
Nevada .....	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	69	15,262	89	11	24	14	13	7	45	9,066	19
New York .....	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	2	(D)	(D)	2	-	-	-	-	8	1,800	65
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	137	26,832	67	8	33	72	12	12	73	21,987	36
Oregon .....	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	-	-	-	-	-	-	-	-	3	120	57
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	1	(D)	(D)	1	-	-	-	-	2	(D)	(D)
South Dakota .....	6	456	88	-	3	3	-	-	2	(D)	(D)
Tennessee .....	2	(D)	(D)	1	-	1	-	-	6	2,086	115
Texas .....	2,263	743,172	71	34	489	724	384	632	1,402	608,407	33
Utah .....	9	540	110	-	9	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-	-	-
Washington .....	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	4	720	57
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>											
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	42	1,669	62
Region 03 South Atlantic-Gulf .....	50	(D)	(D)	24	5	7	9	5	131	12,446	46
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-	17	1,515	78
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	5	170	57
Region 07 Upper Mississippi .....	5	(D)	(D)	4	-	-	-	1	44	5,451	68
Region 08 Lower Mississippi .....	319	73,200	100	39	45	133	51	51	415	113,011	76
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	438	31,551	107	144	182	106	5	1	1,226	289,662	76
Region 11 Arkansas-White-Red .....	1,518	332,814	84	111	405	604	223	175	1,526	615,357	55
Region 12 Texas-Gulf .....	1,597	545,110	67	37	335	468	250	507	1,084	473,277	35
Region 13 Rio Grande .....	60	8,621	100	8	14	29	8	1	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	82	24,428	93	-	15	37	19	11	-	-	-
Region 16 Great Basin .....	9	540	110	-	9	-	-	-	-	-	-
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....	39	14,620	104	4	10	-	19	6	-	-	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	1	(D)	(D)	1	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Wheat for grain or seed										
	Irrigated								Non-irrigated		
	Farms	Acres harvested	Average yield per acre (bushels)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (bushels)
1 to 49 acres				50 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more				
United States ..... 2008 ..	16,265	4,107,464	75	3,352	2,691	5,505	2,684	2,033	17,097	7,361,506	40
..... 2003 ..	13,524	3,267,978	76	2,806	2,609	4,562	1,914	1,633	16,859	6,871,079	39
<b>2008 DATA</b>											
Alabama .....	17	1,850	75	2	2	12	1	-	77	30,094	74
Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	254	138,472	109	3	31	64	49	107	-	-	-
Arkansas .....	160	46,737	61	8	31	45	44	32	1,467	561,866	73
California .....	1,338	493,133	99	194	122	439	340	243	50	52,000	31
Colorado .....	997	171,323	75	281	183	349	118	66	485	418,435	27
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	77	10,929	83	18	30	15	9	5	131	24,743	75
Florida .....	6	1,750	75	-	2	2	-	2	1	(D)	(D)
Georgia .....	321	65,933	67	89	21	112	67	32	492	96,724	55
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	2,062	638,220	104	382	467	614	303	296	237	67,138	26
Illinois .....	49	5,312	60	22	17	6	-	4	325	45,652	60
Indiana .....	69	10,163	66	21	16	27	2	3	210	26,818	65
Iowa .....	2	(D)	(D)	2	-	-	-	-	17	1,460	28
Kansas .....	1,541	455,558	57	89	224	557	427	244	3,095	2,136,155	39
Kentucky .....	-	-	-	-	-	-	-	-	94	19,261	64
Louisiana .....	23	6,706	59	-	2	8	9	4	224	78,969	60
Maine .....	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	75	7,992	78	28	17	24	6	-	195	34,292	67
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	88	16,732	73	29	14	32	9	4	290	39,954	64
Minnesota .....	88	9,450	60	43	19	19	5	2	316	49,360	51
Mississippi .....	13	3,941	57	1	-	9	1	2	391	207,352	63
Missouri .....	87	27,163	63	13	14	24	24	12	602	203,693	56
Montana .....	1,235	212,886	69	391	215	350	212	67	704	342,921	31
Nebraska .....	1,000	174,922	66	79	254	533	61	73	3,414	407,390	50
Nevada .....	46	12,282	81	28	2	8	4	4	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	8	1,635	73	2	1	4	-	1	28	4,196	68
New Mexico .....	174	83,868	46	4	23	71	38	38	90	188,654	11
New York .....	2	(D)	(D)	2	-	-	-	-	16	4,276	64
North Carolina .....	51	4,610	45	25	11	12	1	2	271	97,281	39
North Dakota .....	144	30,427	56	20	24	62	28	10	302	248,265	36
Ohio .....	-	-	-	-	-	-	-	-	39	5,964	72
Oklahoma .....	479	147,489	49	14	86	213	90	76	549	421,077	32
Oregon .....	747	177,497	105	287	43	243	105	69	189	72,129	60
Pennsylvania .....	-	-	-	-	-	-	-	-	151	7,877	68
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	38	6,748	67	11	2	18	3	4	84	23,831	58
South Dakota .....	81	15,948	56	7	18	36	17	3	308	183,626	56
Tennessee .....	3	675	72	-	-	2	1	-	79	38,422	70
Texas .....	2,583	796,071	43	65	432	1,074	525	487	1,446	786,096	17
Utah .....	952	44,356	94	724	109	82	25	12	162	26,461	23
Vermont .....	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	8	655	71	5	-	3	-	-	104	29,522	80
Washington .....	1,195	260,958	97	437	104	386	144	124	138	195,928	31
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	27	2,176	69	4	18	4	1	-	170	15,704	53
Wyoming .....	225	22,861	57	22	137	46	15	5	154	165,920	19
<b>Water Resources Regions</b>											
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	170	21,225	80	55	48	46	15	6	571	91,839	73
Region 03 South Atlantic-Gulf .....	429	80,183	66	127	38	153	71	40	930	239,140	50
Region 04 Great Lakes .....	98	17,672	73	31	17	37	9	4	431	54,422	64
Region 05 Ohio .....	30	8,911	59	-	11	12	2	5	311	59,208	66
Region 06 Tennessee .....	5	1,058	85	-	-	3	2	-	42	24,637	79
Region 07 Upper Mississippi .....	158	12,392	67	75	48	27	5	3	708	83,284	53
Region 08 Lower Mississippi .....	243	70,852	62	14	47	78	55	49	2,390	994,268	68
Region 09 Souris-Red-Rainy .....	75	9,921	58	20	14	34	6	1	194	99,325	50
Region 10 Missouri .....	3,495	598,607	66	727	779	1,328	445	216	6,394	2,391,478	40
Region 11 Arkansas-White-Red .....	3,189	1,117,022	49	31	441	1,271	787	659	3,599	2,436,490	30
Region 12 Texas-Gulf .....	1,373	324,595	42	65	311	564	274	159	665	293,796	19
Region 13 Rio Grande .....	270	53,841	82	98	19	89	33	31	28	137,440	11
Region 14 Upper Colorado .....	156	14,539	84	105	28	22	-	1	29	27,731	14
Region 15 Lower Colorado .....	265	142,692	109	3	31	68	55	108	-	-	-
Region 16 Great Basin .....	1,111	80,748	88	703	178	173	33	24	273	55,696	25
Region 17 Pacific Northwest .....	3,831	1,056,344	103	1,088	556	1,153	553	481	481	319,752	37
Region 18 California .....	1,367	496,862	99	210	125	447	339	246	51	53,000	32
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Barley for grain or seed										
	Irrigated								Non-irrigated		
	Farms	Acres harvested	Average yield per acre (bushels)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (bushels)
1 to 24 acres				25 to 49 acres	50 to 99 acres	100 to 249 acres	250 acres or more				
United States .....	4,334	762,240	100	736	838	859	1,027	874	1,081	239,183	47
2003 ..	4,651	990,827	96	962	661	804	1,100	1,124	1,330	297,334	38
<b>2008 DATA</b>											
Alabama .....	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	90	28,459	116	-	13	11	25	41	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-
California .....	46	11,836	71	-	4	19	15	8	153	27,375	71
Colorado .....	320	71,675	126	3	122	26	60	109	10	2,000	10
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	15	1,919	98	-	1	8	5	1	61	10,449	82
Florida .....	-	-	-	-	-	-	-	-	-	-	-
Georgia .....	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	1,446	329,449	106	169	324	304	294	355	70	23,722	21
Illinois .....	-	-	-	-	-	-	-	-	1	(D)	(D)
Indiana .....	1	(D)	(D)	-	-	-	-	-	13	(D)	(D)
Iowa .....	-	-	-	-	-	-	-	-	7	2,980	75
Kansas .....	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	7	714	48
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	8	5,518	49
Maryland .....	14	918	84	2	-	11	1	-	59	5,945	79
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	2	(D)	(D)	2	-	-	-	-	2	(D)	(D)
Minnesota .....	6	876	65	-	2	-	4	-	22	1,144	61
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-
Montana .....	927	180,238	82	70	61	196	366	234	208	102,011	36
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	8	1,330	112	-	1	4	1	2	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	2	(D)	(D)
New Mexico .....	4	335	81	1	-	1	2	-	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-	11	2,237	44
North Dakota .....	83	17,088	80	7	-	18	33	25	77	28,654	46
Ohio .....	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	-	-	-	-	-	-	-	-	-
Oregon .....	201	15,159	81	14	29	137	12	9	124	13,797	64
Pennsylvania .....	-	-	-	-	-	-	-	-	65	959	88
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-	2	(D)	(D)
South Dakota .....	11	622	63	-	5	6	-	-	14	538	25
Tennessee .....	-	-	-	-	-	-	-	-	3	1,147	90
Texas .....	24	3,840	106	-	-	-	24	-	-	-	-
Utah .....	702	27,027	86	403	156	71	66	6	100	844	16
Vermont .....	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	1	(D)	(D)	-	-	-	-	1	21	3,282	82
Washington .....	14	1,279	103	3	3	3	4	1	9	3,238	71
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	30	655	43
Wyoming .....	419	68,620	99	62	117	44	115	81	2	(D)	(D)
<b>Water Resources Regions</b>											
Region 01 New England .....	-	-	-	-	-	-	-	-	8	5,518	49
Region 02 Mid-Atlantic .....	30	3,587	96	2	1	19	6	2	208	20,715	81
Region 03 South Atlantic-Gulf .....	-	-	-	-	-	-	-	-	13	2,437	45
Region 04 Great Lakes .....	3	(D)	(D)	2	-	-	-	1	8	1,184	(D)
Region 05 Ohio .....	-	-	-	-	-	-	-	-	21	(D)	61
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	1	(D)	(D)
Region 07 Upper Mississippi .....	6	876	65	-	2	-	4	-	52	4,774	67
Region 08 Lower Mississippi .....	-	-	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	12	1,618	78	-	-	4	7	1	19	3,415	59
Region 10 Missouri .....	1,375	261,260	87	134	154	265	469	353	264	119,189	33
Region 11 Arkansas-White-Red .....	26	4,080	104	-	-	-	26	-	-	-	-
Region 12 Texas-Gulf .....	1	(D)	(D)	-	-	1	-	-	-	-	-
Region 13 Rio Grande .....	243	63,115	132	1	94	3	56	89	-	-	-
Region 14 Upper Colorado .....	26	(D)	(D)	-	9	8	5	4	-	-	-
Region 15 Lower Colorado .....	90	28,459	116	-	13	11	25	41	-	-	-
Region 16 Great Basin .....	853	49,475	90	403	218	91	123	18	133	7,766	27
Region 17 Pacific Northwest .....	1,593	330,799	105	194	324	435	287	353	200	42,865	48
Region 18 California .....	76	15,202	75	-	23	22	19	12	154	29,375	72
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Soybeans for beans										
	Irrigated								Non-irrigated		
	Farms	Acres harvested	Average yield per acre (bushels)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (bushels)
1 to 49 acres				50 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more				
United States .....	23,024	7,044,546	49	2,764	4,155	7,726	4,396	3,983	18,846	5,394,776	37
2003 ..	21,062	5,346,276	48	2,847	5,382	6,022	4,041	2,770	18,744	5,474,831	33
<b>2008 DATA</b>											
Alabama .....	69	8,779	55	13	19	28	8	1	92	46,844	37
Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	3,119	2,167,646	43	228	196	463	663	1,569	1,256	582,321	33
California .....	-	-	-	-	-	-	-	-	-	-	-
Colorado .....	30	4,832	57	19	-	4	1	6	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	187	33,770	49	32	61	55	22	17	203	67,196	22
Florida .....	2	(D)	(D)	-	-	-	2	-	5	2,790	37
Georgia .....	413	71,621	48	71	53	199	75	15	423	84,216	29
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	485	90,497	52	94	118	166	73	34	778	258,230	46
Indiana .....	563	102,279	52	89	134	210	98	32	673	303,862	43
Iowa .....	252	48,946	48	31	55	102	46	18	376	160,680	44
Kansas .....	2,148	396,613	53	192	458	1,013	353	132	1,079	281,995	36
Kentucky .....	39	6,173	49	10	6	15	6	2	161	67,550	37
Louisiana .....	448	184,976	44	-	59	171	103	115	569	204,024	32
Maine .....	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	199	26,119	46	42	57	74	21	5	277	68,392	23
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	406	73,986	51	87	97	134	63	25	646	191,470	33
Minnesota .....	665	100,513	45	144	198	209	81	33	775	259,803	36
Mississippi .....	860	712,268	49	4	36	152	179	489	701	441,347	32
Missouri .....	1,208	488,319	48	115	198	284	281	330	1,058	461,362	39
Montana .....	8	624	45	4	-	4	-	-	-	-	-
Nebraska .....	10,541	2,272,944	57	1,369	2,060	3,867	2,176	1,069	7,560	957,491	43
Nevada .....	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	36	3,418	45	8	13	15	-	-	52	10,174	26
New Mexico .....	2	(D)	(D)	-	-	-	2	-	-	-	-
New York .....	-	-	-	-	-	-	-	-	12	885	49
North Carolina .....	112	14,839	42	47	29	24	-	12	366	145,288	28
North Dakota .....	106	18,939	40	9	27	53	12	5	192	153,189	32
Ohio .....	12	1,702	60	2	7	-	3	-	81	33,423	39
Oklahoma .....	95	23,793	44	9	5	52	16	13	33	14,785	30
Oregon .....	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	9	363	63	5	4	-	-	-	153	11,356	39
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	77	12,741	45	13	19	35	5	5	137	55,508	35
South Dakota .....	417	79,296	44	33	109	190	61	24	535	277,566	35
Tennessee .....	65	27,325	51	4	8	26	12	15	123	106,101	36
Texas .....	187	30,607	31	5	64	110	5	3	65	3,250	15
Utah .....	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	51	8,796	53	22	9	6	9	5	129	53,478	34
Washington .....	5	382	45	3	-	2	-	-	2	(D)	(D)
West Virginia .....	1	(D)	(D)	1	-	-	-	-	3	(D)	(D)
Wisconsin .....	207	30,410	45	59	56	63	20	9	331	89,440	31
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>											
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	472	71,515	48	100	144	150	52	26	732	198,454	26
Region 03 South Atlantic-Gulf .....	660	105,746	47	145	119	278	85	33	1,026	321,707	31
Region 04 Great Lakes .....	579	107,159	51	112	130	217	84	36	922	268,635	34
Region 05 Ohio .....	442	97,622	52	58	98	157	91	38	700	344,452	42
Region 06 Tennessee .....	36	5,012	52	10	8	11	6	1	56	38,139	36
Region 07 Upper Mississippi .....	1,425	208,298	48	329	415	447	171	63	2,036	655,455	41
Region 08 Lower Mississippi .....	4,847	3,240,957	45	251	334	902	1,054	2,306	3,114	1,563,809	34
Region 09 Souris-Red-Rainy .....	111	19,383	42	14	28	48	16	5	193	111,661	32
Region 10 Missouri .....	12,023	2,539,475	56	1,532	2,457	4,527	2,349	1,158	9,254	1,683,134	41
Region 11 Arkansas-White-Red .....	2,331	633,293	46	182	416	935	484	314	805	208,832	30
Region 12 Texas-Gulf .....	70	15,205	33	5	6	52	4	3	6	(D)	(D)
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	19	475	50	19	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	9	406	45	7	-	2	-	-	2	(D)	(D)
Region 18 California .....	-	-	-	-	-	-	-	-	-	-	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Beans, dry edible										
	Irrigated								Non-irrigated		
	Farms	Acres harvested	Average yield per acre (cwt)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (cwt)
1 to 24 acres				25 to 49 acres	50 to 99 acres	100 to 249 acres	250 acres or more				
United States .....	2,849	431,329	24	655	427	580	691	496	366	156,348	15
2003 ..	2,697	458,265	23	182	302	623	1,114	476	449	149,337	10
<b>2008 DATA</b>											
Alabama .....	4	54	15	4	-	-	-	-	4	12	15
Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	18	3,228	17	-	-	3	12	3	-	-	-
Arkansas .....	21	9,530	29	-	-	8	-	13	-	-	-
California .....	245	41,230	23	108	5	43	36	53	64	72,715	15
Colorado .....	227	35,305	26	-	19	107	65	36	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-
Florida .....	2	(D)	(D)	-	-	-	2	-	2	(D)	(D)
Georgia .....	11	3,219	48	-	-	-	4	7	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	749	63,665	23	92	326	152	129	50	-	-	-
Illinois .....	6	980	33	-	-	-	6	-	1	(D)	(D)
Indiana .....	19	506	33	13	-	3	3	-	-	-	-
Iowa .....	2	(D)	(D)	-	-	2	-	-	-	-	-
Kansas .....	27	8,242	24	-	-	-	15	12	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-
Maine .....	2	(D)	(D)	2	-	-	-	-	2	(D)	(D)
Maryland .....	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	51	9,637	19	-	12	9	19	11	72	10,114	12
Minnesota .....	84	28,747	26	-	5	8	39	32	39	3,575	20
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-
Montana .....	85	9,424	24	-	8	32	44	1	25	7,250	19
Nebraska .....	368	127,985	25	-	-	26	133	209	30	1,458	9
Nevada .....	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	2	(D)	(D)	2	-	-	-	-	-	-	-
New Mexico .....	15	9,130	22	2	-	4	7	2	-	-	-
New York .....	35	37	48	35	-	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....	55	11,227	22	2	-	19	18	16	87	47,243	15
Ohio .....	-	-	-	-	-	-	-	-	1	(D)	(D)
Oklahoma .....	2	(D)	(D)	-	-	2	-	-	-	-	-
Oregon .....	50	4,756	21	-	5	34	8	3	-	-	-
Pennsylvania .....	-	-	-	-	-	-	-	-	3	420	36
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	3	15	35	3	-	-	-	-	-	-	-
South Dakota .....	4	2,533	15	-	-	-	2	2	4	1,734	17
Tennessee .....	18	(D)	(D)	17	-	-	-	1	1	(D)	(D)
Texas .....	60	8,545	19	-	27	-	23	10	14	2,590	7
Utah .....	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	2	(D)	(D)	-	-	-	-	2	-	-	-
Washington .....	484	20,826	23	361	6	60	41	16	5	6,469	17
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	12	5,888	20	-	-	6	4	2	12	1,974	15
Wyoming .....	186	24,743	22	14	14	62	81	15	-	-	-
<b>Water Resources Regions</b>											
Region 01 New England .....	2	(D)	(D)	2	-	-	-	-	2	(D)	(D)
Region 02 Mid-Atlantic .....	39	(D)	(D)	37	-	-	-	2	3	420	36
Region 03 South Atlantic-Gulf .....	18	3,548	46	5	-	-	6	7	6	(D)	(D)
Region 04 Great Lakes .....	53	9,737	20	-	12	11	19	11	73	10,117	12
Region 05 Ohio .....	17	406	26	13	-	1	3	-	-	-	-
Region 06 Tennessee .....	19	57	11	19	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	77	31,035	26	-	5	16	27	29	47	5,702	18
Region 08 Lower Mississippi .....	13	7,530	30	-	-	8	-	5	1	(D)	(D)
Region 09 Souris-Red-Rainy .....	61	10,843	24	2	-	17	28	14	60	33,453	16
Region 10 Missouri .....	859	205,588	25	14	22	229	314	280	70	19,229	14
Region 11 Arkansas-White-Red .....	13	4,672	23	-	-	2	-	11	-	-	-
Region 12 Texas-Gulf .....	61	8,795	19	-	27	-	23	11	14	2,590	7
Region 13 Rio Grande .....	13	1,647	18	2	-	4	7	-	-	-	-
Region 14 Upper Colorado .....	58	13,151	23	-	19	-	38	1	-	-	-
Region 15 Lower Colorado .....	18	3,228	17	-	-	3	12	3	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	1,283	89,247	23	453	337	246	178	69	26	11,719	20
Region 18 California .....	245	41,230	23	108	5	43	36	53	64	72,715	15
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Rice								Other small grains (oats, rye, etc.)			
	Farms	Acres harvested	Average yield per acre (cwt)	Farms by acres harvested					Irrigated		Non-irrigated	
				1 to 99 acres	100 to 249 acres	250 to 499 acres	500 to 999 acres	1,000 acres or more	Farms	Acres harvested	Farms	Acres harvested
United States .....	5,265	2,683,363	70	425	1,329	1,614	1,234	663	2,975	344,195	2,242	363,619
2003 .....	6,836	2,994,757	69	919	1,728	2,088	1,523	578	2,825	240,264	3,340	282,080
<b>2008 DATA</b>												
Alabama .....	-	-	-	-	-	-	-	-	3	194	15	1,676
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	73	6,595	-	-
Arkansas .....	2,550	1,303,574	69	330	574	718	580	348	61	1,952	84	9,563
California .....	1,033	432,208	78	-	303	475	177	78	427	114,973	228	79,469
Colorado .....	-	-	-	-	-	-	-	-	336	21,974	70	9,565
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	2	(D)	8	(D)
Florida .....	6	11,272	47	-	-	2	1	3	25	2,820	10	3,130
Georgia .....	-	-	-	-	-	-	-	-	214	17,660	203	16,698
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	269	42,764	62	1,575
Illinois .....	4	1,750	64	-	-	4	-	-	4	414	73	2,732
Indiana .....	1	(D)	(D)	-	-	-	-	1	-	-	4	140
Iowa .....	-	-	-	-	-	-	-	-	3	180	13	1,328
Kansas .....	-	-	-	-	-	-	-	-	2	(D)	121	31,671
Kentucky .....	-	-	-	-	-	-	-	-	-	-	6	48
Louisiana .....	784	412,691	62	44	226	199	226	89	-	-	2	(D)
Maine .....	-	-	-	-	-	-	-	-	-	-	8	(D)
Maryland .....	-	-	-	-	-	-	-	-	-	-	4	38
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	5	540	206	7,841
Minnesota .....	-	-	-	-	-	-	-	-	23	1,487	142	6,425
Mississippi .....	345	201,893	69	9	104	94	67	71	2	(D)	3	57
Missouri .....	278	142,450	86	29	72	59	90	28	3	(D)	18	1,570
Montana .....	-	-	-	-	-	-	-	-	138	13,983	45	4,856
Nebraska .....	-	-	-	-	-	-	-	-	96	6,216	126	3,089
Nevada .....	-	-	-	-	-	-	-	-	21	2,490	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	4	1,252
New Mexico .....	-	-	-	-	-	-	-	-	59	11,918	64	36,158
New York .....	-	-	-	-	-	-	-	-	-	-	26	1,782
North Carolina .....	-	-	-	-	-	-	-	-	40	5,486	46	1,736
North Dakota .....	-	-	-	-	-	-	-	-	17	1,357	63	12,511
Ohio .....	-	-	-	-	-	-	-	-	-	-	49	498
Oklahoma .....	-	-	-	-	-	-	-	-	13	4,194	27	5,445
Oregon .....	-	-	-	-	-	-	-	-	78	17,029	36	17,080
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	86	1,347
Rhode Island .....	-	-	-	-	-	-	-	-	1	(D)	1	(D)
South Carolina .....	-	-	-	-	-	-	-	-	7	155	40	4,188
South Dakota .....	-	-	-	-	-	-	-	-	33	1,118	47	12,425
Tennessee .....	3	(D)	(D)	-	1	2	-	-	1	(D)	6	217
Texas .....	261	174,565	73	13	49	61	93	45	48	4,724	29	4,460
Utah .....	-	-	-	-	-	-	-	-	598	29,763	25	62,795
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-	-	32	1,256
Washington .....	-	-	-	-	-	-	-	-	179	13,687	83	4,663
West Virginia .....	-	-	-	-	-	-	-	-	-	-	1	(D)
Wisconsin .....	-	-	-	-	-	-	-	-	18	1,930	96	5,886
Wyoming .....	-	-	-	-	-	-	-	-	176	16,165	30	6,000
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	1	(D)	9	1,785
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	2	(D)	115	5,210
Region 03 South Atlantic-Gulf .....	6	11,272	47	-	-	2	1	3	289	26,315	318	27,560
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	9	1,900	268	10,622
Region 05 Ohio .....	1	(D)	(D)	-	-	-	-	1	2	(D)	55	595
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	1	(D)	9	278
Region 07 Upper Mississippi .....	5	(D)	(D)	1	-	4	-	-	42	2,373	282	13,021
Region 08 Lower Mississippi .....	3,397	1,812,399	68	281	840	937	861	478	66	3,350	93	11,288
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	4	132	32	3,074
Region 10 Missouri .....	-	-	-	-	-	-	-	-	452	42,738	426	52,039
Region 11 Arkansas-White-Red .....	562	248,989	70	130	137	135	102	58	36	6,358	134	63,265
Region 12 Texas-Gulf .....	261	174,565	73	13	49	61	93	45	57	9,999	29	4,460
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	100	15,704	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	383	7,560	19	3,450
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	73	6,595	4	328
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	480	30,914	16	62,345
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-	526	68,587	206	17,058
Region 18 California .....	1,033	432,208	78	-	303	475	177	78	452	121,212	227	87,241
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage)											
	Irrigated								Non-irrigated			
	Farms	Acres harvested	Average yield per acre <sup>1</sup> (tons, dry)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre <sup>1</sup> (tons, dry)	
1 to 49 acres				50 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more					
United States .....	2008 ..	48,315	6,187,983	4.5	25,184	8,331	9,095	3,228	2,477	10,191	1,144,932	2.2
	2003 ..	46,179	6,204,874	5.0	21,774	8,679	9,550	3,700	2,476	10,774	1,081,555	2.5
<b>2008 DATA</b>												
Alabama .....		4	20	1.0	4	-	-	-	-	4	(D)	(D)
Alaska .....		-	-	-	-	-	-	-	-	-	-	-
Arizona .....		553	280,741	8.7	144	45	139	79	146	2	(D)	(D)
Arkansas .....		-	-	-	-	-	-	-	-	-	-	-
California .....		2,808	968,715	5.8	295	919	691	334	569	81	6,540	0.9
Colorado .....		6,079	631,443	3.3	3,435	925	1,117	391	211	798	50,943	1.0
Connecticut .....		-	-	-	-	-	-	-	-	2	(D)	(D)
Delaware .....		18	887	3.6	12	3	3	-	-	20	721	1.7
Florida .....		-	-	-	-	-	-	-	-	4	920	4.0
Georgia .....		53	1,336	7.9	50	-	-	3	-	116	8,610	2.0
Hawaii .....		-	-	-	-	-	-	-	-	-	-	-
Idaho .....		6,801	823,523	4.3	3,670	1,185	1,189	407	350	306	52,934	1.1
Illinois .....		23	970	2.3	12	11	-	-	-	132	4,586	2.1
Indiana .....		76	5,376	3.0	67	6	-	2	1	148	10,765	2.2
Iowa .....		21	844	5.4	13	6	2	-	-	51	2,491	3.6
Kansas .....		768	176,976	6.4	161	148	291	111	57	584	148,949	2.8
Kentucky .....		16	(D)	(D)	16	-	-	-	-	144	4,879	3.8
Louisiana .....		4	440	0.4	-	-	4	-	-	-	-	-
Maine .....		-	-	-	-	-	-	-	-	-	-	-
Maryland .....		25	1,203	6.6	21	2	-	2	-	50	2,156	4.8
Massachusetts .....		-	-	-	-	-	-	-	-	7	105	3.0
Michigan .....		175	14,559	5.5	109	19	34	12	1	446	56,295	4.0
Minnesota .....		342	20,616	4.3	179	113	46	2	2	358	27,921	2.8
Mississippi .....		-	-	-	-	-	-	-	-	-	-	-
Missouri .....		16	560	3.6	14	2	-	-	-	88	2,052	2.7
Montana .....		5,061	657,151	3.0	2,205	808	1,282	573	193	801	257,146	0.9
Nebraska .....		2,956	238,408	4.8	1,500	857	504	35	60	3,561	180,505	3.0
Nevada .....		1,133	304,932	4.1	531	107	190	148	157	4	260	3.0
New Hampshire .....		-	-	-	-	-	-	-	-	3	106	3.0
New Jersey .....		22	390	6.3	20	1	1	-	-	24	1,454	1.0
New Mexico .....		3,798	231,913	4.5	3,111	191	322	90	84	93	1,801	1.0
New York .....		7	219	7.4	6	1	-	-	-	25	6,976	5.0
North Carolina .....		39	1,046	1.1	38	-	1	-	-	30	747	3.7
North Dakota .....		178	17,627	4.2	72	46	50	5	5	157	33,521	1.6
Ohio .....		4	535	6.6	2	-	2	-	-	43	639	2.1
Oklahoma .....		166	21,698	5.4	73	14	62	15	2	79	11,857	3.9
Oregon .....		2,864	347,117	3.9	1,489	684	407	149	135	246	29,824	3.0
Pennsylvania .....		9	569	2.4	8	-	-	1	-	158	5,778	2.4
Rhode Island .....		-	-	-	-	-	-	-	-	4	(D)	(D)
South Carolina .....		3	114	3.0	1	2	-	-	-	-	-	-
South Dakota .....		532	62,859	3.7	184	109	173	53	13	426	113,646	1.8
Tennessee .....		4	64	4.6	4	-	-	-	-	7	221	5.4
Texas .....		849	147,375	4.6	62	92	578	73	44	53	22,670	3.8
Utah .....		7,418	517,526	3.9	5,074	949	966	298	131	343	17,992	2.0
Vermont .....		-	-	-	-	-	-	-	-	-	-	-
Virginia .....		25	1,062	4.3	18	5	2	-	-	32	953	0.9
Washington .....		2,152	272,641	4.8	1,076	438	358	158	122	296	22,572	2.4
West Virginia .....		2	(D)	(D)	1	-	-	-	-	6	350	3.5
Wisconsin .....		221	20,734	3.5	79	81	49	9	3	312	43,807	2.4
Wyoming .....		3,090	415,474	3.5	1,428	561	632	278	191	147	11,036	1.3
<b>Water Resources Regions</b>												
Region 01 New England .....		-	-	-	-	-	-	-	-	16	261	3.2
Region 02 Mid-Atlantic .....		103	4,233	4.8	83	11	6	3	-	245	10,848	2.4
Region 03 South Atlantic-Gulf .....		99	2,516	4.8	93	2	1	3	-	154	10,281	2.3
Region 04 Great Lakes .....		274	21,280	5.0	162	47	48	16	1	625	79,882	3.7
Region 05 Ohio .....		33	1,585	3.5	28	1	2	2	-	285	11,638	3.0
Region 06 Tennessee .....		4	40	4.0	4	-	-	-	-	4	181	6.0
Region 07 Upper Mississippi .....		504	36,371	3.5	254	164	75	5	6	705	57,369	2.5
Region 08 Lower Mississippi .....		6	510	1.0	2	-	4	-	-	10	771	3.4
Region 09 Souris-Red-Rainy .....		84	6,341	5.7	36	32	12	4	-	110	13,026	2.8
Region 10 Missouri .....		12,650	1,489,418	3.6	5,750	2,682	2,709	1,032	477	5,550	681,515	1.9
Region 11 Arkansas-White-Red .....		2,201	387,203	4.9	837	470	470	265	159	625	96,473	2.7
Region 12 Texas-Gulf .....		387	77,768	5.6	51	14	248	51	23	1	(D)	(D)
Region 13 Rio Grande .....		3,764	333,905	3.9	2,400	216	895	150	103	90	1,504	1.0
Region 14 Upper Colorado .....		5,405	340,744	2.8	4,076	313	774	149	93	357	34,136	1.0
Region 15 Lower Colorado .....		948	323,132	8.5	470	89	146	81	162	6	(D)	(D)
Region 16 Great Basin .....		7,030	742,150	4.1	4,329	1,103	911	407	280	436	22,823	1.9
Region 17 Pacific Northwest .....		11,878	1,431,044	4.2	6,310	2,268	2,011	691	598	894	117,459	1.9
Region 18 California .....		2,945	989,743	5.7	299	919	783	369	575	78	5,790	0.8
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All other hay (dry hay, greenchop, and silage)										
	Irrigated								Non-irrigated		
	Farms	Acres harvested	Average yield per acre <sup>1</sup> (tons, dry)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre <sup>1</sup> (tons, dry)
			1 to 24 acres	25 to 49 acres	50 to 99 acres	100 to 249 acres	250 acres or more				
United States ..... 2008 ..	29,553	3,351,986	2.8	12,439	5,299	4,303	4,389	3,123	15,645	1,505,343	1.7
..... 2003 ..	27,449	3,245,618	2.8	9,706	5,694	3,937	5,176	2,936	12,484	1,396,137	1.9
<b>2008 DATA</b>											
Alabama .....	63	2,998	3.9	29	13	12	9	-	132	9,692	2.6
Alaska .....	4	842	2.5	-	-	1	1	2	5	(D)	(D)
Arizona .....	548	61,995	5.6	255	142	33	56	62	-	-	-
Arkansas .....	117	12,336	3.4	15	44	-	40	18	194	21,534	2.4
California .....	3,376	556,013	4.7	1,378	560	303	538	597	882	133,649	1.8
Colorado .....	3,358	441,727	2.0	1,244	716	467	568	363	222	23,491	1.0
Connecticut .....	-	-	-	-	-	-	-	-	45	1,105	5.7
Delaware .....	17	438	2.9	8	8	1	-	-	28	1,236	2.3
Florida .....	306	31,718	4.0	197	9	23	33	44	463	44,047	1.2
Georgia .....	484	37,022	4.9	117	125	147	77	18	485	61,987	4.4
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	2,209	182,393	1.9	1,119	459	223	230	178	216	15,540	0.7
Illinois .....	5	645	3.0	-	-	-	5	-	14	(D)	(D)
Indiana .....	12	786	0.8	10	-	-	-	2	47	2,130	1.0
Iowa .....	1	(D)	(D)	1	-	-	-	-	18	476	1.9
Kansas .....	158	17,453	4.4	5	58	32	50	13	644	69,894	2.2
Kentucky .....	16	693	3.5	1	6	9	-	-	293	25,927	2.7
Louisiana .....	29	1,620	4.9	-	-	29	-	-	74	8,892	2.5
Maine .....	-	-	-	-	-	-	-	-	1	(D)	(D)
Maryland .....	35	1,936	4.8	25	3	5	-	2	150	5,030	3.2
Massachusetts .....	-	-	-	-	-	-	-	-	4	40	0.5
Michigan .....	-	-	-	-	-	-	-	-	205	8,813	2.8
Minnesota .....	64	2,535	2.3	24	11	28	1	-	205	14,966	1.4
Mississippi .....	35	(D)	6.1	-	-	24	10	1	5	970	3.9
Missouri .....	90	2,827	1.9	37	47	-	6	-	243	41,630	1.7
Montana .....	3,008	362,777	1.8	1,172	514	367	576	379	833	117,819	1.1
Nebraska .....	515	34,503	2.9	26	102	357	4	26	2,418	286,214	1.4
Nevada .....	558	192,482	1.7	118	71	89	112	168	3	7,400	1.0
New Hampshire .....	-	-	-	-	-	-	-	-	3	(D)	(D)
New Jersey .....	15	581	1.1	13	-	1	-	1	86	3,214	2.5
New Mexico .....	1,769	93,528	3.1	1,086	180	206	240	57	462	43,165	2.0
New York .....	-	-	-	-	-	-	-	-	59	2,644	2.9
North Carolina .....	640	35,438	3.2	249	206	132	43	10	311	16,754	2.5
North Dakota .....	26	1,295	1.8	8	9	6	3	-	126	36,677	0.9
Ohio .....	-	-	-	-	-	-	-	-	35	388	2.1
Oklahoma .....	323	34,981	2.7	14	78	142	67	22	281	36,418	2.8
Oregon .....	3,878	354,232	2.2	2,003	817	248	465	345	1,343	47,494	1.0
Pennsylvania .....	29	558	2.8	23	2	2	2	-	181	6,674	1.9
Rhode Island .....	-	-	-	-	-	-	-	-	6	240	3.0
South Carolina .....	50	2,505	4.6	15	20	10	3	2	182	11,242	3.3
South Dakota .....	132	10,510	1.8	19	11	71	29	2	301	62,405	2.0
Tennessee .....	28	1,118	(D)	10	13	1	4	-	172	12,661	2.6
Texas .....	2,298	175,291	3.3	1,116	322	523	186	151	2,634	199,213	1.8
Utah .....	2,261	126,581	2.1	1,303	228	421	242	67	233	13,198	2.1
Vermont .....	-	-	-	-	-	-	-	-	5	35	0.8
Virginia .....	15	2,129	1.3	-	14	-	-	1	115	9,216	1.6
Washington .....	1,423	149,682	4.3	576	232	144	324	147	1,044	71,021	0.8
West Virginia .....	-	-	-	-	-	-	-	-	26	1,287	2.4
Wisconsin .....	20	2,500	2.9	-	-	5	13	2	121	8,833	2.8
Wyoming .....	1,638	411,808	1.7	223	279	241	452	443	90	18,582	0.9
<b>Water Resources Regions</b>											
Region 01 New England .....	-	-	-	-	-	-	-	-	59	1,849	4.4
Region 02 Mid-Atlantic .....	99	3,588	3.6	69	16	9	2	3	510	20,678	2.3
Region 03 South Atlantic-Gulf .....	1,565	113,551	4.0	602	379	334	175	75	1,627	148,316	3.0
Region 04 Great Lakes .....	15	1,081	2.9	7	-	-	8	-	300	13,663	2.8
Region 05 Ohio .....	25	947	3.5	6	9	9	1	-	431	30,675	2.7
Region 06 Tennessee .....	28	1,108	2.4	10	12	3	3	-	130	9,923	2.5
Region 07 Upper Mississippi .....	62	4,670	2.3	15	11	21	11	4	323	25,201	1.6
Region 08 Lower Mississippi .....	79	10,210	5.1	3	3	41	13	19	186	21,992	2.8
Region 09 Souris-Red-Rainy .....	26	988	2.2	10	-	16	-	-	55	(D)	(D)
Region 10 Missouri .....	3,987	643,642	2.0	850	678	904	984	571	4,317	581,330	1.4
Region 11 Arkansas-White-Red .....	1,937	160,726	2.8	671	368	489	274	135	1,415	172,125	2.2
Region 12 Texas-Gulf .....	1,852	145,241	3.0	841	201	533	167	110	2,038	161,605	1.8
Region 13 Rio Grande .....	1,477	121,149	2.8	900	174	120	199	84	337	10,628	1.2
Region 14 Upper Colorado .....	3,101	392,631	1.8	1,399	616	265	422	399	107	8,601	1.5
Region 15 Lower Colorado .....	626	64,214	5.5	323	142	39	60	62	-	-	-
Region 16 Great Basin .....	2,212	287,526	1.9	1,043	273	360	292	244	173	18,378	1.6
Region 17 Pacific Northwest .....	8,721	817,493	2.4	4,044	1,843	856	1,188	790	2,742	140,103	0.8
Region 18 California .....	3,737	582,379	4.6	1,646	574	303	589	625	890	135,349	1.8
Region 19 Alaska .....	4	842	2.5	-	-	1	1	2	5	(D)	(D)
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Peanuts for nuts										
	Irrigated					Non-irrigated					
	Farms	Acres harvested	Average yield per acre (pounds)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (pounds)
1 to 49 acres				50 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more				
United States .....	2,535	540,577	4,187	424	498	724	704	185	1,071	192,769	3,356
2003 ..	2,115	(D)	(D)	553	420	656	303	183	740	141,728	2,765
<b>2008 DATA</b>											
Alabama .....	53	9,988	3,844	8	11	17	15	2	67	22,492	3,357
Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-
California .....	-	-	-	-	-	-	-	-	-	-	-
Colorado .....	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-
Florida .....	82	22,014	4,129	2	36	22	11	11	25	8,183	3,445
Georgia .....	1,268	227,591	4,220	293	313	376	187	99	783	108,729	3,146
Hawaii .....	2	(D)	(D)	2	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	-	-	-	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	3	168	3,423
Iowa .....	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	1	(D)	(D)	-	1	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	11	8,194	4,420
Missouri .....	-	-	-	-	-	-	-	-	-	-	-
Montana .....	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	15	(D)	(D)	-	2	8	3	2	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	65	6,031	4,415	33	-	27	5	-	82	26,358	3,490
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	55	9,020	3,781	-	18	27	8	2	-	-	-
Oregon .....	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	114	10,864	4,356	56	17	26	13	2	65	16,065	3,898
South Dakota .....	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....	-	-	-	-	-	-	-	-	17	25	1,360
Texas .....	862	248,473	4,194	24	92	217	462	67	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	18	1,045	4,580	6	8	4	-	-	18	2,555	3,816
Washington .....	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>											
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....	1,600	277,533	4,210	398	385	472	231	114	1,040	185,442	3,318
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-	3	168	3,423
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	19	625	3,702
Region 07 Upper Mississippi .....	-	-	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi .....	1	(D)	(D)	-	1	-	-	-	9	6,534	4,400
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....	115	20,285	(D)	24	18	27	44	2	-	-	-
Region 12 Texas-Gulf .....	816	(D)	4,191	-	94	225	429	68	-	-	-
Region 13 Rio Grande .....	1	(D)	(D)	-	-	-	-	1	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....	-	-	-	-	-	-	-	-	-	-	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	2	(D)	(D)	2	-	-	-	-	-	-	-

See footnote(s) at end of table.

--continued

**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All cotton										
	Irrigated								Non-irrigated		
	Farms	Acres harvested	Average yield per acre (lbs, lint)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (lbs, lint)
1 to 99 acres				100 to 249 acres	250 to 499 acres	500 to 999 acres	1,000 acres or more				
United States .....	6,612	3,123,664	1,103	1,137	1,937	1,514	1,295	729	3,766	1,658,924	558
2003 ..	8,615	4,075,124	995	1,777	2,012	2,135	1,767	924	3,859	1,971,307	563
<b>2008 DATA</b>											
Alabama .....	65	16,789	1,035	11	33	14	5	2	89	57,548	653
Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	234	142,163	1,537	24	57	44	70	39	-	-	-
Arkansas .....	643	519,707	1,050	14	131	114	188	196	217	58,953	897
California .....	544	266,947	1,438	208	101	137	66	32	-	-	-
Colorado .....	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-
Florida .....	8	4,928	1,056	-	-	4	3	1	6	3,506	640
Georgia .....	903	246,790	1,087	344	259	162	97	41	833	228,020	689
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	-	-	-	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	22	9,170	907	-	5	14	1	2	12	5,182	513
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	146	84,565	727	12	38	48	32	16	131	81,641	574
Maine .....	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....	259	174,147	1,075	23	51	75	56	54	228	110,453	859
Missouri .....	290	200,968	1,187	43	60	56	77	54	178	57,546	868
Montana .....	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	158	29,811	1,008	75	57	6	17	3	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	70	14,156	1,076	13	37	19	1	-	133	58,742	729
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	148	60,033	1,180	23	52	36	23	14	28	5,416	529
Oregon .....	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	53	10,585	1,165	14	26	8	5	-	55	20,020	915
South Dakota .....	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....	30	12,227	1,211	3	8	12	4	3	53	83,842	851
Texas .....	3,030	1,329,803	1,029	323	1,020	765	650	272	1,790	882,993	386
Utah .....	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	9	875	954	7	2	-	-	-	13	5,062	981
Washington .....	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>											
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	2	(D)	(D)
Region 03 South Atlantic-Gulf .....	1,109	290,680	1,085	389	363	206	108	43	1,123	347,356	716
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	19	6,604	1,137	-	10	5	3	1	26	(D)	(D)
Region 07 Upper Mississippi .....	-	-	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi .....	1,323	973,925	1,060	95	262	297	349	320	772	381,163	805
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....	739	299,193	1,105	59	336	170	113	61	282	144,251	415
Region 12 Texas-Gulf .....	2,459	1,067,907	1,000	290	760	631	576	202	1,561	752,534	383
Region 13 Rio Grande .....	183	75,319	1,198	72	48	22	10	31	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	245	151,085	1,559	24	57	46	75	43	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....	535	258,951	1,421	208	101	137	61	28	-	-	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sugarbeets for sugar										
	Irrigated								Non-irrigated		
	Farms	Acres harvested	Average yield per acre (tons)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (tons)
1 to 24 acres				25 to 49 acres	50 to 99 acres	100 to 249 acres	250 acres or more				
United States .....	1,590	382,267	30	32	122	478	502	456	45	17,537	27
2003 ..	2,495	561,653	29	47	59	381	1,430	578	87	21,851	18
<b>2008 DATA</b>											
Alabama .....	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-
California .....	181	57,251	41	-	5	5	39	132	-	-	-
Colorado .....	199	31,258	27	-	10	88	79	22	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-
Florida .....	-	-	-	-	-	-	-	-	-	-	-
Georgia .....	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	456	141,792	32	-	86	117	119	134	-	-	-
Illinois .....	-	-	-	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	18	1,388	30	-	7	3	8	-	23	6,542	28
Minnesota .....	20	3,313	25	-	-	6	13	1	17	3,395	25
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-
Montana .....	156	24,928	27	-	-	84	44	28	-	-	-
Nebraska .....	257	59,553	23	-	-	119	77	61	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	-	-	-	-	-	-	-	-	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....	58	14,740	24	-	9	4	18	27	5	7,600	26
Ohio .....	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	-	-	-	-	-	-	-	-	-
Oregon .....	85	11,953	31	3	3	38	35	6	-	-	-
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....	-	-	-	-	-	-	-	-	-	-	-
Texas .....	-	-	-	-	-	-	-	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-	-	-
Washington .....	4	2,068	41	-	-	-	-	4	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	156	34,023	26	29	2	14	70	41	-	-	-
<b>Water Resources Regions</b>											
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....	-	-	-	-	-	-	-	-	-	-	-
Region 04 Great Lakes .....	18	1,388	30	-	7	3	8	-	23	6,542	28
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	15	2,598	26	-	-	4	10	1	10	1,434	25
Region 08 Lower Mississippi .....	-	-	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	9	1,461	26	-	-	2	7	-	12	9,561	26
Region 10 Missouri .....	822	163,756	25	29	21	309	284	179	-	-	-
Region 11 Arkansas-White-Red .....	-	-	-	-	-	-	-	-	-	-	-
Region 12 Texas-Gulf .....	-	-	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	545	155,813	32	3	89	155	154	144	-	-	-
Region 18 California .....	181	57,251	41	-	5	5	39	132	-	-	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area		Tobacco, all types										
		Irrigated							Non-irrigated			
		Farms	Acres harvested	Average yield per acre (pounds)	Farms by acres harvested					Farms	Acres harvested	Average yield per acre (pounds)
Less than 5 acres	5 to 9 acres				10 to 24 acres	25 to 49 acres	50 acres or more					
United States .....	2008 ..	811	23,614	2,634	97	156	255	177	126	311	20,753	1,494
	2003 ..	1,507	35,059	2,413	229	298	540	255	185	635	15,409	1,917
<b>2008 DATA</b>												
Alabama .....		-	-	-	-	-	-	-	-	-	-	-
Alaska .....		-	-	-	-	-	-	-	-	-	-	-
Arizona .....		-	-	-	-	-	-	-	-	-	-	-
Arkansas .....		-	-	-	-	-	-	-	-	-	-	-
California .....		-	-	-	-	-	-	-	-	-	-	-
Colorado .....		-	-	-	-	-	-	-	-	-	-	-
Connecticut .....		17	837	1,554	10	1	-	3	3	-	-	-
Delaware .....		-	-	-	-	-	-	-	-	-	-	-
Florida .....		2	(D)	(D)	-	-	-	-	2	-	-	-
Georgia .....		16	1,300	2,528	-	-	-	-	16	-	-	-
Hawaii .....		-	-	-	-	-	-	-	-	-	-	-
Idaho .....		-	-	-	-	-	-	-	-	-	-	-
Illinois .....		1	(D)	(D)	-	-	-	-	1	3	370	2,000
Indiana .....		-	-	-	-	-	-	-	-	-	-	-
Iowa .....		-	-	-	-	-	-	-	-	-	-	-
Kansas .....		-	-	-	-	-	-	-	-	-	-	-
Kentucky .....		379	8,498	3,034	42	63	165	89	20	113	1,558	2,609
Louisiana .....		-	-	-	-	-	-	-	-	-	-	-
Maine .....		-	-	-	-	-	-	-	-	-	-	-
Maryland .....		22	154	2,724	-	22	-	-	-	-	-	-
Massachusetts .....		-	-	-	-	-	-	-	-	7	(D)	(D)
Michigan .....		-	-	-	-	-	-	-	-	-	-	-
Minnesota .....		-	-	-	-	-	-	-	-	-	-	-
Mississippi .....		-	-	-	-	-	-	-	-	-	-	-
Missouri .....		-	-	-	-	-	-	-	-	-	-	-
Montana .....		-	-	-	-	-	-	-	-	-	-	-
Nebraska .....		-	-	-	-	-	-	-	-	-	-	-
Nevada .....		-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....		-	-	-	-	-	-	-	-	-	-	-
New Jersey .....		-	-	-	-	-	-	-	-	-	-	-
New Mexico .....		-	-	-	-	-	-	-	-	-	-	-
New York .....		-	-	-	-	-	-	-	-	-	-	-
North Carolina .....		222	8,488	2,198	16	16	64	69	57	126	16,945	1,278
North Dakota .....		-	-	-	-	-	-	-	-	-	-	-
Ohio .....		-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....		-	-	-	-	-	-	-	-	-	-	-
Oregon .....		-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....		3	24	2,000	-	3	-	-	-	27	313	2,069
Rhode Island .....		-	-	-	-	-	-	-	-	-	-	-
South Carolina .....		3	195	3,000	-	-	-	2	1	3	855	2,312
South Dakota .....		-	-	-	-	-	-	-	-	-	-	-
Tennessee .....		72	1,444	3,158	21	11	17	14	9	30	650	2,746
Texas .....		-	-	-	-	-	-	-	-	-	-	-
Utah .....		-	-	-	-	-	-	-	-	-	-	-
Vermont .....		-	-	-	-	-	-	-	-	-	-	-
Virginia .....		74	2,167	2,947	8	40	9	-	17	-	-	-
Washington .....		-	-	-	-	-	-	-	-	-	-	-
West Virginia .....		-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....		-	-	-	-	-	-	-	-	2	(D)	(D)
Wyoming .....		-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....		17	837	1,554	10	1	-	3	3	7	(D)	(D)
Region 02 Mid-Atlantic .....		25	178	2,626	-	25	-	-	-	27	313	2,069
Region 03 South Atlantic-Gulf .....		302	12,360	2,378	9	56	73	71	93	129	17,800	1,327
Region 04 Great Lakes .....		-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....		345	8,071	2,864	52	59	129	79	26	126	2,310	2,555
Region 06 Tennessee .....		76	1,138	3,641	26	9	29	8	4	13	128	1,861
Region 07 Upper Mississippi .....		-	-	-	-	-	-	-	-	2	(D)	(D)
Region 08 Lower Mississippi .....		46	1,030	3,673	-	6	24	16	-	7	140	3,200
Region 09 Souris-Red-Rainy .....		-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....		-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....		-	-	-	-	-	-	-	-	-	-	-
Region 12 Texas-Gulf .....		-	-	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....		-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....		-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....		-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....		-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....		-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....		-	-	-	-	-	-	-	-	-	-	-
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Land in vegetables <sup>2</sup>								
	Irrigated							Non-irrigated	
	Farms	Acres harvested	Farms by acres harvested					Farms	Acres harvested
Less than 5 acres			5 to 24 acres	25 to 99 acres	100 to 249 acres	250 acres or more			
United States .....2008 ..	16,899	3,084,879	6,774	3,200	2,601	1,599	2,725	2,854	145,704
.....2003 ..	15,954	2,068,317	5,677	3,504	2,779	2,495	1,499	2,381	129,194
<b>2008 DATA</b>									
Alabama .....	236	5,218	153	55	21	5	2	78	1,369
Alaska .....	14	330	6	5	2	-	-	5	(D)
Arizona .....	95	102,471	-	22	6	7	60	-	-
Arkansas .....	199	12,054	-	121	60	9	9	17	7,280
California .....	2,086	911,694	395	404	230	231	826	405	408
Colorado .....	468	97,416	-	211	71	72	114	-	-
Connecticut .....	91	1,030	57	29	4	-	1	25	558
Delaware .....	112	16,401	9	31	29	30	13	22	4,360
Florida .....	325	171,644	67	95	4	20	139	3	(D)
Georgia .....	753	57,772	169	363	101	50	70	124	2,374
Hawaii .....	392	5,156	308	62	20	-	2	11	66
Idaho .....	908	356,957	-	46	243	317	302	-	-
Illinois .....	178	20,627	41	15	75	24	23	79	3,459
Indiana .....	212	14,510	91	27	49	31	14	45	303
Iowa .....	46	1,391	28	4	11	2	1	14	57
Kansas .....	127	5,428	56	-	56	15	-	112	896
Kentucky .....	267	1,417	185	68	14	-	-	86	486
Louisiana .....	115	4,616	109	-	-	2	4	-	-
Maine .....	88	4,934	55	14	3	10	6	77	28,222
Maryland .....	317	16,953	144	61	52	44	16	74	1,754
Massachusetts .....	128	2,568	81	28	7	12	-	28	1,785
Michigan .....	670	114,222	214	192	78	74	112	267	19,000
Minnesota .....	274	56,747	46	32	110	44	42	49	6,499
Mississippi .....	68	2,598	66	-	-	-	2	1	(D)
Missouri .....	256	21,052	194	42	8	4	8	8	1,368
Montana .....	79	13,430	8	12	7	16	36	-	-
Nebraska .....	137	145,848	51	-	-	-	86	-	-
Nevada .....	6	6,189	-	-	2	-	4	-	-
New Hampshire .....	57	474	43	6	8	-	-	20	549
New Jersey .....	367	31,545	126	83	66	54	38	34	1,556
New Mexico .....	200	27,459	126	6	18	23	27	2	(D)
New York .....	356	11,314	197	79	52	19	9	140	15,036
North Carolina .....	416	18,596	202	72	92	38	12	88	9,405
North Dakota .....	36	29,633	-	5	-	4	27	7	1,828
Ohio .....	276	7,228	126	98	38	10	4	125	3,859
Oklahoma .....	94	7,754	38	-	43	7	6	3	59
Oregon .....	1,123	182,045	525	27	154	145	272	2	(D)
Pennsylvania .....	801	10,538	453	243	85	15	5	303	7,406
Rhode Island .....	34	353	25	2	7	-	-	17	439
South Carolina .....	287	13,336	151	81	39	1	15	31	307
South Dakota .....	38	128	34	4	-	-	-	3	24
Tennessee .....	228	6,609	155	49	13	8	3	77	5,941
Texas .....	1,344	78,821	583	279	328	93	61	279	56
Utah .....	376	2,208	276	90	6	1	3	-	-
Vermont .....	30	121	20	10	-	-	-	3	180
Virginia .....	118	11,170	12	45	32	13	16	37	1,676
Washington .....	1,601	284,122	979	-	303	116	203	6	(D)
West Virginia .....	51	320	45	3	3	-	-	12	85
Wisconsin .....	412	187,461	125	79	51	32	125	135	14,197
Wyoming .....	7	2,975	-	-	-	-	7	-	-
<b>Water Resources Regions</b>									
Region 01 New England .....	410	9,379	273	79	29	22	7	167	31,553
Region 02 Mid-Atlantic .....	1,792	89,513	867	372	298	167	88	458	18,449
Region 03 South Atlantic-Gulf .....	2,014	264,197	770	661	235	112	236	304	13,747
Region 04 Great Lakes .....	1,142	168,001	368	374	142	102	156	459	39,865
Region 05 Ohio .....	771	14,729	438	225	72	25	11	273	3,312
Region 06 Tennessee .....	247	5,606	150	50	35	8	4	79	1,537
Region 07 Upper Mississippi .....	784	217,897	230	89	217	95	153	249	17,823
Region 08 Lower Mississippi .....	412	33,466	170	137	68	16	21	25	13,348
Region 09 Souris-Red-Rainy .....	42	25,365	-	-	14	6	22	10	2,259
Region 10 Missouri .....	502	198,438	178	41	103	25	155	61	1,464
Region 11 Arkansas-White-Red .....	290	28,990	132	38	43	65	12	59	115
Region 12 Texas-Gulf .....	1,274	56,837	583	279	305	52	55	279	56
Region 13 Rio Grande .....	382	106,501	124	6	55	67	130	2	(D)
Region 14 Upper Colorado .....	242	14,934	2	196	22	19	3	-	-
Region 15 Lower Colorado .....	101	106,394	-	22	10	7	62	-	-
Region 16 Great Basin .....	384	14,881	276	87	5	1	15	-	-
Region 17 Pacific Northwest .....	3,579	811,669	1,504	73	675	563	764	8	1,444
Region 18 California .....	2,125	912,598	395	404	251	246	829	405	408
Region 19 Alaska .....	14	330	6	5	2	1	5	5	(D)
Region 20 Hawaii .....	392	5,156	308	62	20	-	2	11	66

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sweet corn									
	Irrigated							Non-irrigated		
	Farms	Acres harvested	Farms by acres harvested					Farms	Acres harvested	
Less than 5 acres			5 to 24 acres	25 to 49 acres	50 to 99 acres	100 acres or more				
United States ..... 2008 ..	4,341	294,855	2,445	810	270	263	553	844	18,681	
..... 2003 ..	4,052	282,158	1,909	950	346	279	568	874	17,836	
<b>2008 DATA</b>										
Alabama .....	79	467	54	21	4	-	-	24	30	
Alaska .....	-	-	-	-	-	-	-	-	-	
Arizona .....	3	6	3	-	-	-	-	-	-	
Arkansas .....	-	-	-	-	-	-	-	-	-	
California .....	38	23,890	-	-	-	4	34	5	200	
Colorado .....	231	4,744	193	-	19	-	19	-	-	
Connecticut .....	38	213	25	10	3	-	-	7	196	
Delaware .....	35	5,760	2	2	1	15	15	4	(D)	
Florida .....	163	30,459	66	66	2	-	29	1	(D)	
Georgia .....	227	15,209	92	118	-	-	17	104	312	
Hawaii .....	22	342	15	4	2	-	1	-	-	
Idaho .....	267	23,286	-	40	51	85	91	-	-	
Illinois .....	73	5,381	19	25	-	18	11	10	1,327	
Indiana .....	83	1,917	26	39	11	-	7	13	130	
Iowa .....	14	393	5	2	4	3	-	5	(D)	
Kansas .....	-	-	-	-	-	-	-	-	-	
Kentucky .....	121	376	95	26	-	-	-	52	99	
Louisiana .....	4	3,402	2	-	-	-	2	-	-	
Maine .....	11	161	3	5	3	-	-	3	54	
Maryland .....	131	7,494	49	27	11	11	33	25	232	
Massachusetts .....	33	1,606	-	14	7	-	12	14	469	
Michigan .....	183	3,783	120	51	4	-	8	89	906	
Minnesota .....	139	9,300	31	12	30	39	27	27	4,298	
Mississippi .....	68	2,532	66	-	-	-	2	-	-	
Missouri .....	38	114	38	-	-	-	-	-	-	
Montana .....	9	7	9	-	-	-	-	-	-	
Nebraska .....	51	34	51	-	-	-	-	-	-	
Nevada .....	-	-	-	-	-	-	-	-	-	
New Hampshire .....	25	310	16	3	5	1	-	9	264	
New Jersey .....	115	3,599	55	18	19	13	10	3	72	
New Mexico .....	139	(D)	126	7	6	-	-	-	-	
New York .....	162	2,455	121	15	14	6	6	71	1,099	
North Carolina .....	188	1,587	149	32	-	4	3	-	-	
North Dakota .....	-	-	-	-	-	-	-	-	-	
Ohio .....	85	1,187	45	31	2	4	3	46	1,440	
Oklahoma .....	43	610	-	38	3	2	-	-	-	
Oregon .....	110	16,474	-	27	31	17	35	-	-	
Pennsylvania .....	207	2,060	100	94	8	3	2	211	2,564	
Rhode Island .....	8	80	4	4	-	-	-	6	32	
South Carolina .....	144	901	114	28	-	1	1	-	-	
South Dakota .....	38	60	36	2	-	-	-	3	6	
Tennessee .....	79	159	76	2	-	1	-	36	110	
Texas .....	24	24	24	-	-	-	-	-	-	
Utah .....	4	(D)	-	3	-	-	1	-	-	
Vermont .....	6	1	6	-	-	-	-	3	9	
Virginia .....	46	2,405	17	6	14	2	7	-	-	
Washington .....	626	66,522	490	15	7	10	104	-	-	
West Virginia .....	17	93	15	1	-	1	-	9	31	
Wisconsin .....	214	54,718	87	22	9	23	73	64	3,652	
Wyoming .....	-	-	-	-	-	-	-	-	-	
<b>Water Resources Regions</b>										
Region 01 New England .....	115	2,370	48	36	18	1	12	39	1,015	
Region 02 Mid-Atlantic .....	617	21,682	295	154	54	47	67	205	2,687	
Region 03 South Atlantic-Gulf .....	880	48,306	558	258	11	5	48	129	1,342	
Region 04 Great Lakes .....	364	18,274	203	95	20	16	30	206	4,967	
Region 05 Ohio .....	264	2,323	194	51	8	2	9	151	1,056	
Region 06 Tennessee .....	65	811	53	9	-	1	2	20	78	
Region 07 Upper Mississippi .....	361	58,323	83	71	38	73	96	86	7,330	
Region 08 Lower Mississippi .....	25	5,832	21	-	-	-	4	-	-	
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	
Region 10 Missouri .....	105	187	101	2	2	-	-	3	6	
Region 11 Arkansas-White-Red .....	81	724	38	38	3	2	-	-	-	
Region 12 Texas-Gulf .....	24	24	24	-	-	-	-	-	-	
Region 13 Rio Grande .....	137	(D)	124	7	6	-	-	-	-	
Region 14 Upper Colorado .....	233	4,746	195	-	19	-	19	-	-	
Region 15 Lower Colorado .....	3	6	3	-	-	-	-	-	-	
Region 16 Great Basin .....	4	(D)	-	3	-	-	1	-	-	
Region 17 Pacific Northwest .....	1,003	106,282	490	82	89	112	230	-	-	
Region 18 California .....	38	23,890	-	-	-	4	34	5	200	
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii .....	22	342	15	4	2	-	1	-	-	

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Tomatoes									
	Irrigated							Non-irrigated		
	Farms	Acres harvested	Farms by acres harvested					Farms	Acres harvested	
Less than 5 acres			5 to 24 acres	25 to 49 acres	50 to 99 acres	100 acres or more				
United States .....2008 ..	5,937	305,565	4,717	517	175	100	428	581	2,026	
.....2003 ..	6,101	426,656	4,243	381	103	764	610	255	1,947	
<b>2008 DATA</b>										
Alabama .....	109	1,125	73	24	6	6	-	13	20	
Alaska .....	-	-	-	-	-	-	-	-	-	
Arizona .....	-	-	-	-	-	-	-	-	-	
Arkansas .....	121	2,349	-	61	60	-	-	-	-	
California .....	1,272	234,041	790	29	60	56	337	395	198	
Colorado .....	193	386	193	-	-	-	-	-	-	
Connecticut .....	43	70	39	3	1	-	-	2	(D)	
Delaware .....	8	18	5	3	-	-	-	-	-	
Florida .....	26	37,617	-	2	-	-	24	-	-	
Georgia .....	129	2,496	92	30	-	-	7	-	-	
Hawaii .....	96	852	88	5	2	-	1	-	-	
Idaho .....	-	-	-	-	-	-	-	-	-	
Illinois .....	26	27	26	-	-	-	-	2	(D)	
Indiana .....	92	3,979	65	11	-	5	11	13	13	
Iowa .....	34	34	30	4	-	-	-	-	-	
Kansas .....	56	39	56	-	-	-	-	-	-	
Kentucky .....	168	399	146	16	6	-	-	20	17	
Louisiana .....	107	58	107	-	-	-	-	-	-	
Maine .....	7	4	7	-	-	-	-	-	-	
Maryland .....	73	426	56	11	3	3	-	-	-	
Massachusetts .....	47	132	40	7	-	-	-	-	-	
Michigan .....	315	6,286	291	-	1	2	21	4	666	
Minnesota .....	50	75	43	7	-	-	-	-	-	
Mississippi .....	66	7	66	-	-	-	-	-	-	
Missouri .....	81	56	81	-	-	-	-	-	-	
Montana .....	9	2	9	-	-	-	-	-	-	
Nebraska .....	-	-	-	-	-	-	-	-	-	
Nevada .....	-	-	-	-	-	-	-	-	-	
New Hampshire .....	43	31	42	1	-	-	-	-	-	
New Jersey .....	185	1,997	141	27	9	4	4	-	-	
New Mexico .....	13	25	13	-	-	-	-	-	-	
New York .....	253	432	225	28	-	-	-	10	60	
North Carolina .....	138	852	117	4	15	-	2	-	-	
North Dakota .....	-	-	-	-	-	-	-	-	-	
Ohio .....	162	2,127	135	10	2	8	7	30	907	
Oklahoma .....	78	298	38	38	-	2	-	-	-	
Oregon .....	3	15	-	3	-	-	-	-	-	
Pennsylvania .....	425	1,821	373	39	4	6	3	53	97	
Rhode Island .....	16	33	14	2	-	-	-	5	(D)	
South Carolina .....	90	2,837	72	9	3	-	6	10	(D)	
South Dakota .....	35	(D)	35	-	-	-	-	3	3	
Tennessee .....	168	1,888	146	7	3	8	4	8	8	
Texas .....	303	256	279	24	-	-	-	-	-	
Utah .....	1	(D)	1	-	-	-	-	-	-	
Vermont .....	11	1	11	-	-	-	-	-	-	
Virginia .....	61	886	54	6	-	-	1	-	-	
Washington .....	703	1,511	597	106	-	-	-	-	-	
West Virginia .....	43	41	43	-	-	-	-	-	-	
Wisconsin .....	78	23	78	-	-	-	-	13	26	
Wyoming .....	-	-	-	-	-	-	-	-	-	
<b>Water Resources Regions</b>										
Region 01 New England .....	160	271	146	13	1	-	-	7	7	
Region 02 Mid-Atlantic .....	839	5,214	726	76	16	13	8	58	111	
Region 03 South Atlantic-Gulf .....	527	44,109	408	69	7	6	37	23	23	
Region 04 Great Lakes .....	507	8,578	450	17	3	10	27	45	1,548	
Region 05 Ohio .....	473	3,198	392	60	9	5	7	35	109	
Region 06 Tennessee .....	181	2,481	147	4	17	7	6	-	-	
Region 07 Upper Mississippi .....	196	1,732	180	11	-	-	5	15	27	
Region 08 Lower Mississippi .....	245	2,504	122	62	60	1	-	-	-	
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	
Region 10 Missouri .....	91	53	91	-	-	-	-	3	3	
Region 11 Arkansas-White-Red .....	134	337	94	38	-	2	-	-	-	
Region 12 Texas-Gulf .....	279	112	279	-	-	-	-	-	-	
Region 13 Rio Grande .....	37	(D)	13	24	-	-	-	-	-	
Region 14 Upper Colorado .....	193	386	193	-	-	-	-	-	-	
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	
Region 16 Great Basin .....	1	(D)	1	-	-	-	-	-	-	
Region 17 Pacific Northwest .....	706	1,526	597	109	-	-	-	-	-	
Region 18 California .....	1,272	234,041	790	29	60	56	337	395	198	
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii .....	96	852	88	5	2	-	1	-	-	

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Lettuce and Romaine								
	Irrigated						Non-irrigated		
	Farms	Acres harvested	Farms by acres harvested					Farms	Acres harvested
Less than 5 acres			5 to 24 acres	25 to 49 acres	50 to 99 acres	100 acres or more			
United States .....	2,203	255,880	1,657	83	25	176	262	51	340
2003 .....	2,051	276,426	1,048	54	40	14	895	49	338
<b>2008 DATA</b>									
Alabama .....	13	5	13	-	-	-	-	4	8
Alaska .....	2	(D)	1	-	1	-	-	-	-
Arizona .....	33	38,310	-	-	-	-	33	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-
California .....	439	200,470	-	54	10	170	205	-	-
Colorado .....	6	4,471	-	-	-	-	6	-	-
Connecticut .....	13	16	13	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-
Florida .....	74	8,581	66	-	-	-	8	-	-
Georgia .....	-	-	-	-	-	-	-	-	-
Hawaii .....	96	184	90	4	2	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-
Illinois .....	13	26	13	-	-	-	-	-	-
Indiana .....	13	3	13	-	-	-	-	-	-
Iowa .....	8	2	8	-	-	-	-	5	5
Kansas .....	56	6	56	-	-	-	-	-	-
Kentucky .....	27	16	27	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-
Maine .....	2	(D)	2	-	-	-	-	-	-
Maryland .....	2	(D)	2	-	-	-	-	-	-
Massachusetts .....	19	26	19	-	-	-	-	-	-
Michigan .....	85	688	84	-	-	-	1	-	-
Minnesota .....	31	23	29	2	-	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-
Montana .....	5	1	5	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-
New Hampshire .....	17	8	16	1	-	-	-	1	(D)
New Jersey .....	94	918	72	6	10	4	2	-	-
New Mexico .....	10	690	-	6	-	-	4	2	(D)
New York .....	180	494	168	8	2	-	2	-	-
North Carolina .....	89	21	89	-	-	-	-	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-
Ohio .....	25	(D)	23	-	-	1	1	9	(D)
Oklahoma .....	38	8	38	-	-	-	-	-	-
Oregon .....	-	-	-	-	-	-	-	-	-
Pennsylvania .....	80	134	77	2	-	1	-	3	3
Rhode Island .....	19	9	19	-	-	-	-	5	(D)
South Carolina .....	-	-	-	-	-	-	-	-	-
South Dakota .....	5	1	5	-	-	-	-	-	-
Tennessee .....	22	(D)	22	-	-	-	-	9	14
Texas .....	-	-	-	-	-	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-
Vermont .....	14	(D)	14	-	-	-	-	-	-
Virginia .....	9	27	9	-	-	-	-	-	-
Washington .....	596	182	596	-	-	-	-	-	-
West Virginia .....	16	5	16	-	-	-	-	-	-
Wisconsin .....	52	18	52	-	-	-	-	13	20
Wyoming .....	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>									
Region 01 New England .....	78	64	77	1	-	-	-	6	49
Region 02 Mid-Atlantic .....	295	1,500	258	16	12	5	4	-	-
Region 03 South Atlantic-Gulf .....	167	8,603	159	-	-	-	8	4	8
Region 04 Great Lakes .....	160	1,210	157	-	-	1	2	9	(D)
Region 05 Ohio .....	123	89	123	-	-	-	-	3	3
Region 06 Tennessee .....	27	9	27	-	-	-	-	9	14
Region 07 Upper Mississippi .....	61	(D)	59	2	-	-	-	18	25
Region 08 Lower Mississippi .....	2	(D)	2	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	14	3	14	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....	94	13	94	-	-	-	-	-	-
Region 12 Texas-Gulf .....	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....	16	5,161	-	6	-	-	10	2	(D)
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	34	38,899	-	-	-	-	34	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	596	182	596	-	-	-	-	-	-
Region 18 California .....	438	199,881	-	54	10	170	204	-	-
Region 19 Alaska .....	2	(D)	1	-	1	-	-	-	-
Region 20 Hawaii .....	96	184	90	4	2	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Potatoes								
	Irrigated							Non-irrigated	
	Farms	Acres harvested	Farms by acres harvested					Farms	Acres harvested
Less than 15 acres			15 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more			
United States .....	2008 .. 3,727	974,606	1,996	438	424	328	541	447	13,653
..... 2003 ..	3,126	1,032,155	646	671	708	549	552	320	26,120
<b>2008 DATA</b>									
Alabama .....	13	10	13	-	-	-	-	4	4
Alaska .....	3	(D)	1	2	-	-	-	5	(D)
Arizona .....	4	2,421	-	-	2	-	2	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-
California .....	122	43,304	54	9	5	19	35	-	-
Colorado .....	137	53,878	10	27	17	39	44	-	-
Connecticut .....	20	12	20	-	-	-	-	-	-
Delaware .....	8	1,283	-	4	2	2	-	2	(D)
Florida .....	45	26,343	-	-	10	14	21	2	(D)
Georgia .....	103	62	103	-	-	-	-	52	52
Hawaii .....	24	2	24	-	-	-	-	-	-
Idaho .....	520	286,937	-	101	156	89	174	-	-
Illinois .....	15	(D)	13	-	1	-	1	-	-
Indiana .....	22	639	17	-	5	-	-	13	3
Iowa .....	11	287	6	4	1	-	-	5	3
Kansas .....	-	-	-	-	-	-	-	56	56
Kentucky .....	55	48	55	-	-	-	-	7	1
Louisiana .....	53	53	53	-	-	-	-	-	-
Maine .....	14	(D)	2	2	7	2	1	14	4,784
Maryland .....	18	724	8	7	3	-	-	26	97
Massachusetts .....	14	14	14	-	-	-	-	7	(D)
Michigan .....	226	42,363	157	13	33	11	12	5	1,011
Minnesota .....	127	37,642	45	38	13	15	16	1	(D)
Mississippi .....	-	-	-	-	-	-	-	-	-
Missouri .....	121	9,927	114	-	2	-	5	2	(D)
Montana .....	66	11,943	11	7	16	31	1	-	-
Nebraska .....	86	145,814	-	-	-	3	83	-	-
Nevada .....	3	(D)	-	2	-	-	1	-	-
New Hampshire .....	15	7	15	-	-	-	-	-	-
New Jersey .....	99	1,156	91	2	6	-	-	1	(D)
New Mexico .....	3	(D)	-	1	-	-	2	-	-
New York .....	62	2,094	50	3	6	2	1	7	802
North Carolina .....	117	65	117	-	-	-	-	-	-
North Dakota .....	30	28,353	-	-	4	7	19	7	1,828
Ohio .....	25	30	25	-	-	-	-	49	50
Oklahoma .....	78	684	76	-	2	-	-	-	-
Oregon .....	192	46,806	-	111	39	18	24	2	(D)
Pennsylvania .....	132	2,382	111	13	5	3	-	96	1,452
Rhode Island .....	5	(D)	4	1	-	-	-	6	(D)
South Carolina .....	97	58	97	-	-	-	-	-	-
South Dakota .....	33	10	33	-	-	-	-	-	-
Tennessee .....	37	25	37	-	-	-	-	33	37
Texas .....	8	5,083	-	-	5	2	1	-	-
Utah .....	2	(D)	-	-	-	1	1	-	-
Vermont .....	10	1	10	-	-	-	-	-	-
Virginia .....	28	3,080	15	-	9	2	2	13	413
Washington .....	720	142,357	490	73	50	41	66	3	(D)
West Virginia .....	14	5	14	-	-	-	-	-	-
Wisconsin .....	183	57,287	91	18	25	20	29	29	1,183
Wyoming .....	7	2,975	-	-	-	7	-	-	-
<b>Water Resources Regions</b>									
Region 01 New England .....	76	2,619	63	3	7	2	1	27	4,995
Region 02 Mid-Atlantic .....	318	9,120	251	28	30	7	2	97	2,519
Region 03 South Atlantic-Gulf .....	386	26,552	341	-	10	14	21	58	156
Region 04 Great Lakes .....	356	55,030	256	20	42	22	16	38	2,085
Region 05 Ohio .....	99	1,202	94	-	3	2	-	98	106
Region 06 Tennessee .....	35	21	35	-	-	-	-	25	29
Region 07 Upper Mississippi .....	257	75,319	128	40	30	21	38	28	356
Region 08 Lower Mississippi .....	60	9,915	53	-	2	-	5	-	-
Region 09 Souris-Red-Rainy .....	40	(D)	-	14	6	8	12	8	2,129
Region 10 Missouri .....	266	177,037	82	26	18	43	97	2	(D)
Region 11 Arkansas-White-Red .....	117	4,654	114	-	2	-	1	56	56
Region 12 Texas-Gulf .....	8	1,214	-	1	5	2	-	-	-
Region 13 Rio Grande .....	117	52,543	10	8	17	39	43	-	-
Region 14 Upper Colorado .....	2	(D)	-	-	-	-	2	-	-
Region 15 Lower Colorado .....	4	2,421	-	-	2	-	2	-	-
Region 16 Great Basin .....	14	12,593	-	2	-	1	11	-	-
Region 17 Pacific Northwest .....	1,382	465,108	490	263	230	144	255	5	604
Region 18 California .....	163	46,868	54	31	20	23	35	-	-
Region 19 Alaska .....	3	(D)	1	2	-	-	-	5	(D)
Region 20 Hawaii .....	24	2	24	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Land in orchards, vineyards, and nut trees							All berries					
	Irrigated						Non-irrigated		Irrigated		Non-irrigated		
	Farms	Acres harvested	Farms by acres harvested					Farms	Acres harvested	Farms	Acres harvested	Farms	Acres harvested
Less than 5 acres			5 to 14 acres	15 to 49 acres	50 to 99 acres	100 acres or more							
United States ..... 2008 ..	57,184	3,733,339	20,148	15,253	11,833	3,707	6,243	3,003	138,879	9,021	222,857	538	15,560
..... 2003 ..	57,820	4,098,357	17,323	13,063	15,284	4,714	7,436	2,335	115,298	7,961	225,475	649	21,307
<b>2008 DATA</b>													
Alabama .....	155	1,286	100	35	16	2	2	56	789	111	394	12	120
Alaska .....	3	9	3	-	-	-	-	-	-	3	3	-	-
Arizona .....	670	30,745	375	66	160	32	37	-	-	-	-	-	-
Arkansas .....	180	420	180	-	-	-	-	8	480	-	-	-	-
California .....	32,651	2,546,785	8,226	9,523	8,183	2,359	4,360	6	150	1,138	74,362	-	-
Colorado .....	772	2,123	772	-	-	-	-	-	-	-	-	-	-
Connecticut .....	43	262	35	4	4	-	-	27	251	44	143	2	(D)
Delaware .....	-	-	-	-	-	-	-	-	-	9	57	-	-
Florida .....	3,887	522,632	1,110	557	1,032	529	659	158	5,546	612	10,184	-	-
Georgia .....	721	79,780	121	266	81	71	182	239	39,570	351	23,967	-	-
Hawaii .....	480	6,653	322	130	18	4	6	80	426	12	1	-	-
Idaho .....	420	8,403	273	61	77	-	9	-	-	1	(D)	-	-
Illinois .....	48	525	39	-	-	9	-	29	98	61	145	-	-
Indiana .....	20	249	-	8	12	-	-	32	909	40	336	13	130
Iowa .....	14	72	9	5	-	-	-	-	-	23	98	-	-
Kansas .....	31	304	1	30	-	-	-	-	-	-	-	-	-
Kentucky .....	40	270	19	8	13	-	-	33	119	106	179	26	15
Louisiana .....	232	1,855	214	16	-	-	2	-	-	53	53	-	-
Maine .....	32	633	-	30	-	-	2	2	(D)	114	8,082	43	7,645
Maryland .....	49	664	28	11	5	3	2	18	819	47	120	7	18
Massachusetts .....	27	427	13	12	-	-	2	7	280	545	13,883	38	22
Michigan .....	327	12,519	72	101	96	33	25	280	61,439	451	16,054	108	1,660
Minnesota .....	94	1,003	59	15	14	6	-	15	45	132	798	-	-
Mississippi .....	131	530	65	66	-	-	-	5	255	65	1,950	-	-
Missouri .....	38	2,090	-	-	-	38	-	42	649	38	4	-	-
Montana .....	145	290	145	-	-	-	-	-	-	-	-	-	-
Nebraska .....	240	720	240	-	-	-	-	240	240	-	-	-	-
Nevada .....	64	589	49	2	13	-	-	-	-	-	-	-	-
New Hampshire .....	18	58	14	4	-	-	-	10	(D)	52	119	9	(D)
New Jersey .....	83	4,273	31	18	17	5	12	38	379	199	11,391	26	448
New Mexico .....	2,896	68,806	1,840	652	263	49	92	6	156	-	-	-	-
New York .....	150	5,413	7	82	31	12	18	132	5,218	218	1,195	76	170
North Carolina .....	172	2,153	132	-	31	-	9	25	2,200	385	8,110	42	4,902
North Dakota .....	12	39	7	5	-	-	-	7	6	7	105	-	-
Ohio .....	58	977	20	22	4	12	-	35	835	116	373	26	95
Oklahoma .....	249	1,531	194	42	11	-	2	38	684	76	114	-	-
Oregon .....	1,525	33,404	847	416	180	5	77	303	2,922	1,082	17,275	1	(D)
Pennsylvania .....	249	3,251	164	31	33	15	6	120	6,758	311	776	60	50
Rhode Island .....	24	158	15	7	2	-	-	15	95	10	136	-	-
South Carolina .....	209	9,843	180	11	3	2	13	12	737	80	228	-	-
South Dakota .....	2	(D)	-	2	-	-	-	2	(D)	-	-	-	-
Tennessee .....	78	434	56	21	-	-	1	40	104	157	314	8	16
Texas .....	3,026	87,682	1,966	837	51	92	80	285	331	558	4,046	-	-
Utah .....	829	4,602	719	3	84	-	-	23	-	84	84	-	-
Vermont .....	18	159	13	4	-	-	-	9	379	38	208	8	24
Virginia .....	240	1,169	123	117	-	-	-	17	286	122	567	-	-
Washington .....	5,659	286,697	1,226	2,001	1,382	429	621	599	3,716	1,107	(D)	2	(D)
West Virginia .....	21	118	19	-	2	-	-	7	1,713	46	113	5	10
Wisconsin .....	145	651	105	25	15	-	-	26	72	417	21,444	26	33
Wyoming .....	7	70	-	7	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>													
Region 01 New England .....	146	1,562	77	59	6	-	4	63	915	776	22,476	100	7,710
Region 02 Mid-Atlantic .....	581	11,324	285	165	74	30	27	210	11,452	765	13,124	121	552
Region 03 South Atlantic-Gulf .....	5,264	615,299	1,676	971	1,159	604	854	472	46,940	1,598	44,923	50	5,002
Region 04 Great Lakes .....	529	16,466	163	161	121	49	35	391	66,145	669	17,316	187	1,843
Region 05 Ohio .....	147	1,044	100	25	19	1	2	133	1,113	367	1,162	65	233
Region 06 Tennessee .....	96	1,684	50	30	4	-	12	58	2,006	140	246	12	36
Region 07 Upper Mississippi .....	204	1,947	121	40	28	15	-	55	282	554	22,055	-	-
Region 08 Lower Mississippi .....	373	2,097	351	20	-	-	-	2	10	275	74	111	-
Region 09 Souris-Red-Rainy .....	7	14	7	-	-	-	-	7	6	-	-	-	-
Region 10 Missouri .....	289	1,191	240	49	-	-	-	279	881	17	111	-	-
Region 11 Arkansas-White-Red .....	997	6,919	836	104	11	38	8	46	1,164	76	114	-	-
Region 12 Texas-Gulf .....	2,919	64,851	1,966	837	51	11	54	285	331	558	4,046	-	-
Region 13 Rio Grande .....	2,604	89,177	1,512	588	263	130	111	6	156	-	-	-	-
Region 14 Upper Colorado .....	666	2,849	579	2	84	-	1	-	-	-	-	-	-
Region 15 Lower Colorado .....	754	30,787	459	66	160	32	37	-	-	-	-	-	-
Region 16 Great Basin .....	786	4,316	684	66	13	-	23	-	-	84	84	-	-
Region 17 Pacific Northwest .....	7,688	328,367	2,491	2,417	1,639	434	707	902	6,638	2,190	22,724	3	185
Region 18 California .....	32,651	2,546,785	8,226	9,523	8,183	2,359	4,360	6	150	1,138	74,362	-	-
Region 19 Alaska .....	3	9	3	-	-	-	-	-	-	3	3	-	-
Region 20 Hawaii .....	480	6,653	322	130	18	4	6	80	426	12	1	-	-

See footnote(s) at end of table.

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**Table 27. Crops Harvested from Irrigated Farms: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All other crops (see text)				Pastureland, all types			
	Irrigated		Non-irrigated		Irrigated		Non-irrigated	
	Farms	Acres harvested	Farms	Acres harvested	Farms	Acres	Farms	Acres
United States .....	6,761	1,487,387	1,632	626,219	49,582	3,611,216	72,654	91,453,055
2008 ..								
2003 ..	6,541	1,418,982	2,157	749,180	49,843	3,629,492	70,931	90,228,942
<b>2008 DATA</b>								
Alabama .....	35	294	12	198	47	1,614	297	43,470
Alaska .....	1	(D)	-	-	1	(D)	9	(D)
Arizona .....	370	17,005	3	515	1,336	42,104	820	3,425,747
Arkansas .....	79	4,400	-	-	129	3,272	676	321,400
California .....	2,155	263,763	19	5,870	6,787	367,405	8,029	6,207,614
Colorado .....	368	24,607	39	5,777	4,088	435,226	6,675	5,364,667
Connecticut .....	3	(D)	1	(D)	-	-	54	912
Delaware .....	7	865	2	(D)	8	116	48	1,135
Florida .....	114	355,879	7	530	404	74,344	1,330	587,664
Georgia .....	69	20,498	18	7,176	213	26,795	1,448	227,314
Hawaii .....	369	43,958	14	14	58	1,492	124	38,061
Idaho .....	247	52,459	8	3,136	8,179	379,140	4,123	2,360,516
Illinois .....	82	26,248	22	1,432	2	(D)	208	15,474
Indiana .....	38	12,974	30	13,558	60	2,092	290	19,266
Iowa .....	12	944	3	1,018	12	209	115	12,097
Kansas .....	104	21,020	138	42,861	113	29,958	2,307	2,381,787
Kentucky .....	8	78	-	-	30	566	483	48,098
Louisiana .....	20	10,302	14	5,230	8	240	358	143,262
Maine .....	-	-	4	564	3	45	67	878
Maryland .....	20	619	13	526	7	248	204	5,892
Massachusetts .....	7	329	-	-	37	111	58	851
Michigan .....	19	1,876	25	1,396	163	3,251	334	12,459
Minnesota .....	68	17,933	37	8,729	21	464	490	50,330
Mississippi .....	2	(D)	2	(D)	-	-	186	16,968
Missouri .....	7	1,336	4	80	58	1,889	450	78,994
Montana .....	92	15,090	51	15,434	3,379	392,545	4,750	15,254,444
Nebraska .....	523	123,750	538	280,703	584	44,057	9,265	9,245,429
Nevada .....	12	5,983	-	-	627	152,895	765	4,632,166
New Hampshire .....	1	(D)	4	68	-	-	8	231
New Jersey .....	28	1,605	5	760	47	365	119	(D)
New Mexico .....	55	9,147	3	2,800	2,502	111,475	2,196	7,579,776
New York .....	52	1,368	5	530	-	-	174	8,593
North Carolina .....	28	3,004	11	1,820	316	11,790	689	45,857
North Dakota .....	30	7,415	105	67,714	6	652	317	487,749
Ohio .....	41	66	6	294	3	65	166	3,349
Oklahoma .....	44	4,621	18	2,124	253	38,509	975	976,909
Oregon .....	615	215,863	91	61,083	6,538	338,710	5,592	3,861,301
Pennsylvania .....	97	649	36	717	9	158	452	9,607
Rhode Island .....	9	18	4	(D)	4	4	5	15
South Carolina .....	25	1,543	3	600	82	2,815	214	29,715
South Dakota .....	34	4,285	46	36,844	25	2,003	887	1,285,648
Tennessee .....	33	598	1	(D)	31	(D)	278	32,423
Texas .....	173	54,872	47	9,042	2,013	350,030	5,515	6,148,080
Utah .....	28	2,577	15	2,352	4,997	253,812	4,339	3,456,008
Vermont .....	-	-	-	-	-	-	24	310
Virginia .....	41	953	41	164	7	250	409	23,243
Washington .....	387	118,702	11	2,535	4,293	132,393	3,221	4,076,529
West Virginia .....	5	25	-	-	4	16	37	3,493
Wisconsin .....	81	9,850	75	5,347	30	905	335	17,244
Wyoming .....	123	26,102	101	35,474	2,068	405,592	2,739	12,907,757
<b>Water Resources Regions</b>								
Region 01 New England .....	20	431	13	670	44	160	200	2,919
Region 02 Mid-Atlantic .....	184	5,473	97	(D)	80	(D)	1,085	35,089
Region 03 South Atlantic-Gulf .....	293	381,693	49	10,254	1,056	117,118	4,158	941,678
Region 04 Great Lakes .....	64	6,688	34	2,792	221	4,886	677	(D)
Region 05 Ohio .....	85	11,171	24	8,980	66	1,323	925	81,993
Region 06 Tennessee .....	27	206	2	(D)	15	1,267	280	27,751
Region 07 Upper Mississippi .....	221	39,066	136	17,921	25	977	984	81,419
Region 08 Lower Mississippi .....	113	(D)	17	6,360	106	2,174	924	210,070
Region 09 Souris-Red-Rainy .....	25	15,892	38	15,623	8	292	204	52,505
Region 10 Missouri .....	979	200,717	930	459,913	5,173	685,704	19,499	39,391,536
Region 11 Arkansas-White-Red .....	166	33,830	72	12,686	1,034	285,709	5,679	9,739,291
Region 12 Texas-Gulf .....	119	41,498	40	10,292	1,779	189,306	4,212	2,857,813
Region 13 Rio Grande .....	65	8,927	-	-	2,244	153,797	1,654	5,612,056
Region 14 Upper Colorado .....	222	4,137	19	3,040	5,165	490,301	4,770	3,371,145
Region 15 Lower Colorado .....	370	17,005	3	515	1,712	53,539	1,095	3,609,064
Region 16 Great Basin .....	103	28,110	19	4,688	4,225	297,680	3,862	7,128,723
Region 17 Pacific Northwest .....	1,176	364,950	106	64,418	19,207	898,867	14,161	11,887,217
Region 18 California .....	2,159	265,897	19	5,870	7,363	425,116	8,152	6,363,793
Region 19 Alaska .....	1	(D)	-	-	1	(D)	9	(D)
Region 20 Hawaii .....	369	43,958	14	14	58	1,492	124	38,061

<sup>1</sup> Respondents were asked to report dry tons.

<sup>2</sup> 2003 data do not include potatoes.

**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Corn for grain or seed											
	Farms	Irrigated acres harvested	Average yield per acre (bushels)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre (bushels)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (bushels)	Average acre-feet applied per acre
United States .....	2008 .. 33,571	11,991,515	181	1.0	26,592	9,786,501	183	1.0	6,979	2,205,014	170	1.1
	2003 .. 32,231	9,747,474	178	1.2	22,665	7,593,248	180	1.2	8,930	2,128,431	176	1.3
<b>2008 DATA</b>												
Alabama .....	140	24,111	173	0.7	135	(D)	(D)	(D)	5	(D)	(D)	(D)
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	40	13,987	182	2.8	28	12,323	182	2.6	12	1,664	176	4.2
Arkansas .....	960	381,321	163	1.1	178	106,499	157	0.9	782	274,822	166	1.1
California .....	433	122,554	177	2.0	168	22,016	202	1.8	265	100,538	171	2.1
Colorado .....	2,337	796,040	174	1.6	1,271	599,232	177	1.6	1,066	196,808	167	1.6
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	223	49,381	190	0.8	223	49,381	190	0.8	-	-	-	-
Florida .....	72	9,899	155	0.7	70	(D)	(D)	(D)	2	(D)	(D)	(D)
Georgia .....	1,174	155,035	171	1.1	1,122	154,983	171	1.1	52	52	200	0.8
Hawaii .....	10	2,037	(D)	(D)	8	(D)	(D)	(D)	2	(D)	(D)	(D)
Idaho .....	540	72,800	179	2.6	226	47,094	176	2.4	314	25,706	183	3.0
Illinois .....	875	309,187	190	0.5	860	309,026	190	0.5	15	161	165	0.5
Indiana .....	778	244,574	176	0.6	778	244,574	176	0.6	-	-	-	-
Iowa .....	430	107,979	171	0.5	423	106,440	171	0.4	7	1,539	160	1.1
Kansas .....	2,896	1,368,126	191	1.3	2,567	1,307,395	191	1.4	329	60,731	187	1.2
Kentucky .....	76	14,099	174	0.5	72	13,599	175	0.5	4	500	152	0.3
Louisiana .....	470	212,824	161	0.7	63	33,914	161	0.8	407	178,910	161	0.7
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	231	36,981	188	0.8	231	36,981	188	0.8	-	-	-	-
Massachusetts .....	5	(D)	(D)	(D)	5	(D)	(D)	(D)	-	-	-	-
Michigan .....	778	248,790	175	0.6	776	(D)	(D)	(D)	2	(D)	(D)	(D)
Minnesota .....	1,071	254,960	174	0.6	1,071	254,960	174	0.6	-	-	-	-
Mississippi .....	522	351,869	175	0.9	201	134,924	175	0.9	321	216,945	174	0.9
Missouri .....	1,057	361,275	172	0.8	611	192,910	173	0.7	446	168,365	171	0.9
Montana .....	162	28,653	150	1.6	54	11,109	144	1.6	108	17,544	153	1.6
Nebraska .....	12,530	5,058,195	184	0.8	10,847	4,293,573	185	0.8	1,683	764,622	180	0.9
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
New Jersey .....	43	5,620	178	0.5	43	5,620	178	0.5	-	-	-	-
New Mexico .....	88	(D)	191	2.0	76	44,442	189	2.1	12	(D)	198	1.5
New York .....	9	375	198	0.4	9	375	198	0.4	-	-	-	-
North Carolina .....	210	24,738	127	1.5	210	24,738	127	1.5	-	-	-	-
North Dakota .....	311	90,271	156	0.8	290	87,499	157	0.8	21	2,772	119	1.2
Ohio .....	23	7,260	162	1.5	20	7,080	162	1.5	3	180	180	1.0
Oklahoma .....	211	95,182	188	1.4	207	94,482	188	1.4	4	700	157	1.2
Oregon .....	291	32,584	209	3.0	213	22,807	206	2.8	78	9,777	215	3.6
Pennsylvania .....	16	912	138	0.3	16	912	138	0.3	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	158	35,411	162	0.8	156	(D)	(D)	(D)	2	(D)	(D)	(D)
South Dakota .....	669	175,593	173	0.8	611	169,880	175	0.8	58	5,713	117	1.2
Tennessee .....	72	17,794	190	0.6	70	(D)	(D)	(D)	2	(D)	(D)	(D)
Texas .....	1,998	954,026	184	1.7	1,666	843,902	193	1.7	332	110,124	115	1.5
Utah .....	296	26,848	152	2.8	41	5,017	155	3.9	255	21,831	151	2.6
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	86	12,729	181	0.5	86	12,729	181	0.5	-	-	-	-
Washington .....	402	87,919	185	2.4	242	68,263	185	2.4	160	19,656	188	2.3
West Virginia .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Wisconsin .....	479	105,809	166	0.7	479	105,809	166	0.7	-	-	-	-
Wyoming .....	395	39,896	145	1.7	165	26,560	157	1.4	230	13,336	121	2.2
<b>Water Resources Regions</b>												
Region 01 New England .....	7	134	109	0.1	7	134	109	0.1	-	-	-	-
Region 02 Mid-Atlantic .....	587	104,218	189	0.7	587	104,218	189	0.7	-	-	-	-
Region 03 South Atlantic-Gulf .....	1,761	244,887	164	1.1	1,700	243,642	164	1.1	61	1,245	143	0.8
Region 04 Great Lakes .....	1,098	330,435	174	0.6	1,093	329,665	174	0.6	5	770	211	0.5
Region 05 Ohio .....	554	156,931	176	0.6	552	(D)	(D)	(D)	2	(D)	(D)	(D)
Region 06 Tennessee .....	55	15,763	187	0.7	55	15,763	187	0.7	-	-	-	-
Region 07 Upper Mississippi .....	2,616	734,442	179	0.6	2,549	725,427	179	0.6	67	9,015	177	0.6
Region 08 Lower Mississippi .....	2,483	1,159,644	169	0.9	759	381,954	170	0.8	1,724	777,690	168	0.9
Region 09 Souris-Red-Rainy .....	228	64,333	163	0.7	228	64,333	163	0.7	-	-	-	-
Region 10 Missouri .....	17,097	6,541,812	182	0.9	14,261	5,596,033	183	0.9	2,836	945,779	176	1.0
Region 11 Arkansas-White-Red .....	3,736	1,839,620	193	1.5	3,050	1,686,310	196	1.6	686	153,310	168	1.3
Region 12 Texas-Gulf .....	1,040	376,884	151	1.6	768	283,785	164	1.7	272	93,099	109	1.3
Region 13 Rio Grande .....	78	8,980	(D)	(D)	26	2,648	(D)	(D)	52	6,332	107	2.8
Region 14 Upper Colorado .....	230	53,182	184	2.0	35	15,668	173	3.1	195	37,514	188	1.5
Region 15 Lower Colorado .....	44	17,621	179	2.7	30	15,297	179	2.6	14	2,324	177	3.2
Region 16 Great Basin .....	273	23,995	151	2.6	27	2,536	145	2.9	246	21,459	152	2.6
Region 17 Pacific Northwest .....	1,241	194,043	186	2.6	689	138,904	185	2.5	552	55,139	191	2.9
Region 18 California .....	433	122,554	177	2.0	168	22,016	202	1.8	265	100,538	171	2.1
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	10	2,037	(D)	(D)	8	(D)	(D)	(D)	2	(D)	(D)	(D)

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Corn for silage or greenchop											
	Farms	Irrigated acres harvested	Average yield per acre (tons, green)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre (tons, green)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (tons, green)	Average acre-feet applied per acre
United States .....	2008 .. 9,135	1,633,540	25	2.1	4,690	891,129	25	1.7	4,445	742,411	26	2.6
.....	2003 .. 10,111	1,311,674	25	2.2	4,618	601,713	24	1.6	5,483	(D)	(D)	(D)
<b>2008 DATA</b>												
Alabama .....	9	1,269	18	0.6	9	1,269	18	0.6	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	81	30,591	28	4.6	9	5,732	29	4.0	72	24,859	28	4.7
Arkansas .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
California .....	1,684	530,406	27	2.9	129	44,559	27	2.9	1,555	485,847	27	2.9
Colorado .....	848	92,563	23	1.5	293	47,207	23	1.4	555	45,356	22	1.6
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	17	750	21	0.8	17	750	21	0.8	-	-	-	-
Florida .....	169	30,670	18	0.9	159	23,776	18	0.9	10	6,894	18	0.8
Georgia .....	186	26,147	22	1.3	186	26,147	22	1.3	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	1,391	253,615	27	2.2	794	221,322	27	2.2	597	32,293	27	2.0
Illinois .....	11	766	14	0.2	11	766	14	0.2	-	-	-	-
Indiana .....	55	8,417	21	0.5	55	8,417	21	0.5	-	-	-	-
Iowa .....	11	1,730	24	0.4	11	1,730	24	0.4	-	-	-	-
Kansas .....	394	75,978	22	1.4	262	70,343	22	1.4	132	5,635	19	1.3
Kentucky .....	9	114	25	(D)	7	(D)	(D)	(D)	2	(D)	(D)	(D)
Louisiana .....	4	120	10	0.5	4	120	10	0.5	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	16	2,096	27	0.4	16	2,096	27	0.4	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	99	18,379	22	0.4	99	18,379	22	0.4	-	-	-	-
Minnesota .....	183	10,673	20	0.6	183	10,673	20	0.6	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	29	4,019	18	0.7	22	3,184	16	0.7	7	835	25	0.7
Montana .....	297	40,377	22	1.6	104	15,562	19	1.5	193	24,815	25	1.7
Nebraska .....	1,115	89,346	22	0.8	1,035	85,299	22	0.7	80	4,047	24	1.9
Nevada .....	34	5,880	27	3.2	4	1,510	24	2.2	30	4,370	28	3.5
New Hampshire .....	5	61	27	2.1	5	61	27	2.1	-	-	-	-
New Jersey .....	4	746	24	0.1	4	746	24	0.1	-	-	-	-
New Mexico .....	281	86,730	26	2.1	142	69,305	27	2.0	139	17,425	25	2.6
New York .....	4	12	25	2.1	4	12	25	2.1	-	-	-	-
North Carolina .....	25	1,830	27	0.4	25	1,830	27	0.4	-	-	-	-
North Dakota .....	60	4,946	19	1.1	38	3,083	17	0.9	22	1,863	24	1.4
Ohio .....	4	635	23	0.7	3	(D)	(D)	(D)	1	(D)	(D)	(D)
Oklahoma .....	49	12,665	17	1.3	46	12,125	17	1.3	3	540	10	0.6
Oregon .....	166	18,977	28	1.8	108	13,395	27	1.5	58	5,582	29	2.4
Pennsylvania .....	7	511	24	0.3	7	511	24	0.3	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	35	4,519	15	0.6	35	4,519	15	0.6	-	-	-	-
South Dakota .....	61	4,595	18	1.3	52	2,890	19	1.1	9	1,705	17	1.6
Tennessee .....	17	1,572	21	0.2	15	(D)	(D)	(D)	2	(D)	(D)	(D)
Texas .....	324	108,226	25	1.7	228	90,476	27	1.7	96	17,750	17	1.4
Utah .....	751	51,380	22	2.4	153	21,428	22	2.7	598	29,952	22	2.2
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	64	3,287	25	0.3	64	3,287	25	0.3	-	-	-	-
Washington .....	355	67,413	29	2.5	185	50,230	28	2.5	170	17,183	30	2.6
West Virginia .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Wisconsin .....	119	12,442	21	0.6	119	12,442	21	0.6	-	-	-	-
Wyoming .....	159	29,027	24	2.0	45	13,767	23	1.7	114	15,260	24	2.3
<b>Water Resources Regions</b>												
Region 01 New England .....	5	61	27	2.1	5	61	27	2.1	-	-	-	-
Region 02 Mid-Atlantic .....	112	7,402	25	0.4	112	7,402	25	0.4	-	-	-	-
Region 03 South Atlantic-Gulf .....	424	64,435	20	1.0	414	57,541	20	1.1	10	6,894	18	0.8
Region 04 Great Lakes .....	149	22,893	22	0.5	148	(D)	(D)	(D)	1	(D)	(D)	(D)
Region 05 Ohio .....	33	2,271	21	0.7	31	(D)	(D)	(D)	2	(D)	(D)	(D)
Region 06 Tennessee .....	11	1,323	21	0.3	11	1,323	21	0.3	-	-	-	-
Region 07 Upper Mississippi .....	296	26,761	20	0.5	296	26,761	20	0.5	-	-	-	-
Region 08 Lower Mississippi .....	19	1,855	18	0.7	10	930	12	0.7	9	925	24	0.7
Region 09 Souris-Red-Rainy .....	25	1,494	20	0.8	25	1,494	20	0.8	-	-	-	-
Region 10 Missouri .....	2,477	263,062	22	1.3	1,612	179,411	22	1.1	865	83,651	23	1.8
Region 11 Arkansas-White-Red .....	475	121,955	24	1.6	349	114,695	24	1.6	126	7,260	20	1.6
Region 12 Texas-Gulf .....	313	97,872	24	1.7	215	77,839	26	1.7	98	20,033	18	1.5
Region 13 Rio Grande .....	191	48,162	27	2.4	55	33,110	28	2.3	136	15,052	25	2.7
Region 14 Upper Colorado .....	183	11,943	23	1.6	22	999	20	2.9	161	10,944	23	1.5
Region 15 Lower Colorado .....	81	30,591	28	4.6	9	5,732	29	4.0	72	24,859	28	4.7
Region 16 Great Basin .....	806	58,129	23	2.4	225	26,391	22	2.5	581	31,738	23	2.4
Region 17 Pacific Northwest .....	1,848	342,625	28	2.2	1,019	287,527	28	2.2	829	55,098	28	2.2
Region 18 California .....	1,687	530,706	27	2.9	132	44,859	27	2.9	1,555	485,847	27	2.9
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sorghum for grain or seed											
	Farms	Irrigated acres harvested	Average yield per acre (bushels)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre (bushels)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (bushels)	Average acre-feet applied per acre
United States .....	2008 .. 4,118	1,042,392	77	0.9	2,860	798,388	75	0.8	1,258	244,004	83	1.4
2003 ..	6,134	1,108,375	75	1.0	3,213	748,698	76	0.9	2,870	344,016	75	1.1
<b>2008 DATA</b>												
Alabama .....	-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	80	24,328	93	3.4	25	4,155	109	3.3	55	20,173	90	3.5
Arkansas .....	290	65,738	101	1.0	83	20,596	107	0.6	207	45,142	98	1.1
California .....	39	14,620	104	1.8	24	11,125	105	1.7	15	3,495	99	2.1
Colorado .....	103	8,308	52	0.6	29	4,410	52	0.6	74	3,898	52	0.6
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	2	(D)	(D)	(D)	-	-	-	-	2	(D)	(D)	(D)
Georgia .....	45	8,201	43	1.2	45	8,201	43	1.2	-	-	-	-
Hawaii .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	4	103	114	0.4	4	103	114	0.4	-	-	-	-
Indiana .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	779	107,525	99	1.0	573	96,593	100	1.0	206	10,932	87	1.0
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	18	4,833	79	0.4	6	2,320	90	0.4	12	2,513	69	0.4
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....	25	3,895	77	0.9	5	1,100	(D)	0.7	20	2,795	(D)	1.0
Missouri .....	70	3,135	104	(D)	44	(D)	114	(D)	26	(D)	99	(D)
Montana .....	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	172	12,100	109	0.5	55	5,548	89	0.4	117	6,552	125	0.5
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	69	15,262	89	1.6	43	10,374	75	1.4	26	4,888	118	2.1
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	137	26,832	67	0.8	108	23,745	67	0.8	29	3,087	67	1.0
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
South Dakota .....	6	456	88	1.6	3	306	95	2.0	3	150	75	0.7
Tennessee .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Texas .....	2,263	743,172	71	0.8	1,797	605,219	70	0.8	466	137,953	75	1.2
Utah .....	9	540	110	1.3	9	540	110	1.3	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Washington .....	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....	50	(D)	(D)	(D)	48	(D)	(D)	(D)	2	(D)	(D)	(D)
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	5	(D)	(D)	(D)	5	(D)	(D)	(D)	-	-	-	-
Region 08 Lower Mississippi .....	319	73,200	100	0.9	81	21,806	108	0.6	238	51,394	96	1.1
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	438	31,551	107	0.6	235	22,220	100	0.7	203	9,331	123	0.6
Region 11 Arkansas-White-Red .....	1,518	332,814	84	1.0	1,122	289,084	87	1.1	396	43,730	63	0.8
Region 12 Texas-Gulf .....	1,597	545,110	67	0.8	1,294	435,740	65	0.6	303	109,370	79	1.4
Region 13 Rio Grande .....	60	8,621	100	1.8	16	(D)	(D)	(D)	44	(D)	(D)	(D)
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	82	24,428	93	3.4	25	4,155	109	3.3	57	20,273	90	3.4
Region 16 Great Basin .....	9	540	110	1.3	9	540	110	1.3	-	-	-	-
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....	39	14,620	104	1.8	24	11,125	105	1.7	15	3,495	99	2.1
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-

See footnote(s) at end of table.

--continued

**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Wheat for grain or seed											
	Farms	Irrigated acres harvested	Average yield per acre (bushels)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre (bushels)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (bushels)	Average acre-feet applied per acre
United States .....	2008 .. 16,265	4,107,464	75	1.4	11,781	3,201,888	70	1.2	4,484	905,576	92	2.2
2003 ..	13,524	3,267,978	76	1.5	8,468	2,392,589	71	1.2	4,985	873,749	88	2.1
<b>2008 DATA</b>												
Alabama .....	17	1,850	75	0.4	13	(D)	79	0.4	4	(D)	60	0.5
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	254	138,472	109	3.6	33	9,612	99	3.2	221	128,860	110	3.6
Arkansas .....	160	46,737	61	0.4	31	6,962	59	0.4	129	39,775	62	0.4
California .....	1,338	493,133	99	2.2	303	83,830	106	1.9	1,035	409,303	97	2.3
Colorado .....	997	171,323	75	1.4	525	135,848	75	1.3	472	35,475	76	1.6
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	77	10,929	83	0.4	77	10,929	83	0.4	-	-	-	-
Florida .....	6	1,750	75	0.5	6	1,750	75	0.5	-	-	-	-
Georgia .....	321	65,933	67	0.4	321	65,933	67	0.4	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	2,062	638,220	104	1.6	1,500	571,990	104	1.6	562	66,230	106	2.0
Illinois .....	49	5,312	60	0.4	49	5,312	60	0.4	-	-	-	-
Indiana .....	69	10,163	66	0.2	69	10,163	66	0.2	-	-	-	-
Iowa .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Kansas .....	1,541	455,558	57	0.9	1,538	(D)	(D)	(D)	3	(D)	(D)	(D)
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	23	6,706	59	0.8	10	3,820	60	(D)	13	2,886	58	(D)
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	75	7,992	78	0.4	75	7,992	78	0.4	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	88	16,732	73	0.3	88	16,732	73	0.3	-	-	-	-
Minnesota .....	88	9,450	60	0.5	88	9,450	60	0.5	-	-	-	-
Mississippi .....	13	3,941	57	0.2	3	2,530	(D)	0.2	10	1,411	(D)	0.2
Missouri .....	87	27,163	63	0.4	53	19,625	63	0.3	34	7,538	62	0.5
Montana .....	1,235	212,886	69	1.0	689	156,024	69	1.0	546	56,862	70	1.1
Nebraska .....	1,000	174,922	66	0.8	867	165,588	68	0.8	133	9,334	38	0.7
Nevada .....	46	12,282	81	2.8	29	10,216	78	2.9	17	2,066	97	2.5
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	8	1,635	73	0.3	8	1,635	73	0.3	-	-	-	-
New Mexico .....	174	83,868	46	1.7	151	76,177	44	1.7	23	7,691	62	2.4
New York .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
North Carolina .....	51	4,610	45	0.2	51	4,610	45	0.2	-	-	-	-
North Dakota .....	144	30,427	56	0.9	90	17,604	58	0.7	54	12,823	54	1.2
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	479	147,489	49	0.9	466	145,454	49	0.9	13	2,035	42	0.6
Oregon .....	747	177,497	105	1.7	635	152,214	104	1.5	112	25,283	109	2.9
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	38	6,748	67	0.5	38	6,748	67	0.5	-	-	-	-
South Dakota .....	81	15,948	56	0.5	68	14,610	59	0.5	13	1,338	31	0.8
Tennessee .....	3	675	72	0.5	3	675	72	0.5	-	-	-	-
Texas .....	2,583	796,071	43	1.0	2,411	769,045	43	1.0	172	27,026	46	1.2
Utah .....	952	44,356	94	1.9	275	16,279	86	1.7	677	28,077	99	2.0
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	8	655	71	0.3	8	655	71	0.3	-	-	-	-
Washington .....	1,195	260,958	97	1.9	1,001	228,567	96	1.9	194	32,391	106	2.2
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	27	2,176	69	0.4	27	2,176	69	0.4	-	-	-	-
Wyoming .....	225	22,861	57	1.0	178	18,079	63	1.0	47	4,782	33	0.8
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	170	21,225	80	0.4	170	21,225	80	0.4	-	-	-	-
Region 03 South Atlantic-Gulf .....	429	80,183	66	0.4	425	79,783	66	0.4	4	400	60	0.5
Region 04 Great Lakes .....	98	17,672	73	0.3	98	17,672	73	0.3	-	-	-	-
Region 05 Ohio .....	30	8,911	59	0.3	30	8,911	59	0.3	-	-	-	-
Region 06 Tennessee .....	5	1,058	85	0.4	5	1,058	85	0.4	-	-	-	-
Region 07 Upper Mississippi .....	158	12,392	67	0.4	158	12,392	67	0.4	-	-	-	-
Region 08 Lower Mississippi .....	243	70,852	62	0.4	88	27,102	63	0.4	155	43,750	62	0.4
Region 09 Souris-Red-Rainy .....	75	9,921	58	0.6	75	9,921	58	0.6	-	-	-	-
Region 10 Missouri .....	3,495	598,607	66	0.9	2,495	501,725	66	0.9	1,000	96,882	64	1.1
Region 11 Arkansas-White-Red .....	3,189	1,117,022	49	1.0	2,943	1,074,712	49	0.9	246	42,310	59	1.1
Region 12 Texas-Gulf .....	1,373	324,595	42	1.0	1,287	306,333	42	1.0	86	18,262	39	1.4
Region 13 Rio Grande .....	270	53,841	82	2.3	157	46,504	83	2.2	113	7,337	81	2.8
Region 14 Upper Colorado .....	156	14,539	84	2.5	109	10,384	78	2.6	47	4,155	98	2.1
Region 15 Lower Colorado .....	265	142,692	109	3.6	35	10,338	98	3.1	230	132,354	110	3.6
Region 16 Great Basin .....	1,111	80,748	88	1.7	426	51,055	81	1.6	685	29,693	99	2.0
Region 17 Pacific Northwest .....	3,831	1,056,344	103	1.7	2,939	931,720	102	1.7	892	124,624	106	2.2
Region 18 California .....	1,367	496,862	99	2.2	341	91,053	105	1.9	1,026	405,809	97	2.3
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Barley for grain or seed											
	Farms	Irrigated acres harvested	Average yield per acre (bushels)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre (bushels)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (bushels)	Average acre-feet applied per acre
United States .....	2008 .. 4,334	762,240	100	1.5	2,414	546,847	103	1.3	1,920	215,393	91	2.0
	2003 .. 4,651	990,827	96	1.5	2,588	705,511	95	1.3	2,059	283,636	97	1.9
<b>2008 DATA</b>												
Alabama .....	-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	90	28,459	116	3.4	16	4,605	127	2.7	74	23,854	114	3.6
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	46	11,836	71	1.8	16	3,225	60	2.1	30	8,611	75	1.6
Colorado .....	320	71,675	126	1.7	185	63,802	134	1.7	135	7,873	62	1.8
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	15	1,919	98	0.4	15	1,919	98	0.4	-	-	-	-
Florida .....	-	-	-	-	-	-	-	-	-	-	-	-
Georgia .....	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	1,446	329,449	106	1.3	1,049	297,247	107	1.3	397	32,202	94	1.3
Illinois .....	-	-	-	-	-	-	-	-	-	-	-	-
Indiana .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	14	918	84	0.4	14	918	84	0.4	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Minnesota .....	6	876	65	0.4	6	876	65	0.4	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	927	180,238	82	1.2	395	110,992	83	1.1	532	69,246	81	1.5
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	8	1,330	112	2.4	6	(D)	(D)	(D)	2	(D)	(D)	(D)
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	4	335	81	1.3	4	335	81	1.3	-	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....	83	17,088	80	0.8	47	7,438	80	0.7	36	9,650	80	0.9
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	-	-	-	-	-	-	-	-	-	-
Oregon .....	201	15,159	81	1.1	197	14,828	81	1.0	4	331	103	1.9
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....	11	622	63	0.9	3	195	30	0.5	8	427	78	1.0
Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-
Texas .....	24	3,840	106	0.3	24	3,840	106	0.3	-	-	-	-
Utah .....	702	27,027	86	1.4	315	14,046	82	1.2	387	12,981	90	1.6
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Washington .....	14	1,279	103	2.1	11	1,258	102	2.1	3	21	120	1.2
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	419	68,620	99	2.6	107	18,565	96	1.7	312	50,055	100	3.0
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	30	3,587	96	0.7	30	3,587	96	0.7	-	-	-	-
Region 03 South Atlantic-Gulf .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 04 Great Lakes .....	3	(D)	(D)	(D)	3	(D)	(D)	(D)	-	-	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	6	876	65	0.4	6	876	65	0.4	-	-	-	-
Region 08 Lower Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	12	1,618	78	0.4	12	1,618	78	0.4	-	-	-	-
Region 10 Missouri .....	1,375	261,260	87	1.6	455	128,102	85	1.1	920	133,158	89	2.0
Region 11 Arkansas-White-Red .....	26	4,080	104	0.4	26	4,080	104	0.4	-	-	-	-
Region 12 Texas-Gulf .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Region 13 Rio Grande .....	243	63,115	132	1.8	149	59,355	139	1.7	94	3,760	26	2.7
Region 14 Upper Colorado .....	26	(D)	(D)	(D)	17	2,526	75	2.5	9	(D)	(D)	(D)
Region 15 Lower Colorado .....	90	28,459	116	3.4	16	4,605	127	2.7	74	23,854	114	3.6
Region 16 Great Basin .....	853	49,475	90	1.2	450	(D)	(D)	(D)	403	(D)	(D)	(D)
Region 17 Pacific Northwest .....	1,593	330,799	105	1.3	1,204	301,235	106	1.3	389	29,564	97	1.4
Region 18 California .....	76	15,202	75	1.6	45	6,401	74	1.7	31	8,801	75	1.6
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Soybeans for beans											
	Farms	Irrigated acres harvested	Average yield per acre (bushels)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre (bushels)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (bushels)	Average acre-feet applied per acre
United States .....	23,024	7,044,546	49	0.7	16,906	4,158,193	52	0.7	6,118	2,886,353	45	0.8
2003 ..	21,062	5,346,276	48	0.8	13,890	2,837,915	50	0.8	7,168	2,507,973	45	0.8
<b>2008 DATA</b>												
Alabama .....	69	8,779	55	0.6	69	8,779	55	0.6	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	3,119	2,167,646	43	0.9	560	519,351	45	0.9	2,559	1,648,295	42	0.9
California .....	-	-	-	-	-	-	-	-	-	-	-	-
Colorado .....	30	4,832	57	1.2	11	4,357	58	1.2	19	475	50	1.2
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	187	33,770	49	0.6	187	33,770	49	0.6	-	-	-	-
Florida .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Georgia .....	413	71,621	48	0.6	413	71,621	48	0.6	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	485	90,497	52	0.5	481	89,975	52	0.5	4	522	43	1.1
Indiana .....	563	102,279	52	0.5	563	102,279	52	0.5	-	-	-	-
Iowa .....	252	48,946	48	0.4	252	48,946	48	0.4	-	-	-	-
Kansas .....	2,148	396,613	53	1.0	1,784	360,609	53	1.0	364	36,004	53	0.8
Kentucky .....	39	6,173	49	0.4	39	6,173	49	0.4	-	-	-	-
Louisiana .....	448	184,976	44	0.7	84	42,272	45	0.7	364	142,704	44	0.7
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	199	26,119	46	0.6	199	26,119	46	0.6	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	406	73,986	51	0.5	406	73,986	51	0.5	-	-	-	-
Minnesota .....	665	100,513	45	0.6	664	(D)	(D)	(D)	1	(D)	(D)	(D)
Mississippi .....	860	712,268	49	0.8	219	192,347	50	0.7	641	519,921	49	0.8
Missouri .....	1,208	488,319	48	0.7	638	188,426	47	0.6	570	299,893	48	0.7
Montana .....	8	624	45	1.0	4	24	45	2.1	4	600	45	1.0
Nebraska .....	10,541	2,272,944	57	0.6	8,989	2,043,676	57	0.6	1,552	229,268	55	0.5
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	36	3,418	45	0.5	36	3,418	45	0.5	-	-	-	-
New Mexico .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	112	14,839	42	2.5	112	14,839	42	2.5	-	-	-	-
North Dakota .....	106	18,939	40	0.7	102	18,747	40	0.7	4	192	31	0.9
Ohio .....	12	1,702	60	3.2	11	(D)	(D)	(D)	1	(D)	(D)	(D)
Oklahoma .....	95	23,793	44	0.8	93	(D)	(D)	(D)	2	(D)	(D)	(D)
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	9	363	63	0.2	9	363	63	0.2	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	77	12,741	45	0.6	77	12,741	45	0.6	-	-	-	-
South Dakota .....	417	79,296	44	0.5	403	77,906	44	0.5	14	1,390	41	0.5
Tennessee .....	65	27,325	51	0.6	63	(D)	(D)	(D)	2	(D)	(D)	(D)
Texas .....	187	30,607	31	1.0	170	25,507	31	1.0	17	5,100	34	1.0
Utah .....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	51	8,796	53	0.5	51	8,796	53	0.5	-	-	-	-
Washington .....	5	382	45	1.9	5	382	45	1.9	-	-	-	-
West Virginia .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Wisconsin .....	207	30,410	45	0.6	207	30,410	45	0.6	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	472	71,515	48	0.6	472	71,515	48	0.6	-	-	-	-
Region 03 South Atlantic-Gulf .....	660	105,746	47	0.9	660	105,746	47	0.9	-	-	-	-
Region 04 Great Lakes .....	579	107,159	51	0.5	578	(D)	(D)	(D)	1	(D)	(D)	(D)
Region 05 Ohio .....	442	97,622	52	0.6	442	97,622	52	0.6	-	-	-	-
Region 06 Tennessee .....	36	5,012	52	0.7	36	5,012	52	0.7	-	-	-	-
Region 07 Upper Mississippi .....	1,425	208,298	48	0.5	1,411	204,047	48	0.5	14	4,251	55	0.5
Region 08 Lower Mississippi .....	4,847	3,240,957	45	0.8	1,180	845,809	47	0.8	3,667	2,395,148	45	0.8
Region 09 Souris-Red-Rainy .....	111	19,383	42	0.6	110	(D)	(D)	(D)	1	(D)	(D)	(D)
Region 10 Missouri .....	12,023	2,539,475	56	0.6	10,317	2,294,840	56	0.6	1,706	244,635	55	0.5
Region 11 Arkansas-White-Red .....	2,331	633,293	46	0.9	1,638	397,338	49	1.0	693	235,955	40	0.8
Region 12 Texas-Gulf .....	70	15,205	33	1.0	53	(D)	(D)	(D)	17	(D)	(D)	(D)
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	19	475	50	1.2	-	-	-	-	19	475	50	1.2
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	9	406	45	1.9	9	406	45	1.9	-	-	-	-
Region 18 California .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Beans, dry edible											
	Farms	Irrigated acres harvested	Average yield per acre (cwt)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre
United States .....	2,849	431,329	24	1.4	1,366	266,162	25	1.1	1,483	165,167	23	1.9
2003 ..	2,697	458,265	23	1.6	1,422	284,874	22	1.2	1,238	173,279	23	2.2
<b>2008 DATA</b>												
Alabama .....	4	54	15	0.4	4	54	15	0.4	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	18	3,228	17	2.0	15	2,395	16	1.6	3	833	19	3.0
Arkansas .....	21	9,530	29	1.0	-	-	-	-	21	9,530	29	1.0
California .....	245	41,230	23	2.6	97	9,512	22	2.7	148	31,718	23	2.6
Colorado .....	227	35,305	26	1.5	122	25,614	27	1.2	105	9,691	24	2.2
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Georgia .....	11	3,219	48	0.7	11	3,219	48	0.7	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	749	63,665	23	1.9	246	31,052	24	1.5	503	32,613	23	2.3
Illinois .....	6	980	33	0.3	6	980	33	0.3	-	-	-	-
Indiana .....	19	506	33	0.5	19	506	33	0.5	-	-	-	-
Iowa .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Kansas .....	27	8,242	24	0.9	27	8,242	24	0.9	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	51	9,637	19	0.3	51	9,637	19	0.3	-	-	-	-
Minnesota .....	84	28,747	26	0.6	84	28,747	26	0.6	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	85	9,424	24	1.4	9	1,220	29	0.6	76	8,204	23	1.5
Nebraska .....	368	127,985	25	0.9	213	81,381	27	0.9	155	46,604	21	0.8
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
New Mexico .....	15	9,130	22	2.2	15	9,130	22	2.2	-	-	-	-
New York .....	35	37	48	0.2	5	7	38	0.2	30	30	50	0.2
North Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....	55	11,227	22	0.6	55	11,227	22	0.6	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Oregon .....	50	4,756	21	2.1	25	2,225	17	1.4	25	2,531	24	2.7
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	3	15	35	0.1	3	15	35	0.1	-	-	-	-
South Dakota .....	4	2,533	15	0.4	4	2,533	15	0.4	-	-	-	-
Tennessee .....	18	(D)	(D)	(D)	18	(D)	(D)	(D)	-	-	-	-
Texas .....	60	8,545	19	0.9	60	8,545	19	0.9	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Washington .....	484	20,826	23	1.9	205	17,316	22	2.0	279	3,510	25	1.6
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	12	5,888	20	0.9	12	5,888	20	0.9	-	-	-	-
Wyoming .....	186	24,743	22	3.0	48	4,840	26	1.8	138	19,903	21	3.3
<b>Water Resources Regions</b>												
Region 01 New England .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Region 02 Mid-Atlantic .....	39	(D)	(D)	(D)	9	579	35	0.2	30	(D)	(D)	(D)
Region 03 South Atlantic-Gulf .....	18	3,548	46	0.8	18	3,548	46	0.8	-	-	-	-
Region 04 Great Lakes .....	53	9,737	20	0.3	53	9,737	20	0.3	-	-	-	-
Region 05 Ohio .....	17	406	26	0.5	17	406	26	0.5	-	-	-	-
Region 06 Tennessee .....	19	57	11	0.2	19	57	11	0.2	-	-	-	-
Region 07 Upper Mississippi .....	77	31,035	26	0.7	77	31,035	26	0.7	-	-	-	-
Region 08 Lower Mississippi .....	13	7,530	30	0.9	1	(D)	(D)	(D)	12	(D)	(D)	(D)
Region 09 Souris-Red-Rainy .....	61	10,843	24	0.6	61	10,843	24	0.6	-	-	-	-
Region 10 Missouri .....	859	205,588	25	1.2	442	127,104	26	(D)	417	78,484	22	(D)
Region 11 Arkansas-White-Red .....	13	4,672	23	1.0	4	(D)	(D)	0.9	9	(D)	(D)	1.0
Region 12 Texas-Gulf .....	61	8,795	19	1.0	61	8,795	19	1.0	-	-	-	-
Region 13 Rio Grande .....	13	1,647	18	2.5	13	1,647	18	2.5	-	-	-	-
Region 14 Upper Colorado .....	58	13,151	23	2.2	1	(D)	(D)	(D)	57	(D)	(D)	(D)
Region 15 Lower Colorado .....	18	3,228	17	2.0	15	2,395	16	1.6	3	833	19	3.0
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	1,283	89,247	23	1.9	476	50,593	23	1.7	807	38,654	23	2.3
Region 18 California .....	245	41,230	23	2.6	97	9,512	22	2.7	148	31,718	23	2.6
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Rice												
	Farms	Irrigated acres harvested	Average yield per acre (cwt)	Average acre-feet applied per acre	Primary method of distribution								
					Pressure system				Gravity system				
					Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre	
United States .....	2008 ..	5,265	2,683,363	70	2.3	75	48,154	71	2.1	5,190	2,635,209	70	2.3
	2003 ..	6,836	2,994,757	69	2.3	111	47,838	71	1.7	6,725	2,946,919	69	2.3
<b>2008 DATA</b>													
Alabama .....		-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....		-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....		2,550	1,303,574	69	2.0	68	41,434	70	2.2	2,482	1,262,140	68	2.0
California .....		1,033	432,208	78	4.1	-	-	-	-	1,033	432,208	78	4.1
Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....		-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....		-	-	-	-	-	-	-	-	-	-	-	-
Florida .....		6	11,272	47	1.5	-	-	-	-	6	11,272	47	1.5
Georgia .....		-	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....		-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....		4	1,750	64	(D)	-	-	-	-	4	1,750	64	(D)
Indiana .....		1	(D)	(D)	(D)	-	-	-	-	1	(D)	(D)	(D)
Iowa .....		-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....		-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....		-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....		784	412,691	62	1.5	3	2,360	69	1.6	781	410,331	62	1.5
Maine .....		-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....		-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....		-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....		-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....		-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....		345	201,893	69	1.9	-	-	-	-	345	201,893	69	1.9
Missouri .....		278	142,450	86	1.6	4	4,360	89	1.6	274	138,090	86	1.6
Montana .....		-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....		-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....		-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....		-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....		-	-	-	-	-	-	-	-	-	-	-	-
New York .....		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....		-	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....		-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....		-	-	-	-	-	-	-	-	-	-	-	-
Oregon .....		-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....		-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....		-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....		3	(D)	(D)	2.3	-	-	-	-	3	(D)	(D)	2.3
Texas .....		261	174,565	73	2.5	-	-	-	-	261	174,565	73	2.5
Utah .....		-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....		-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....		-	-	-	-	-	-	-	-	-	-	-	-
Washington .....		-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....		-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....		-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....		-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>													
Region 01 New England .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....		6	11,272	47	1.5	-	-	-	-	6	11,272	47	1.5
Region 04 Great Lakes .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....		1	(D)	(D)	(D)	-	-	-	-	1	(D)	(D)	(D)
Region 06 Tennessee .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....		5	(D)	(D)	(D)	-	-	-	-	5	(D)	(D)	(D)
Region 08 Lower Mississippi .....		3,397	1,812,399	68	1.9	43	25,658	73	1.9	3,354	1,786,741	68	1.9
Region 09 Souris-Red-Rainy .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....		562	248,989	70	1.9	32	22,496	69	2.3	530	226,493	70	1.8
Region 12 Texas-Gulf .....		261	174,565	73	2.5	-	-	-	-	261	174,565	73	2.5
Region 13 Rio Grande .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....		1,033	432,208	78	4.1	-	-	-	-	1,033	432,208	78	4.1
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

--continued

**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Other small grains (oats, rye, etc.)									
	Farms	Irrigated acres harvested	Average acre-feet applied per acre	Primary method of distribution						
				Pressure system			Gravity system			
				Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	
United States .....	2,975	344,195	1.4	1,521	201,540	1.3	1,454	142,655	1.6	
2003 ..	2,825	240,264	(D)	1,633	138,138	1.1	1,192	(D)	(D)	
<b>2008 DATA</b>										
Alabama .....	3	194	0.9	3	194	0.9	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-
Arizona .....	73	6,595	3.7	14	1,440	4.7	59	5,155	3.4	-
Arkansas .....	61	1,952	1.5	-	-	-	61	1,952	1.5	-
California .....	427	114,973	1.5	39	25,390	1.5	388	89,583	1.5	-
Colorado .....	336	21,974	1.2	79	15,836	1.3	257	6,138	1.2	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-
Delaware .....	2	(D)	(D)	2	(D)	(D)	-	-	-	-
Florida .....	25	2,820	0.8	25	2,820	0.8	-	-	-	-
Georgia .....	214	17,660	0.4	214	17,660	0.4	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-
Idaho .....	269	42,764	1.5	183	37,958	1.3	86	4,806	2.6	-
Illinois .....	4	414	0.4	4	414	0.4	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-	-
Iowa .....	3	180	0.5	3	180	0.5	-	-	-	-
Kansas .....	2	(D)	(D)	2	(D)	(D)	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-
Michigan .....	5	540	0.2	5	540	0.2	-	-	-	-
Minnesota .....	23	1,487	0.6	23	1,487	0.6	-	-	-	-
Mississippi .....	2	(D)	(D)	-	-	-	2	(D)	(D)	(D)
Missouri .....	3	(D)	(D)	2	(D)	(D)	1	(D)	(D)	(D)
Montana .....	138	13,983	0.8	78	8,734	0.7	60	5,249	0.9	-
Nebraska .....	96	6,216	1.7	96	6,216	1.7	-	-	-	-
Nevada .....	21	2,490	2.6	16	1,638	2.4	5	852	3.0	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-
New Mexico .....	59	11,918	2.3	32	10,533	1.9	27	1,385	5.8	-
New York .....	-	-	-	-	-	-	-	-	-	-
North Carolina .....	40	5,486	0.6	40	5,486	0.6	-	-	-	-
North Dakota .....	17	1,357	0.9	8	896	0.8	9	461	0.9	-
Ohio .....	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	13	4,194	0.6	13	4,194	0.6	-	-	-	-
Oregon .....	78	17,029	1.5	72	15,876	1.5	6	1,153	1.4	-
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	1	(D)	(D)	1	(D)	(D)	-	-	-	-
South Carolina .....	7	155	0.8	7	155	0.8	-	-	-	-
South Dakota .....	33	1,118	0.8	6	230	1.1	27	888	0.7	-
Tennessee .....	1	(D)	(D)	1	(D)	(D)	-	-	-	-
Texas .....	48	4,724	1.0	48	4,724	1.0	-	-	-	-
Utah .....	598	29,763	1.1	351	15,056	1.6	247	14,707	0.7	-
Vermont .....	-	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-	-
Washington .....	179	13,687	1.6	64	9,958	1.8	115	3,729	0.9	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	18	1,930	1.0	18	1,930	1.0	-	-	-	-
Wyoming .....	176	16,165	1.8	72	10,942	1.5	104	5,223	2.7	-
<b>Water Resources Regions</b>										
Region 01 New England .....	1	(D)	(D)	1	(D)	(D)	-	-	-	-
Region 02 Mid-Atlantic .....	2	(D)	(D)	2	(D)	(D)	-	-	-	-
Region 03 South Atlantic-Gulf .....	289	26,315	0.5	289	26,315	0.5	-	-	-	-
Region 04 Great Lakes .....	9	1,900	0.7	9	1,900	0.7	-	-	-	-
Region 05 Ohio .....	2	(D)	(D)	2	(D)	(D)	-	-	-	-
Region 06 Tennessee .....	1	(D)	(D)	1	(D)	(D)	-	-	-	-
Region 07 Upper Mississippi .....	42	2,373	0.7	42	2,373	0.7	-	-	-	-
Region 08 Lower Mississippi .....	66	3,350	1.4	2	(D)	(D)	64	(D)	(D)	(D)
Region 09 Souris-Red-Rainy .....	4	132	0.9	4	132	0.9	-	-	-	-
Region 10 Missouri .....	452	42,738	1.3	242	30,817	1.1	210	11,921	1.7	-
Region 11 Arkansas-White-Red .....	36	6,358	0.7	17	5,218	(D)	19	1,140	(D)	(D)
Region 12 Texas-Gulf .....	57	9,999	1.6	57	9,999	1.6	-	-	-	-
Region 13 Rio Grande .....	100	15,704	2.0	51	13,469	1.6	49	2,235	4.1	-
Region 14 Upper Colorado .....	383	7,560	1.4	165	(D)	1.7	218	(D)	1.2	-
Region 15 Lower Colorado .....	73	6,595	3.7	14	1,440	4.7	59	5,155	3.4	-
Region 16 Great Basin .....	480	30,914	1.2	232	15,511	1.7	248	15,403	0.8	-
Region 17 Pacific Northwest .....	526	68,587	1.5	327	58,979	1.4	199	9,608	1.8	-
Region 18 California .....	452	121,212	1.5	64	31,629	1.5	388	89,583	1.5	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage)											
	Farms	Irrigated acres harvested	Average yield per acre <sup>1</sup> (tons, dry)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre <sup>1</sup> (tons, dry)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre <sup>1</sup> (tons, dry)	Average acre-feet applied per acre
United States .....	2008 .. 48,315	6,187,983	4.5	2.4	24,879	3,596,494	4.4	2.0	23,436	2,591,489	4.6	3.0
.....	2003 .. 46,179	6,204,874	5.0	2.3	23,403	3,544,449	4.8	1.9	22,744	2,654,631	5.2	2.8
<b>2008 DATA</b>												
Alabama .....	4	20	1.0	0.5	4	20	1.0	0.5	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	553	280,741	8.7	6.2	89	34,704	8.1	4.9	464	246,037	8.7	6.4
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	2,808	968,715	5.8	4.0	922	227,385	5.0	3.5	1,886	741,330	6.1	4.1
Colorado .....	6,079	631,443	3.3	1.7	1,651	264,935	3.9	1.8	4,428	366,508	2.8	1.6
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	18	887	3.6	0.8	18	887	3.6	0.8	-	-	-	-
Florida .....	-	-	-	-	-	-	-	-	-	-	-	-
Georgia .....	53	1,336	7.9	0.6	53	1,336	7.9	0.6	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	6,801	823,523	4.3	1.9	3,585	692,160	4.4	1.8	3,216	131,363	3.5	2.0
Illinois .....	23	970	2.3	0.3	23	970	2.3	0.3	-	-	-	-
Indiana .....	76	5,376	3.0	0.5	76	5,376	3.0	0.5	-	-	-	-
Iowa .....	21	844	5.4	0.7	16	694	3.9	0.5	5	150	12.0	1.7
Kansas .....	768	176,976	6.4	1.5	667	172,364	6.4	1.5	101	4,612	4.0	2.1
Kentucky .....	16	(D)	(D)	(D)	9	191	(D)	(D)	7	(D)	(D)	(D)
Louisiana .....	4	440	0.4	1.7	-	-	-	-	4	440	0.4	1.7
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	25	1,203	6.6	0.4	25	1,203	6.6	0.4	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	175	14,559	5.5	0.4	151	13,719	5.7	0.4	24	840	2.3	0.2
Minnesota .....	342	20,616	4.3	0.6	341	(D)	(D)	(D)	1	(D)	(D)	(D)
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	16	560	3.6	0.3	16	560	3.6	0.3	-	-	-	-
Montana .....	5,061	657,151	3.0	1.3	2,839	407,239	3.3	1.4	2,222	249,912	2.5	1.2
Nebraska .....	2,956	238,408	4.8	0.9	2,466	201,669	4.9	0.9	490	36,739	4.3	1.2
Nevada .....	1,133	304,932	4.1	3.1	438	180,023	4.2	3.1	695	124,909	4.0	3.0
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	22	390	6.3	0.9	22	390	6.3	0.9	-	-	-	-
New Mexico .....	3,798	231,913	4.5	2.7	547	114,575	5.2	2.8	3,251	117,338	3.9	2.7
New York .....	7	219	7.4	0.1	4	(D)	6.8	0.1	3	(D)	8.0	0.1
North Carolina .....	39	1,046	1.1	0.3	39	1,046	1.1	0.3	-	-	-	-
North Dakota .....	178	17,627	4.2	1.1	112	11,711	4.5	0.9	66	5,916	3.5	1.3
Ohio .....	4	535	6.6	2.0	4	535	6.6	2.0	-	-	-	-
Oklahoma .....	166	21,698	5.4	1.3	144	19,519	5.3	1.1	22	2,179	6.6	2.5
Oregon .....	2,864	347,117	3.9	2.1	2,291	296,548	4.0	2.1	573	50,569	2.9	1.9
Pennsylvania .....	9	569	2.4	0.4	9	569	2.4	0.4	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	3	114	3.0	0.8	3	114	3.0	0.8	-	-	-	-
South Dakota .....	532	62,859	3.7	1.0	228	28,094	4.1	1.0	304	34,765	3.4	1.0
Tennessee .....	4	64	4.6	0.1	4	64	4.6	0.1	-	-	-	-
Texas .....	849	147,375	4.6	1.6	547	108,262	5.2	1.8	302	39,113	2.8	1.0
Utah .....	7,418	517,526	3.9	2.5	4,000	335,113	3.8	2.5	3,418	182,413	4.1	2.4
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	25	1,062	4.3	0.3	25	1,062	4.3	0.3	-	-	-	-
Washington .....	2,152	272,641	4.8	2.4	2,036	261,630	4.8	2.4	116	11,011	5.3	2.5
West Virginia .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Wisconsin .....	221	20,734	3.5	0.7	221	20,734	3.5	0.7	-	-	-	-
Wyoming .....	3,090	415,474	3.5	2.1	1,252	170,401	3.4	1.8	1,838	245,073	3.5	2.3
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	103	4,233	4.8	0.5	100	4,113	4.7	0.5	3	120	8.0	0.1
Region 03 South Atlantic-Gulf .....	99	2,516	4.8	0.5	99	2,516	4.8	0.5	-	-	-	-
Region 04 Great Lakes .....	274	21,280	5.0	0.5	250	20,440	5.1	0.5	24	840	2.3	0.2
Region 05 Ohio .....	33	1,585	3.5	0.9	26	1,508	3.5	0.9	7	77	4.0	0.2
Region 06 Tennessee .....	4	40	4.0	0.1	4	40	4.0	0.1	-	-	-	-
Region 07 Upper Mississippi .....	504	36,371	3.5	0.6	499	36,221	3.5	0.6	5	150	12.0	1.7
Region 08 Lower Mississippi .....	6	510	1.0	1.5	2	(D)	(D)	(D)	4	(D)	(D)	(D)
Region 09 Souris-Red-Rainy .....	84	6,341	5.7	0.7	83	(D)	(D)	(D)	1	(D)	(D)	(D)
Region 10 Missouri .....	12,650	1,489,418	3.6	1.5	6,660	854,252	4.0	1.4	5,990	635,166	3.1	1.7
Region 11 Arkansas-White-Red .....	2,201	387,203	4.9	1.5	988	239,091	5.9	1.5	1,213	148,112	3.3	1.6
Region 12 Texas-Gulf .....	387	77,768	5.6	2.0	373	75,849	5.6	2.0	14	1,919	4.3	2.0
Region 13 Rio Grande .....	3,764	333,905	3.9	2.2	536	140,069	4.3	2.3	3,228	193,836	3.6	2.1
Region 14 Upper Colorado .....	5,405	340,744	2.8	2.0	2,575	191,616	3.4	2.3	2,830	149,128	2.2	1.7
Region 15 Lower Colorado .....	948	323,132	8.5	6.0	272	49,758	7.2	4.5	676	273,374	8.7	6.3
Region 16 Great Basin .....	7,030	742,150	4.1	2.7	3,531	469,008	4.0	2.8	3,499	273,142	4.3	2.6
Region 17 Pacific Northwest .....	11,878	1,431,044	4.2	2.0	7,812	1,233,098	4.3	2.0	4,066	197,946	3.4	2.0
Region 18 California .....	2,945	989,743	5.7	3.8	1,069	272,579	5.0	3.2	1,876	717,164	6.0	4.1
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All other hay (dry hay, greenchop, and silage)											
	Farms	Irrigated acres harvested	Average yield per acre <sup>1</sup> (tons, dry)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre <sup>1</sup> (tons, dry)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre <sup>1</sup> (tons, dry)	Average acre-feet applied per acre
United States .....	2008 .. 29,553	3,351,986	2.8	1.8	13,767	1,110,400	3.0	1.4	15,786	2,241,586	2.7	2.0
	2003 .. 27,449	3,245,618	2.8	1.7	12,171	(D)	(D)	(D)	15,260	2,128,072	2.4	1.8
<b>2008 DATA</b>												
Alabama .....	63	2,998	3.9	0.4	63	2,998	3.9	0.4	-	-	-	-
Alaska .....	4	842	2.5	0.3	4	842	2.5	0.3	-	-	-	-
Arizona .....	548	61,995	5.6	3.9	102	14,733	6.2	3.1	446	47,262	5.4	4.2
Arkansas .....	117	12,336	3.4	0.5	71	8,286	4.5	0.5	46	4,050	1.1	0.5
California .....	3,376	556,013	4.7	2.5	603	97,348	2.9	1.5	2,773	458,665	5.1	2.8
Colorado .....	3,358	441,727	2.0	1.5	521	78,785	2.4	1.3	2,837	362,942	1.9	1.5
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	17	438	2.9	1.2	17	438	2.9	1.2	-	-	-	-
Florida .....	306	31,718	4.0	1.6	294	31,033	4.0	1.6	12	685	3.5	0.9
Georgia .....	484	37,022	4.9	0.9	432	35,982	4.8	0.9	52	1,040	6.0	0.9
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	2,209	182,393	1.9	1.3	912	91,893	1.9	1.4	1,297	90,500	1.8	1.1
Illinois .....	5	645	3.0	0.7	5	645	3.0	0.7	-	-	-	-
Indiana .....	12	786	0.8	0.2	12	786	0.8	0.2	-	-	-	-
Iowa .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Kansas .....	158	17,453	4.4	1.0	158	17,453	4.4	1.0	-	-	-	-
Kentucky .....	16	693	3.5	(D)	7	173	3.9	(D)	9	520	3.4	(D)
Louisiana .....	29	1,620	4.9	0.5	17	1,020	6.0	0.4	12	600	3.0	0.7
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	35	1,936	4.8	0.3	35	1,936	4.8	0.3	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	64	2,535	2.3	0.7	64	2,535	2.3	0.7	-	-	-	-
Mississippi .....	35	(D)	6.1	0.1	24	1,980	8.4	0.1	11	(D)	3.1	0.1
Missouri .....	90	2,827	1.9	0.2	90	2,827	1.9	0.2	-	-	-	-
Montana .....	3,008	362,777	1.8	1.6	873	66,798	2.0	1.6	2,135	295,979	1.8	1.6
Nebraska .....	515	34,503	2.9	2.2	489	26,903	3.3	1.6	26	7,600	1.5	4.0
Nevada .....	558	192,482	1.7	1.7	124	26,674	2.3	2.1	434	165,808	1.6	1.6
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	15	581	1.1	0.5	15	581	1.1	0.5	-	-	-	-
New Mexico .....	1,769	93,528	3.1	1.7	746	56,614	3.3	1.5	1,023	36,914	2.7	2.1
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	640	35,438	3.2	0.4	640	35,438	3.2	0.4	-	-	-	-
North Dakota .....	26	1,295	1.8	0.5	21	1,047	1.5	0.6	5	248	2.7	0.5
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	323	34,981	2.7	1.0	302	31,271	2.6	1.0	21	3,710	3.1	1.3
Oregon .....	3,878	354,232	2.2	1.6	2,653	111,238	2.4	1.4	1,225	242,994	2.1	1.7
Pennsylvania .....	29	558	2.8	0.8	29	558	2.8	0.8	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	50	2,505	4.6	0.4	48	(D)	(D)	(D)	2	(D)	(D)	(D)
South Dakota .....	132	10,510	1.8	0.9	29	3,023	1.9	0.6	103	7,487	1.8	1.0
Tennessee .....	28	1,118	(D)	0.3	24	1,033	2.1	0.3	4	85	(D)	0.1
Texas .....	2,298	175,291	3.3	1.1	1,505	141,177	3.3	0.9	793	34,114	3.1	1.5
Utah .....	2,261	126,581	2.1	2.2	1,159	42,573	2.4	2.0	1,102	84,008	2.0	2.3
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	15	2,129	1.3	0.2	15	2,129	1.3	0.2	-	-	-	-
Washington .....	1,423	149,682	4.3	2.4	1,243	109,406	4.4	2.1	180	40,276	4.0	3.2
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	20	2,500	2.9	1.3	20	2,500	2.9	1.3	-	-	-	-
Wyoming .....	1,638	411,808	1.7	1.7	400	57,239	2.0	1.6	1,238	354,569	1.6	1.8
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	99	3,588	3.6	0.5	99	3,588	3.6	0.5	-	-	-	-
Region 03 South Atlantic-Gulf .....	1,565	113,551	4.0	0.9	1,489	110,686	4.0	0.9	76	2,865	4.2	0.6
Region 04 Great Lakes .....	15	1,081	2.9	1.2	15	1,081	2.9	1.2	-	-	-	-
Region 05 Ohio .....	25	947	3.5	0.4	16	427	3.6	0.3	9	520	3.4	0.5
Region 06 Tennessee .....	28	1,108	2.4	0.3	25	1,038	2.5	0.3	3	70	2.1	0.1
Region 07 Upper Mississippi .....	62	4,670	2.3	0.8	62	4,670	2.3	0.8	-	-	-	-
Region 08 Lower Mississippi .....	79	10,210	5.1	0.5	59	8,455	5.4	0.5	20	1,755	4.0	0.5
Region 09 Souris-Red-Rainy .....	26	988	2.2	0.7	26	988	2.2	0.7	-	-	-	-
Region 10 Missouri .....	3,987	643,642	2.0	1.6	1,275	140,269	2.6	1.4	2,712	503,373	1.8	1.6
Region 11 Arkansas-White-Red .....	1,937	160,726	2.8	1.1	771	104,863	3.4	1.1	1,166	55,863	1.6	1.2
Region 12 Texas-Gulf .....	1,852	145,241	3.0	1.0	1,359	120,126	3.0	0.9	493	25,115	3.0	1.5
Region 13 Rio Grande .....	1,477	121,149	2.8	1.7	583	43,399	3.2	1.7	894	77,750	2.5	1.8
Region 14 Upper Colorado .....	3,101	392,631	1.8	1.7	781	44,240	1.8	1.3	2,320	348,391	1.8	1.8
Region 15 Lower Colorado .....	626	64,214	5.5	3.9	106	15,133	6.2	3.1	520	49,081	5.3	4.1
Region 16 Great Basin .....	2,212	287,526	1.9	1.8	1,006	62,679	2.4	2.1	1,206	224,847	1.8	1.8
Region 17 Pacific Northwest .....	8,721	817,493	2.4	1.7	5,451	338,858	2.8	1.7	3,270	478,635	2.0	1.7
Region 18 California .....	3,737	582,379	4.6	2.5	640	109,058	2.9	1.5	3,097	473,321	5.0	2.7
Region 19 Alaska .....	4	842	2.5	0.3	4	842	2.5	0.3	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Peanuts for nuts												
	Farms	Irrigated acres harvested	Average yield per acre (pounds)	Average acre-feet applied per acre	Primary method of distribution								
					Pressure system				Gravity system				
					Farms	Acres	Average yield per acre (pounds)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (pounds)	Average acre-feet applied per acre	
United States .....	2,535	540,577	4,187	1.0	2,482	(D)	(D)	(D)	(D)	53	(D)	(D)	(D)
2003 ..	2,115	(D)	(D)	(D)	2,046	(D)	(D)	(D)	(D)	69	23,027	3,921	(D)
2003 ..	2,115	(D)	(D)	(D)	2,046	(D)	(D)	(D)	(D)	69	23,027	3,921	(D)
<b>2008 DATA</b>													
Alabama .....	53	9,988	3,844	0.4	53	9,988	3,844	0.4	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-	-
California .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	82	22,014	4,129	0.4	82	22,014	4,129	0.4	-	-	-	-	-
Georgia .....	1,268	227,591	4,220	0.7	1,216	227,539	4,220	0.7	52	52	4,292	0.8	-
Hawaii .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	15	(D)	(D)	(D)	14	(D)	(D)	(D)	1	(D)	(D)	(D)	(D)
New York .....	-	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	65	6,031	4,415	0.4	65	6,031	4,415	0.4	-	-	-	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	55	9,020	3,781	1.1	55	9,020	3,781	1.1	-	-	-	-	-
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	114	10,864	4,356	0.7	114	10,864	4,356	0.7	-	-	-	-	-
South Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas .....	862	248,473	4,194	1.3	862	248,473	4,194	1.3	-	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	18	1,045	4,580	0.3	18	1,045	4,580	0.3	-	-	-	-	-
Washington .....	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>													
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....	1,600	277,533	4,210	0.7	1,548	277,481	4,210	0.7	52	52	4,292	0.8	-
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....	115	20,285	(D)	(D)	115	20,285	(D)	(D)	-	-	-	-	-
Region 12 Texas-Gulf .....	816	(D)	4,191	1.3	815	(D)	(D)	(D)	1	(D)	(D)	(D)	(D)
Region 13 Rio Grande .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All cotton									
	Farms	Irrigated acres harvested	Average yield per acre (lbs, lint)	Average acre-feet applied per acre	Primary method of distribution					
					Sprinkler system					
					Farms	Acres	Average yield per acre (lbs, lint)	Average acre-feet applied per acre		
United States .....	2008 .. 6,612	3,123,664	1,103	1.3	4,343	1,854,449	1,057	1.0		
2003 ..	8,615	4,075,124	995	1.4	4,452	(D)	(D)	(D)		
<b>2008 DATA</b>										
Alabama .....	65	16,789	1,035	0.6	63	(D)	(D)	(D)		
Alaska .....	-	-	-	-	-	-	-	-	-	
Arizona .....	234	142,163	1,537	4.8	11	9,806	1,717	4.5		
Arkansas .....	643	519,707	1,050	0.8	222	206,387	1,084	0.7		
California .....	544	266,947	1,438	3.1	58	17,225	1,415	3.3		
Colorado .....	-	-	-	-	-	-	-	-	-	
Connecticut .....	-	-	-	-	-	-	-	-	-	
Delaware .....	-	-	-	-	-	-	-	-	-	
Florida .....	8	4,928	1,056	0.6	8	4,928	1,056	0.6		
Georgia .....	903	246,790	1,087	0.8	900	245,275	1,089	0.8		
Hawaii .....	-	-	-	-	-	-	-	-	-	
Idaho .....	-	-	-	-	-	-	-	-	-	
Illinois .....	-	-	-	-	-	-	-	-	-	
Indiana .....	-	-	-	-	-	-	-	-	-	
Iowa .....	-	-	-	-	-	-	-	-	-	
Kansas .....	22	9,170	907	0.7	21	(D)	(D)	(D)		
Kentucky .....	-	-	-	-	-	-	-	-	-	
Louisiana .....	146	84,565	727	0.6	43	22,314	770	(D)		
Maine .....	-	-	-	-	-	-	-	-	-	
Maryland .....	-	-	-	-	-	-	-	-	-	
Massachusetts .....	-	-	-	-	-	-	-	-	-	
Michigan .....	-	-	-	-	-	-	-	-	-	
Minnesota .....	-	-	-	-	-	-	-	-	-	
Mississippi .....	259	174,147	1,075	0.7	118	92,649	1,128	0.7		
Missouri .....	290	200,968	1,187	0.8	121	90,906	1,164	0.8		
Montana .....	-	-	-	-	-	-	-	-	-	
Nebraska .....	-	-	-	-	-	-	-	-	-	
Nevada .....	-	-	-	-	-	-	-	-	-	
New Hampshire .....	-	-	-	-	-	-	-	-	-	
New Jersey .....	-	-	-	-	-	-	-	-	-	
New Mexico .....	158	29,811	1,008	2.3	32	(D)	1,137	2.2		
New York .....	-	-	-	-	-	-	-	-	-	
North Carolina .....	70	14,156	1,076	0.5	70	14,156	1,076	0.5		
North Dakota .....	-	-	-	-	-	-	-	-	-	
Ohio .....	-	-	-	-	-	-	-	-	-	
Oklahoma .....	148	60,033	1,180	1.3	55	14,784	1,179	1.4		
Oregon .....	-	-	-	-	-	-	-	-	-	
Pennsylvania .....	-	-	-	-	-	-	-	-	-	
Rhode Island .....	-	-	-	-	-	-	-	-	-	
South Carolina .....	53	10,585	1,165	0.8	51	(D)	(D)	(D)		
South Dakota .....	-	-	-	-	-	-	-	-	-	
Tennessee .....	30	12,227	1,211	0.6	30	12,227	1,211	0.6		
Texas .....	3,030	1,329,803	1,029	1.1	2,531	1,077,614	1,020	1.0		
Utah .....	-	-	-	-	-	-	-	-	-	
Vermont .....	-	-	-	-	-	-	-	-	-	
Virginia .....	9	875	954	0.3	9	875	954	0.3		
Washington .....	-	-	-	-	-	-	-	-	-	
West Virginia .....	-	-	-	-	-	-	-	-	-	
Wisconsin .....	-	-	-	-	-	-	-	-	-	
Wyoming .....	-	-	-	-	-	-	-	-	-	
<b>Water Resources Regions</b>										
Region 01 New England .....	-	-	-	-	-	-	-	-	-	
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	-	
Region 03 South Atlantic-Gulf .....	1,109	290,680	1,085	0.8	1,102	(D)	1,086	0.8		
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-	
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-	
Region 06 Tennessee .....	19	6,604	1,137	0.7	19	6,604	1,137	0.7		
Region 07 Upper Mississippi .....	-	-	-	-	-	-	-	-	-	
Region 08 Lower Mississippi .....	1,323	973,925	1,060	0.8	505	415,552	1,101	0.7		
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	
Region 10 Missouri .....	-	-	-	-	-	-	-	-	-	
Region 11 Arkansas-White-Red .....	739	299,193	1,105	1.1	549	(D)	1,096	1.1		
Region 12 Texas-Gulf .....	2,459	1,067,907	1,000	1.0	2,084	899,452	1,002	1.0		
Region 13 Rio Grande .....	183	75,319	1,198	2.8	15	4,277	1,419	2.4		
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	
Region 15 Lower Colorado .....	245	151,085	1,559	4.7	11	9,806	1,717	4.5		
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-	-	
Region 18 California .....	535	258,951	1,421	3.0	58	17,225	1,415	3.3		
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All cotton - con.							
	Primary method of distribution - con.							
	Gravity system				Low-flow irrigation (drip, trickle, or micro sprinklers)			
	Farms	Acres	Average yield per acres (lbs, lint)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (lbs, lint)	Average acre-feet applied per acre
United States .....	2,080	1,169,918	1,183	1.9	189	99,297	1,021	1.2
2003 ..	4,020	2,010,097	1,112	1.8	143	46,482	997	1.6
<b>2008 DATA</b>								
Alabama .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)
Alaska .....	-	-	-	-	-	-	-	-
Arizona .....	211	125,667	1,512	4.8	12	6,690	1,744	3.8
Arkansas .....	421	313,320	1,028	0.9	-	-	-	-
California .....	471	245,827	1,443	3.1	15	3,895	1,216	2.6
Colorado .....	-	-	-	-	-	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-
Florida .....	-	-	-	-	-	-	-	-
Georgia .....	-	-	-	-	3	1,515	880	0.1
Hawaii .....	-	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-
Illinois .....	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-
Kansas .....	1	(D)	(D)	(D)	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-
Louisiana .....	103	62,251	711	(D)	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-
Mississippi .....	141	81,498	1,015	0.8	-	-	-	-
Missouri .....	169	110,062	1,206	0.8	-	-	-	-
Montana .....	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-
New Mexico .....	118	(D)	(D)	2.3	8	(D)	(D)	2.8
New York .....	-	-	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-
North Dakota .....	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-
Oklahoma .....	85	37,659	1,216	1.3	8	7,590	1,004	1.0
Oregon .....	-	-	-	-	-	-	-	-
Pennsylvania .....	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	2	(D)	(D)	(D)
South Dakota .....	-	-	-	-	-	-	-	-
Tennessee .....	-	-	-	-	-	-	-	-
Texas .....	359	174,112	1,114	1.6	140	78,077	951	0.9
Utah .....	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-
Washington .....	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>								
Region 01 New England .....	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....	1	(D)	(D)	(D)	6	(D)	(D)	(D)
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi .....	818	558,373	1,029	0.8	-	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-
Region 10 Missouri .....	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....	182	(D)	1,138	(D)	8	(D)	1,004	(D)
Region 12 Texas-Gulf .....	235	90,378	1,015	1.1	140	78,077	951	0.9
Region 13 Rio Grande .....	160	69,862	(D)	2.8	8	1,180	(D)	2.8
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	222	134,589	1,538	4.8	12	6,690	1,744	3.8
Region 16 Great Basin .....	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-
Region 18 California .....	462	237,831	1,424	3.0	15	3,895	1,216	2.6
Region 19 Alaska .....	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

--continued

**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sugarbeets for sugar											
	Farms	Irrigated acres harvested	Average yield per acre (tons)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre (tons)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (tons)	Average acre-feet applied per acre
United States .....	2008 .. 1,590	382,267	30	2.6	696	223,856	29	2.1	894	158,411	32	3.4
	2003 .. 2,495	561,653	29	2.7	1,592	365,676	30	2.4	903	195,977	28	3.2
<b>2008 DATA</b>												
Alabama .....	-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	181	57,251	41	5.2	15	4,340	37	3.7	166	52,911	42	5.3
Colorado .....	199	31,258	27	1.6	91	(D)	28	(D)	108	(D)	24	(D)
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	-	-	-	-	-	-	-	-	-	-	-	-
Georgia .....	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	456	141,792	32	2.5	287	125,038	32	2.5	169	16,754	32	3.1
Illinois .....	-	-	-	-	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	18	1,388	30	0.5	16	(D)	(D)	(D)	2	(D)	(D)	(D)
Minnesota .....	20	3,313	25	0.7	20	3,313	25	0.7	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	156	24,928	27	1.7	16	4,632	(D)	1.5	140	20,296	(D)	1.8
Nebraska .....	257	59,553	23	1.2	182	48,753	23	1.3	75	10,800	21	1.1
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	-	-	-	-	-	-	-	-	-	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....	58	14,740	24	1.8	14	1,396	24	1.3	44	13,344	24	1.8
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	-	-	-	-	-	-	-	-	-	-
Oregon .....	85	11,953	31	3.2	18	2,834	28	2.8	67	9,119	32	3.4
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-
Texas .....	-	-	-	-	-	-	-	-	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Washington .....	4	2,068	41	2.1	4	2,068	41	2.1	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	156	34,023	26	3.1	33	9,534	27	1.5	123	24,489	26	3.7
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 04 Great Lakes .....	18	1,388	30	0.5	16	(D)	(D)	(D)	2	(D)	(D)	(D)
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	15	2,598	26	0.9	15	2,598	26	0.9	-	-	-	-
Region 08 Lower Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	9	1,461	26	0.5	9	1,461	26	0.5	-	-	-	-
Region 10 Missouri .....	822	163,756	25	1.8	332	(D)	(D)	(D)	490	(D)	(D)	(D)
Region 11 Arkansas-White-Red .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 12 Texas-Gulf .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	545	155,813	32	2.6	309	129,940	32	2.5	236	25,873	32	3.2
Region 18 California .....	181	57,251	41	5.2	15	4,340	37	3.7	166	52,911	42	5.3
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Tobacco, all types											
	Farms	Irrigated acres harvested	Average yield per acre (pounds)	Average acre-feet applied per acre	Primary method of distribution							
					Pressure system				Gravity system			
					Farms	Acres	Average yield per acre (pounds)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (pounds)	Average acre-feet applied per acre
United States .....	811	23,614	2,634	0.4	794	23,175	2,616	0.4	17	439	3,591	0.3
2003 ..	1,507	35,059	2,413	0.4	1,496	34,844	2,414	0.4	-	-	-	-
<b>2008 DATA</b>												
Alabama .....	-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	-	-	-	-	-	-	-	-	-	-	-	-
Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....	17	837	1,554	0.2	17	837	1,554	0.2	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Georgia .....	16	1,300	2,528	0.3	16	1,300	2,528	0.3	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	379	8,498	3,034	0.4	370	8,107	3,005	0.5	9	391	3,639	0.3
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	22	154	2,724	0.4	22	154	2,724	0.4	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	-	-	-	-	-	-	-	-	-	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	222	8,488	2,198	0.4	222	8,488	2,198	0.4	-	-	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	-	-	-	-	-	-	-	-	-	-
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	3	24	2,000	0.2	3	24	2,000	0.2	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	3	195	3,000	0.4	3	195	3,000	0.4	-	-	-	-
South Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....	72	1,444	3,158	0.3	64	1,396	3,157	0.4	8	48	3,198	0.3
Texas .....	-	-	-	-	-	-	-	-	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	74	2,167	2,947	0.6	74	2,167	2,947	0.6	-	-	-	-
Washington .....	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	17	837	1,554	0.2	17	837	1,554	0.2	-	-	-	-
Region 02 Mid-Atlantic .....	25	178	2,626	0.4	25	178	2,626	0.4	-	-	-	-
Region 03 South Atlantic-Gulf .....	302	12,360	2,378	0.4	302	12,360	2,378	0.4	-	-	-	-
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....	345	8,071	2,864	0.4	328	7,632	2,822	0.4	17	439	3,591	0.3
Region 06 Tennessee .....	76	1,138	3,641	0.5	76	1,138	3,641	0.5	-	-	-	-
Region 07 Upper Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi .....	46	1,030	3,673	0.3	46	1,030	3,673	0.3	-	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 12 Texas-Gulf .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Land in vegetables <sup>2</sup>											
	Farms	Irrigated acres harvested	Average acre-feet applied per acre	Primary method of distribution								
				Sprinkler system			Gravity system			Low-flow irrigation (drip, trickle, or micro sprinklers)		
				Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre
United States .....	2008 .. 16,899	3,084,879	2.0	8,443	2,043,430	1.7	3,079	447,561	2.8	5,377	593,888	2.3
.....	2003 .. 15,954	2,068,317	2.1	8,153	1,099,911	1.6	3,484	696,241	2.8	4,317	272,164	1.9
<b>2008 DATA</b>												
Alabama .....	236	5,218	0.6	62	2,400	0.6	63	687	0.7	111	2,130	0.7
Alaska .....	14	330	0.3	8	318	0.3	-	-	-	6	12	0.3
Arizona .....	95	102,471	3.0	14	27,169	3.5	66	48,288	3.0	15	27,014	2.4
Arkansas .....	199	12,054	0.4	-	-	-	79	9,954	0.4	120	2,100	0.4
California .....	2,086	911,694	2.9	849	356,573	2.7	381	214,331	3.4	856	340,790	2.8
Colorado .....	468	97,416	1.8	167	84,843	1.7	298	11,928	2.7	3	645	3.0
Connecticut .....	91	1,030	0.4	42	470	0.4	-	-	-	49	560	0.4
Delaware .....	112	16,401	0.5	71	15,539	0.5	-	-	-	41	862	0.4
Florida .....	325	171,644	1.3	189	47,103	1.2	79	69,487	1.4	57	55,054	1.2
Georgia .....	753	57,772	0.7	479	42,913	0.7	161	2,591	0.6	113	12,268	0.7
Hawaii .....	392	5,156	1.3	166	722	1.5	78	212	1.0	148	4,222	1.3
Idaho .....	908	356,957	2.2	677	325,536	2.1	218	27,621	3.3	13	3,800	2.3
Illinois .....	178	20,627	0.5	142	19,951	0.5	-	-	-	36	676	0.3
Indiana .....	212	14,510	0.5	130	13,018	0.5	-	-	-	82	1,492	0.5
Iowa .....	46	1,391	0.8	18	1,298	0.8	5	5	0.8	23	88	0.7
Kansas .....	127	5,428	0.9	71	5,260	0.9	-	-	-	56	168	1.0
Kentucky .....	267	1,417	0.6	74	(D)	(D)	55	(D)	(D)	138	(D)	0.6
Louisiana .....	115	4,616	1.0	59	(D)	(D)	2	(D)	(D)	54	(D)	(D)
Maine .....	88	4,934	0.2	61	4,907	0.2	-	-	-	27	27	0.1
Maryland .....	317	16,953	0.7	211	14,688	0.7	25	207	0.8	81	2,058	0.8
Massachusetts .....	128	2,568	0.3	77	2,258	0.2	-	-	-	51	310	0.5
Michigan .....	670	114,222	0.7	405	100,588	0.7	-	-	-	265	13,634	0.6
Minnesota .....	274	56,747	0.7	258	(D)	(D)	1	(D)	(D)	15	(D)	0.8
Mississippi .....	68	2,598	1.9	-	-	-	2	(D)	(D)	66	(D)	(D)
Missouri .....	256	21,052	0.8	173	(D)	0.8	2	(D)	(D)	81	(D)	(D)
Montana .....	79	13,430	1.2	79	13,430	1.2	-	-	-	-	-	-
Nebraska .....	137	145,848	1.1	111	145,822	1.1	26	26	0.1	-	-	-
Nevada .....	6	6,189	2.9	6	6,189	2.9	-	-	-	-	-	-
New Hampshire .....	57	474	0.4	36	387	0.3	-	21	0.3	14	66	0.6
New Jersey .....	367	31,545	0.7	235	23,085	0.7	30	282	0.7	102	8,178	0.7
New Mexico .....	200	27,459	2.5	15	14,051	2.0	169	7,315	2.8	16	6,093	3.2
New York .....	356	11,314	1.0	129	7,145	0.4	30	135	0.2	197	4,034	2.0
North Carolina .....	416	18,596	0.4	167	14,744	0.4	-	-	-	249	3,852	0.6
North Dakota .....	36	29,633	1.0	36	29,633	1.0	-	-	-	-	-	-
Ohio .....	276	7,228	0.6	111	2,972	0.6	19	427	0.4	146	3,829	0.5
Oklahoma .....	94	7,754	0.8	56	7,716	0.8	-	-	-	38	38	0.9
Oregon .....	1,123	182,045	2.2	898	113,575	2.1	65	12,639	3.8	160	55,831	2.0
Pennsylvania .....	801	10,538	0.4	227	6,065	0.4	53	192	0.3	521	4,281	0.4
Rhode Island .....	34	353	0.4	17	245	0.3	-	-	-	17	108	0.7
South Carolina .....	287	13,336	2.2	183	6,743	2.5	-	-	-	104	6,593	1.8
South Dakota .....	38	128	0.5	30	122	0.5	3	1	0.4	5	5	1.5
Tennessee .....	228	6,609	0.3	70	(D)	(D)	31	82	1.1	127	(D)	0.4
Texas .....	1,344	78,821	2.0	133	42,305	1.7	644	24,668	2.4	567	11,848	2.5
Utah .....	376	2,208	2.1	225	1,588	2.0	148	500	3.0	3	120	0.5
Vermont .....	30	121	0.3	14	104	0.3	-	-	-	16	18	0.2
Virginia .....	118	11,170	0.4	74	9,738	0.5	8	160	0.5	36	1,272	0.4
Washington .....	1,601	284,122	2.4	807	256,950	2.3	329	12,178	2.8	465	14,994	2.7
West Virginia .....	51	320	2.5	27	161	0.2	2	(D)	(D)	22	(D)	0.9
Wisconsin .....	412	187,461	0.7	347	187,065	0.7	-	-	-	65	397	0.4
Wyoming .....	7	2,975	1.5	7	2,975	1.5	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	410	9,379	0.2	237	8,275	0.2	7	21	0.3	166	1,083	0.4
Region 02 Mid-Atlantic .....	1,792	89,513	0.6	863	71,960	0.6	145	1,050	1.2	784	16,504	0.6
Region 03 South Atlantic-Gulf .....	2,014	264,197	1.1	1,063	111,954	1.0	298	72,725	1.3	653	79,518	1.1
Region 04 Great Lakes .....	1,142	168,001	0.7	683	147,265	0.7	19	427	0.4	440	20,309	0.9
Region 05 Ohio .....	771	14,729	0.5	260	(D)	0.5	58	224	0.5	453	(D)	0.5
Region 06 Tennessee .....	247	5,606	0.5	68	(D)	0.3	31	(D)	1.1	148	(D)	0.6
Region 07 Upper Mississippi .....	784	217,897	0.7	670	217,143	0.7	5	5	0.8	109	749	0.5
Region 08 Lower Mississippi .....	412	33,466	0.9	134	18,329	(D)	90	12,904	(D)	188	2,233	0.4
Region 09 Souris-Red-Rainy .....	42	25,365	0.8	41	(D)	(D)	1	(D)	(D)	-	-	-
Region 10 Missouri .....	502	198,438	1.1	381	196,519	1.1	66	1,147	2.5	55	772	2.6
Region 11 Arkansas-White-Red .....	290	28,990	1.4	128	23,588	1.0	30	5,082	3.1	132	320	0.7
Region 12 Texas-Gulf .....	1,274	56,837	1.9	102	33,873	1.6	610	19,826	2.3	562	3,138	2.6
Region 13 Rio Grande .....	382	106,501	2.0	160	79,546	1.8	201	12,151	2.8	21	14,803	2.8
Region 14 Upper Colorado .....	242	14,934	2.1	3	9,058	(D)	236	5,756	(D)	3	120	0.5
Region 15 Lower Colorado .....	101	106,394	3.0	15	27,969	3.4	71	51,411	3.1	15	27,014	2.4
Region 16 Great Basin .....	384	14,881	2.1	239	14,405	2.1	145	476	2.9	-	-	-
Region 17 Pacific Northwest .....	3,579	811,669	2.3	2,329	684,606	2.2	612	52,438	3.3	638	74,625	2.2
Region 18 California .....	2,125	912,598	2.9	893	360,600	2.7	376	211,208	3.4	856	340,790	2.8
Region 19 Alaska .....	14	330	0.3	8	318	0.3	-	-	-	6	12	0.3
Region 20 Hawaii .....	392	5,156	1.3	166	722	1.5	78	212	1.0	148	4,222	1.3

See footnote(s) at end of table.

--continued

**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sweet corn											
	Farms	Irrigated acres harvested	Average acre-feet applied per acre	Primary method of distribution								
				Sprinkler system			Gravity system			Low-flow irrigation (drip, trickle, or micro sprinklers)		
				Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre
United States .....	4,341	294,855	1.5	2,578	225,752	1.3	1,012	49,918	2.2	751	19,185	2.3
2003 ..	4,052	282,158	1.5	2,308	223,062	1.3	1,237	(D)	(D)	507	11,541	1.9
<b>2008 DATA</b>												
Alabama .....	79	467	0.7	34	205	0.8	18	53	0.3	27	209	0.8
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	3	6	4.0	-	-	-	3	6	4.0	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	38	23,890	3.4	4	(D)	(D)	19	(D)	3.6	15	(D)	(D)
Colorado .....	231	4,744	3.0	-	-	-	231	4,744	3.0	-	-	-
Connecticut .....	38	213	0.3	28	203	0.3	-	-	-	10	10	0.3
Delaware .....	35	5,760	0.6	35	5,760	0.6	-	-	-	-	-	-
Florida .....	163	30,459	0.6	147	12,537	(D)	16	17,922	(D)	-	-	-
Georgia .....	227	15,209	0.9	134	14,671	0.9	52	416	0.8	41	122	0.3
Hawaii .....	22	342	1.6	1	(D)	(D)	12	1	1.6	9	341	1.6
Idaho .....	267	23,286	2.2	108	12,219	1.6	159	11,067	2.9	-	-	-
Illinois .....	73	5,381	0.3	60	5,376	0.3	-	-	-	13	5	0.5
Indiana .....	83	1,917	0.5	57	1,908	0.6	-	-	-	26	9	0.3
Iowa .....	14	393	0.5	9	391	0.5	-	-	-	5	2	0.1
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	121	376	(D)	47	166	0.9	7	7	0.1	67	203	(D)
Louisiana .....	4	3,402	1.0	4	3,402	1.0	-	-	-	-	-	-
Maine .....	11	161	0.6	11	161	0.6	-	-	-	-	-	-
Maryland .....	131	7,494	0.8	125	7,374	0.8	3	60	0.9	3	60	0.4
Massachusetts .....	33	1,606	0.2	33	1,606	0.2	-	-	-	-	-	-
Michigan .....	183	3,783	0.5	170	2,961	0.5	-	-	-	13	822	0.6
Minnesota .....	139	9,300	0.6	139	9,300	0.6	-	-	-	-	-	-
Mississippi .....	68	2,532	1.3	-	-	-	2	(D)	(D)	66	(D)	(D)
Missouri .....	38	114	0.3	-	-	-	-	-	-	38	114	0.3
Montana .....	9	7	1.2	9	7	1.2	-	-	-	-	-	-
Nebraska .....	51	34	0.3	25	8	0.8	26	26	0.1	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	25	310	0.2	15	299	0.3	3	6	0.1	7	5	0.2
New Jersey .....	115	3,599	0.4	94	2,859	0.4	-	-	-	21	740	0.5
New Mexico .....	139	(D)	3.0	-	-	-	138	(D)	(D)	1	(D)	(D)
New York .....	162	2,455	0.6	65	1,730	0.6	30	45	(D)	67	680	(D)
North Carolina .....	188	1,587	0.5	103	1,570	0.5	-	-	-	85	17	3.3
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	85	1,187	0.4	59	990	0.4	-	-	-	26	197	0.3
Oklahoma .....	43	610	0.4	43	610	0.4	-	-	-	-	-	-
Oregon .....	110	16,474	1.6	110	16,474	1.6	-	-	-	-	-	-
Pennsylvania .....	207	2,060	0.3	107	1,514	0.3	2	(D)	(D)	98	540	0.5
Rhode Island .....	8	80	0.9	4	72	1.0	-	-	-	4	8	0.4
South Carolina .....	144	901	0.6	83	783	0.6	-	-	-	61	118	0.6
South Dakota .....	38	60	(D)	30	58	0.5	3	(D)	1.0	5	(D)	0.2
Tennessee .....	79	159	0.2	42	130	0.2	-	-	-	37	30	0.5
Texas .....	24	24	1.0	-	-	-	24	24	1.0	-	-	-
Utah .....	4	(D)	(D)	-	-	-	4	(D)	(D)	-	-	-
Vermont .....	6	1	0.5	6	1	0.5	-	-	-	-	-	-
Virginia .....	46	2,405	0.7	41	2,205	0.7	-	-	-	5	200	0.5
Washington .....	626	66,522	2.5	365	(D)	2.5	260	(D)	(D)	1	(D)	(D)
West Virginia .....	17	93	0.3	17	93	0.3	-	-	-	-	-	-
Wisconsin .....	214	54,718	0.7	214	54,718	0.7	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	115	2,370	0.3	91	2,341	0.3	3	6	0.1	21	23	0.3
Region 02 Mid-Atlantic .....	617	21,682	0.6	428	20,188	0.6	35	110	(D)	154	1,384	0.5
Region 03 South Atlantic-Gulf .....	880	48,306	0.7	514	29,157	0.8	81	18,351	0.6	285	798	0.7
Region 04 Great Lakes .....	364	18,274	0.5	340	16,697	0.5	-	-	-	24	1,577	0.6
Region 05 Ohio .....	264	2,323	0.6	112	2,024	0.6	7	7	0.1	145	292	0.5
Region 06 Tennessee .....	65	811	0.4	33	754	0.4	5	40	0.1	27	17	0.7
Region 07 Upper Mississippi .....	361	58,323	0.7	348	58,318	0.7	-	-	-	13	5	0.5
Region 08 Lower Mississippi .....	25	5,832	1.1	15	(D)	(D)	2	(D)	(D)	8	(D)	0.2
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	105	187	0.5	66	158	0.6	29	(D)	0.1	10	(D)	0.2
Region 11 Arkansas-White-Red .....	81	724	(D)	43	610	0.4	-	-	-	38	114	(D)
Region 12 Texas-Gulf .....	24	24	1.0	-	-	-	24	24	1.0	-	-	-
Region 13 Rio Grande .....	137	(D)	3.0	-	-	-	136	(D)	(D)	1	(D)	(D)
Region 14 Upper Colorado .....	233	4,746	3.0	-	-	-	233	4,746	3.0	-	-	-
Region 15 Lower Colorado .....	3	6	4.0	-	-	-	3	6	4.0	-	-	-
Region 16 Great Basin .....	4	(D)	(D)	-	-	-	4	(D)	(D)	-	-	-
Region 17 Pacific Northwest .....	1,003	106,282	2.3	583	(D)	2.2	419	(D)	(D)	1	(D)	(D)
Region 18 California .....	38	23,890	3.4	4	(D)	(D)	19	(D)	3.6	15	(D)	(D)
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	22	342	1.6	1	(D)	(D)	12	1	1.6	9	341	1.6

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Tomatoes												
	Farms	Irrigated acres harvested	Average acre-feet applied per acre	Primary method of distribution									
				Sprinkler system			Gravity system			Low-flow irrigation (drip, trickle, or micro sprinklers)			
				Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	
United States .....	2008 ..	5,937	305,565	2.6	1,872	37,191	2.0	1,050	110,093	3.0	3,015	158,281	2.4
	2003 ..	6,101	426,656	2.6	1,876	81,084	2.7	1,240	228,001	3.1	2,985	117,571	1.6
<b>2008 DATA</b>													
Alabama .....		109	1,125	0.7	14	118	0.4	30	376	1.0	65	631	0.5
Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....		-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....		121	2,349	1.3	-	-	-	61	549	1.3	60	1,800	1.3
California .....		1,272	234,041	2.9	449	25,712	2.6	265	101,559	3.1	558	106,770	2.8
Colorado .....		193	386	2.5	-	-	-	193	386	2.5	-	-	-
Connecticut .....		43	70	0.4	27	27	0.3	-	-	-	16	43	0.4
Delaware .....		8	18	0.4	3	15	0.3	-	-	-	5	3	0.8
Florida .....		26	37,617	2.2	2	(D)	(D)	10	(D)	(D)	14	(D)	2.0
Georgia .....		129	2,496	0.8	80	155	0.6	-	-	-	49	2,341	0.8
Hawaii .....		96	852	1.2	39	16	1.1	24	37	1.2	33	798	1.2
Idaho .....		-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....		26	27	0.4	-	-	-	-	-	-	26	27	0.4
Indiana .....		92	3,979	0.6	42	3,873	0.6	-	-	-	50	106	0.7
Iowa .....		34	34	0.3	6	1	(D)	5	5	0.3	23	28	(D)
Kansas .....		56	39	0.1	-	-	-	-	-	-	56	39	0.1
Kentucky .....		168	399	0.4	40	21	0.5	43	76	0.5	85	301	0.3
Louisiana .....		107	58	1.0	53	53	1.0	-	-	-	54	5	0.5
Maine .....		7	4	0.3	7	4	0.3	-	-	-	-	-	-
Maryland .....		73	426	0.7	31	180	0.5	-	-	-	42	245	0.8
Massachusetts .....		47	132	0.5	21	42	0.5	-	-	-	26	90	0.4
Michigan .....		315	6,286	0.7	109	(D)	0.5	2	(D)	(D)	204	(D)	0.8
Minnesota .....		50	75	0.3	45	50	0.1	-	-	-	5	25	(D)
Mississippi .....		66	7	2.5	-	-	-	-	-	-	66	7	2.5
Missouri .....		81	56	1.0	38	8	1.0	-	-	-	43	48	1.0
Montana .....		9	2	1.1	9	2	1.1	-	-	-	-	-	-
Nebraska .....		-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....		-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....		43	31	0.3	22	(D)	(D)	7	15	0.3	14	(D)	0.3
New Jersey .....		185	1,997	0.6	81	1,354	0.5	16	13	(D)	88	630	0.8
New Mexico .....		13	25	3.1	-	-	-	12	25	(D)	1	(D)	(D)
New York .....		253	432	0.9	73	(D)	0.8	30	(D)	1.0	150	205	0.9
North Carolina .....		138	852	1.5	16	16	0.1	-	-	-	122	836	1.5
North Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....		162	2,127	0.4	62	800	0.3	19	23	0.3	81	1,304	0.5
Oklahoma .....		78	298	0.4	40	290	0.4	-	-	-	38	8	0.3
Oregon .....		3	15	3.0	-	-	-	-	-	-	3	15	3.0
Pennsylvania .....		425	1,821	0.3	90	1,180	0.3	45	34	0.3	290	608	0.4
Rhode Island .....		16	33	0.2	7	22	0.2	-	-	-	9	11	0.2
South Carolina .....		90	2,837	1.5	52	29	2.0	-	-	-	38	2,808	1.5
South Dakota .....		35	(D)	(D)	30	10	0.5	-	-	-	5	2	0.2
Tennessee .....		168	1,888	0.4	48	(D)	(D)	10	(D)	(D)	110	(D)	0.4
Texas .....		303	256	0.7	-	-	-	24	(D)	0.7	279	(D)	0.8
Utah .....		1	(D)	(D)	-	-	-	1	(D)	(D)	-	-	-
Vermont .....		11	1	0.6	2	(D)	(D)	-	-	-	9	(D)	0.5
Virginia .....		61	886	0.5	29	(D)	0.6	8	8	(D)	24	(D)	(D)
Washington .....		703	1,511	2.0	245	74	1.0	245	49	2.0	213	1,389	2.0
West Virginia .....		43	41	0.5	21	10	0.5	-	-	-	22	31	0.5
Wisconsin .....		78	23	0.6	39	5	0.8	-	-	-	39	18	0.5
Wyoming .....		-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>													
Region 01 New England .....		160	271	0.4	84	102	0.4	7	15	0.3	69	154	0.4
Region 02 Mid-Atlantic .....		839	5,214	0.5	246	2,974	0.4	99	85	0.6	494	2,156	0.6
Region 03 South Atlantic-Gulf .....		527	44,109	2.0	173	641	1.4	40	7,114	2.9	314	36,353	1.9
Region 04 Great Lakes .....		507	8,578	0.6	219	3,561	0.5	21	28	0.3	267	4,989	0.8
Region 05 Ohio .....		473	3,198	0.6	115	1,986	0.7	43	76	0.5	315	1,136	0.5
Region 06 Tennessee .....		181	2,481	0.7	40	121	0.5	9	(D)	(D)	132	2,360	0.7
Region 07 Upper Mississippi .....		196	1,732	0.6	120	1,641	0.6	5	5	0.3	71	86	(D)
Region 08 Lower Mississippi .....		245	2,504	1.3	63	62	0.9	62	567	1.3	120	1,875	1.3
Region 09 Souris-Red-Rainy .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....		91	53	0.9	39	12	0.6	-	-	-	52	(D)	0.9
Region 11 Arkansas-White-Red .....		134	337	0.4	40	290	0.4	-	-	-	94	47	0.1
Region 12 Texas-Gulf .....		279	112	0.8	-	-	-	-	-	-	279	112	0.8
Region 13 Rio Grande .....		37	(D)	(D)	-	-	-	36	169	(D)	1	(D)	(D)
Region 14 Upper Colorado .....		193	386	2.5	-	-	-	193	386	2.5	-	-	-
Region 15 Lower Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....		1	(D)	(D)	-	-	-	1	(D)	(D)	-	-	-
Region 17 Pacific Northwest .....		706	1,526	2.0	245	74	1.0	245	49	2.0	216	1,404	2.0
Region 18 California .....		1,272	234,041	2.9	449	25,712	2.6	265	101,559	3.1	558	106,770	2.8
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		96	852	1.2	39	16	1.1	24	37	1.2	33	798	1.2

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Lettuce and romaine											
	Farms	Irrigated acres harvested	Average acre-feet applied per acre	Primary method of distribution								
				Sprinkler system			Gravity system			Low-flow irrigation (drip, trickle, or micro sprinklers)		
				Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre
United States .....	2,203	255,880	2.9	621	78,620	2.7	383	75,176	3.8	1,199	102,084	2.4
2003 ..	2,051	276,426	2.7	1,639	162,128	2.3	148	92,341	3.1	264	21,957	4.2
<b>2008 DATA</b>												
Alabama .....	13	5	0.4	-	-	-	-	-	-	13	5	0.4
Alaska .....	2	(D)	(D)	2	(D)	(D)	-	-	-	-	-	-
Arizona .....	33	38,310	2.9	8	11,130	3.1	25	27,180	2.8	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	439	200,470	3.0	134	51,787	2.8	31	47,229	4.4	274	101,454	2.4
Colorado .....	6	4,471	1.4	6	4,471	1.4	-	-	-	-	-	-
Connecticut .....	13	16	0.4	1	(D)	(D)	-	-	-	12	(D)	(D)
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	74	8,581	2.9	74	8,581	2.9	-	-	-	-	-	-
Georgia .....	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....	96	184	3.7	57	115	3.7	12	2	3.7	27	66	3.6
Idaho .....	-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	13	26	0.2	-	-	-	-	-	-	13	26	0.2
Indiana .....	13	3	0.7	-	-	-	-	-	-	13	3	0.7
Iowa .....	8	2	0.2	4	(Z)	0.4	-	-	-	4	2	0.2
Kansas .....	56	6	0.1	-	-	-	-	-	-	56	6	0.1
Kentucky .....	27	16	(D)	14	3	0.5	7	1	0.9	6	12	1.0
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	2	(D)	(D)	2	(D)	(D)	-	-	-	-	-	-
Maryland .....	2	(D)	(D)	-	-	-	-	-	-	2	(D)	(D)
Massachusetts .....	19	26	(D)	14	21	(D)	-	-	-	5	5	(D)
Michigan .....	85	688	0.2	50	642	0.2	-	-	-	35	46	0.1
Minnesota .....	31	23	0.1	31	23	0.1	-	-	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	5	1	1.4	5	1	1.4	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	17	8	0.3	11	7	0.3	-	-	-	6	1	0.3
New Jersey .....	94	918	(D)	59	(D)	(D)	14	(D)	0.7	21	(D)	(D)
New Mexico .....	10	690	2.7	-	-	-	10	690	2.7	-	-	-
New York .....	180	494	0.2	48	(D)	0.2	30	(D)	0.2	102	(D)	(D)
North Carolina .....	89	21	2.9	-	-	-	-	-	-	89	21	2.9
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	25	(D)	(D)	14	(D)	(D)	-	-	-	11	(D)	0.2
Oklahoma .....	38	8	0.3	-	-	-	-	-	-	38	8	0.3
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	80	134	0.3	26	124	0.3	-	-	-	54	10	0.3
Rhode Island .....	19	9	0.1	4	1	0.1	-	-	-	15	8	0.1
South Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....	5	1	0.2	-	-	-	-	-	-	5	1	0.2
Tennessee .....	22	(D)	0.9	2	(D)	(D)	9	2	0.9	11	(D)	(D)
Texas .....	-	-	-	-	-	-	-	-	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	14	(D)	0.2	10	(D)	0.3	-	-	-	4	(D)	0.1
Virginia .....	9	27	0.3	9	27	0.3	-	-	-	-	-	-
Washington .....	596	182	0.3	-	-	-	245	49	0.4	351	133	0.3
West Virginia .....	16	5	0.7	10	3	0.5	-	-	-	6	2	1.2
Wisconsin .....	52	18	0.9	26	16	1.1	-	-	-	26	3	0.3
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	78	64	0.2	36	38	0.2	-	-	-	42	26	0.2
Region 02 Mid-Atlantic .....	295	1,500	0.3	96	1,226	0.3	44	22	0.4	155	252	0.4
Region 03 South Atlantic-Gulf .....	167	8,603	2.9	74	8,581	2.9	-	-	-	93	22	2.8
Region 04 Great Lakes .....	160	1,210	0.3	112	1,162	0.3	-	-	-	48	48	0.1
Region 05 Ohio .....	123	89	0.4	54	54	0.3	7	1	0.9	62	33	0.5
Region 06 Tennessee .....	27	9	0.7	-	-	-	9	2	0.9	18	7	0.7
Region 07 Upper Mississippi .....	61	(D)	(D)	35	(D)	(D)	-	-	-	26	27	0.2
Region 08 Lower Mississippi .....	2	(D)	(D)	2	(D)	(D)	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	14	3	0.4	5	1	1.4	-	-	-	9	3	0.2
Region 11 Arkansas-White-Red .....	94	13	0.2	-	-	-	-	-	-	94	13	0.2
Region 12 Texas-Gulf .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....	16	5,161	1.6	6	4,471	1.4	10	690	2.7	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	34	38,899	2.9	8	11,130	3.1	26	27,769	2.8	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	596	182	0.3	-	-	-	245	49	0.4	351	133	0.3
Region 18 California .....	438	199,881	3.0	134	51,787	2.8	30	46,640	4.4	274	101,454	2.4
Region 19 Alaska .....	2	(D)	(D)	2	(D)	(D)	-	-	-	-	-	-
Region 20 Hawaii .....	96	184	3.7	57	115	3.7	12	2	3.7	27	66	3.6

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Potatoes												
	Farms	Irrigated acres harvested	Average acre-feet applied per acre	Primary method of distribution									
				Sprinkler system			Gravity system			Low-flow irrigation (drip, trickle, or micro sprinklers)			
				Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	
United States .....	2008 ..	3,727	974,606	1.8	2,713	939,463	1.8	486	31,509	1.5	528	3,634	1.5
	2003 ..	3,126	1,032,155	1.8	2,670	947,838	1.8	243	83,658	1.9	(NA)	(NA)	(NA)
<b>2008 DATA</b>													
Alabama .....		13	10	1.0	9	9	1.0	4	1	1.0	-	-	-
Alaska .....		3	(D)	(D)	3	(D)	(D)	-	-	-	-	-	-
Arizona .....		4	2,421	2.8	2	(D)	(D)	2	(D)	(D)	-	-	-
Arkansas .....		-	-	-	-	-	-	-	-	-	-	-	-
California .....		122	43,304	2.8	68	43,293	2.8	-	-	-	54	11	2.0
Colorado .....		137	53,878	1.8	137	53,878	1.8	-	-	-	-	-	-
Connecticut .....		20	12	0.5	10	10	0.5	-	-	-	10	2	0.3
Delaware .....		8	1,283	0.8	8	1,283	0.8	-	-	-	-	-	-
Florida .....		45	26,343	1.1	4	(D)	(D)	39	23,413	1.2	2	(D)	(D)
Georgia .....		103	62	0.9	51	10	1.3	52	52	0.8	-	-	-
Hawaii .....		24	2	0.1	12	1	0.1	12	1	0.1	-	-	-
Idaho .....		520	286,937	2.2	507	284,657	2.2	4	480	4.0	9	1,800	2.0
Illinois .....		15	(D)	(D)	2	(D)	(D)	-	-	-	13	3	0.5
Indiana .....		22	639	0.5	9	636	0.5	-	-	-	13	3	0.7
Iowa .....		11	287	1.2	11	287	1.2	-	-	-	-	-	-
Kansas .....		-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....		55	48	1.0	28	27	1.1	14	2	0.4	13	19	0.8
Louisiana .....		53	53	1.0	53	53	1.0	-	-	-	-	-	-
Maine .....		14	(D)	0.1	14	(D)	0.1	-	-	-	-	-	-
Maryland .....		18	724	0.7	15	721	0.7	-	-	-	3	3	0.6
Massachusetts .....		14	14	0.1	14	14	0.1	-	-	-	-	-	-
Michigan .....		226	42,363	0.9	166	42,304	0.9	-	-	-	60	59	0.3
Minnesota .....		127	37,642	0.8	126	(D)	(D)	1	(D)	(D)	-	-	-
Mississippi .....		-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....		121	9,927	1.4	83	9,908	1.4	-	-	-	38	19	1.0
Montana .....		66	11,943	1.2	66	11,943	1.2	-	-	-	-	-	-
Nebraska .....		86	145,814	1.1	86	145,814	1.1	-	-	-	-	-	-
Nevada .....		3	(D)	(D)	3	(D)	(D)	-	-	-	-	-	-
New Hampshire .....		15	7	0.3	9	(D)	(D)	-	-	-	6	(D)	0.3
New Jersey .....		99	1,156	0.3	61	1,118	0.3	14	14	0.7	24	24	0.3
New Mexico .....		3	(D)	(D)	2	(D)	(D)	1	(D)	(D)	-	-	-
New York .....		62	2,094	0.4	32	2,049	0.4	30	45	0.5	-	-	-
North Carolina .....		117	65	2.5	32	48	3.4	-	-	-	85	17	0.1
North Dakota .....		30	28,353	1.0	30	28,353	1.0	-	-	-	-	-	-
Ohio .....		25	30	2.8	23	(D)	(D)	-	-	-	2	(D)	(D)
Oklahoma .....		78	684	0.6	40	680	0.6	-	-	-	38	4	1.1
Oregon .....		192	46,806	2.3	189	(D)	(D)	3	(D)	(D)	-	-	-
Pennsylvania .....		132	2,382	0.5	74	2,367	0.5	-	-	-	58	16	0.6
Rhode Island .....		5	(D)	(D)	5	(D)	(D)	-	-	-	-	-	-
South Carolina .....		97	58	1.0	52	13	1.8	-	-	-	45	45	0.8
South Dakota .....		33	10	0.6	28	9	0.7	-	-	-	5	1	0.1
Tennessee .....		37	25	0.3	18	13	0.2	-	-	-	19	12	0.4
Texas .....		8	5,083	2.0	8	5,083	2.0	-	-	-	-	-	-
Utah .....		2	(D)	(D)	2	(D)	(D)	-	-	-	-	-	-
Vermont .....		10	1	(D)	2	(D)	(D)	-	-	-	8	(D)	0.1
Virginia .....		28	3,080	0.3	28	3,080	0.3	-	-	-	-	-	-
Washington .....		720	142,357	2.3	410	(D)	(D)	310	(D)	(D)	-	-	-
West Virginia .....		14	5	0.7	4	2	0.2	-	-	-	10	3	1.0
Wisconsin .....		183	57,287	1.0	170	57,281	1.0	-	-	-	13	7	0.2
Wyoming .....		7	2,975	1.5	7	2,975	1.5	-	-	-	-	-	-
<b>Water Resources Regions</b>													
Region 01 New England .....		76	2,619	0.1	52	2,615	0.1	-	-	-	24	4	0.2
Region 02 Mid-Atlantic .....		318	9,120	0.5	184	9,018	0.5	44	59	0.5	90	44	0.5
Region 03 South Atlantic-Gulf .....		386	26,552	1.2	159	1,444	1.1	95	23,466	1.2	132	1,642	1.1
Region 04 Great Lakes .....		356	55,030	0.9	283	54,965	0.9	-	-	-	73	66	0.3
Region 05 Ohio .....		99	1,202	0.6	52	1,170	0.6	14	2	0.4	33	30	1.2
Region 06 Tennessee .....		35	21	0.3	16	9	0.2	-	-	-	19	12	0.4
Region 07 Upper Mississippi .....		257	75,319	0.9	244	75,316	0.9	-	-	-	13	3	0.5
Region 08 Lower Mississippi .....		60	9,915	1.4	60	9,915	1.4	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....		40	(D)	0.8	39	(D)	(D)	1	(D)	(D)	-	-	-
Region 10 Missouri .....		266	177,037	1.1	223	177,017	1.1	-	-	-	43	20	1.0
Region 11 Arkansas-White-Red .....		117	4,654	(D)	79	4,650	(D)	-	-	-	38	4	1.1
Region 12 Texas-Gulf .....		8	1,214	1.8	7	(D)	(D)	1	(D)	(D)	-	-	-
Region 13 Rio Grande .....		117	52,543	1.8	117	52,543	1.8	-	-	-	-	-	-
Region 14 Upper Colorado .....		2	(D)	(D)	2	(D)	(D)	-	-	-	-	-	-
Region 15 Lower Colorado .....		4	2,421	2.8	2	(D)	(D)	2	(D)	(D)	-	-	-
Region 16 Great Basin .....		14	12,593	1.9	14	12,593	1.9	-	-	-	-	-	-
Region 17 Pacific Northwest .....		1,382	465,108	2.3	1,056	456,223	2.3	317	7,085	2.6	9	1,800	2.0
Region 18 California .....		163	46,868	2.8	109	46,857	2.8	-	-	-	54	11	2.0
Region 19 Alaska .....		3	(D)	(D)	3	(D)	(D)	-	-	-	-	-	-
Region 20 Hawaii .....		24	2	0.1	12	1	0.1	12	1	0.1	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All berries											
	Farms	Irrigated acres harvested	Average acre-feet applied per acre	Primary method of distribution								
				Sprinkler system			Gravity system			Low-flow irrigation (drip, trickle, or micro sprinklers)		
				Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre
United States .....	9,021	222,857	2.2	4,510	108,732	1.5	502	10,221	2.8	4,009	103,904	2.9
2003 ..	7,961	225,475	2.1	4,052	110,421	2.4	188	7,003	3.6	3,721	108,051	1.7
<b>2008 DATA</b>												
Alabama .....	111	394	2.4	38	76	1.3	4	4	2.4	69	314	2.6
Alaska .....	3	3	0.3	3	3	0.3	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	1,138	74,362	3.7	790	237	2.5	4	7,200	3.0	344	66,925	3.8
Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....	44	143	0.8	10	107	1.0	-	-	-	34	36	0.3
Delaware .....	9	57	0.8	5	41	1.0	-	-	-	4	16	0.4
Florida .....	612	10,184	2.4	68	1,530	2.3	-	-	-	544	8,654	2.4
Georgia .....	351	23,967	1.5	126	17,962	1.6	-	-	-	225	6,006	1.0
Hawaii .....	12	1	0.1	12	1	0.1	-	-	-	-	-	-
Idaho .....	1	(D)	(D)	1	(D)	(D)	-	-	-	-	-	-
Illinois .....	61	145	0.2	14	83	0.3	-	-	-	47	62	0.2
Indiana .....	40	336	0.4	26	273	0.5	-	-	-	14	63	0.1
Iowa .....	23	98	1.6	9	60	2.0	-	-	-	14	38	1.0
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	106	179	0.7	46	59	0.9	6	18	0.4	54	102	0.6
Louisiana .....	53	53	1.0	53	53	1.0	-	-	-	-	-	-
Maine .....	114	8,082	0.4	82	7,989	0.4	-	-	-	32	93	0.1
Maryland .....	47	120	1.1	5	17	1.6	-	-	-	42	103	1.1
Massachusetts .....	545	13,883	1.4	523	13,581	1.4	7	98	(D)	15	204	(D)
Michigan .....	451	16,054	0.7	260	12,469	0.7	-	-	-	191	3,585	0.6
Minnesota .....	132	798	0.9	115	735	0.9	-	-	-	17	63	0.9
Mississippi .....	65	1,950	0.8	-	-	-	-	-	-	65	1,950	0.8
Missouri .....	38	4	0.1	38	4	0.1	-	-	-	-	-	-
Montana .....	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	52	119	(D)	20	32	(D)	4	12	0.1	28	75	0.5
New Jersey .....	199	11,391	1.7	80	6,719	1.5	20	744	2.9	99	3,928	2.0
New Mexico .....	-	-	-	-	-	-	-	-	-	-	-	-
New York .....	218	1,195	0.6	84	692	0.5	33	21	0.7	101	482	0.6
North Carolina .....	385	8,110	1.2	167	6,931	1.3	-	-	-	218	1,179	0.4
North Dakota .....	7	105	1.0	-	-	-	-	-	-	7	105	1.0
Ohio .....	116	373	1.1	50	202	1.0	2	(D)	(D)	64	136	(D)
Oklahoma .....	76	114	1.6	-	-	-	-	-	-	76	114	1.6
Oregon .....	1,082	17,275	0.7	539	12,764	0.6	-	-	-	543	4,511	1.0
Pennsylvania .....	311	776	0.7	98	455	0.7	23	(D)	0.8	190	310	0.6
Rhode Island .....	10	136	(D)	5	119	(D)	-	-	-	5	17	0.2
South Carolina .....	80	228	2.3	5	65	5.2	-	-	-	75	163	1.1
South Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....	157	314	0.5	40	90	(D)	22	15	(D)	95	209	0.5
Texas .....	558	4,046	1.6	279	3,906	1.6	-	-	-	279	140	1.1
Utah .....	84	84	1.7	-	-	-	84	84	1.7	-	-	-
Vermont .....	38	208	0.7	14	125	0.7	-	-	-	24	83	0.6
Virginia .....	122	567	0.7	42	5	0.8	8	128	0.6	72	434	0.7
Washington .....	1,107	(D)	(D)	501	(D)	(D)	245	49	1.5	361	3,217	0.8
West Virginia .....	46	113	0.5	24	61	0.4	-	-	-	22	52	0.5
Wisconsin .....	417	21,444	2.9	338	19,104	3.0	40	1,800	2.5	39	540	1.0
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	776	22,476	1.0	647	21,938	1.0	11	110	(D)	118	428	(D)
Region 02 Mid-Atlantic .....	765	13,124	1.6	269	7,343	1.4	84	905	2.5	412	4,877	1.7
Region 03 South Atlantic-Gulf .....	1,598	44,923	1.6	392	26,550	1.6	-	-	-	1,206	18,373	1.7
Region 04 Great Lakes .....	669	17,316	0.7	373	(D)	0.7	2	(D)	(D)	294	(D)	0.6
Region 05 Ohio .....	367	1,162	0.7	156	771	0.7	6	18	0.4	205	373	0.7
Region 06 Tennessee .....	140	246	0.6	32	63	0.6	24	11	1.4	84	171	0.6
Region 07 Upper Mississippi .....	554	22,055	2.8	446	19,604	2.9	40	1,800	2.5	68	651	(D)
Region 08 Lower Mississippi .....	74	111	1.1	70	(D)	1.2	2	(D)	(D)	2	(D)	(D)
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	17	111	1.0	-	-	-	-	-	-	17	111	1.0
Region 11 Arkansas-White-Red .....	76	114	1.6	-	-	-	-	-	-	76	114	1.6
Region 12 Texas-Gulf .....	558	4,046	1.6	279	3,906	1.6	-	-	-	279	140	1.1
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	84	84	1.7	-	-	-	84	84	1.7	-	-	-
Region 17 Pacific Northwest .....	2,190	22,724	0.7	1,041	14,947	0.6	245	49	1.5	904	7,728	0.9
Region 18 California .....	1,138	74,362	3.7	790	237	2.5	4	7,200	3.0	344	66,925	3.8
Region 19 Alaska .....	3	3	0.3	3	3	0.3	-	-	-	-	-	-
Region 20 Hawaii .....	12	1	0.1	12	1	0.1	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Land in orchards, vineyards, and nut trees											
	Farms	Irrigated acres harvested	Average acre-feet applied per acre	Primary method of distribution								
				Sprinkler system			Gravity system			Low-flow irrigation (drip, trickle, or micro sprinklers)		
				Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre
United States .....	57,184	3,733,339	2.4	18,487	675,139	2.4	10,044	579,845	2.9	28,653	2,478,355	2.3
2003 ..	57,820	4,098,357	2.2	14,016	966,764	2.4	13,725	830,415	2.8	30,079	2,301,178	1.8
<b>2008 DATA</b>												
Alabama .....	155	1,286	0.8	54	735	0.9	28	94	0.8	73	457	0.5
Alaska .....	3	9	0.3	3	9	0.3	-	-	-	-	-	-
Arizona .....	670	30,745	5.9	221	2,384	5.7	218	19,955	6.5	231	8,406	4.5
Arkansas .....	180	420	0.1	60	120	0.1	-	-	-	120	300	0.1
California .....	32,651	2,546,785	2.6	8,802	364,920	2.7	6,179	423,632	2.6	17,670	1,758,233	2.6
Colorado .....	772	2,123	0.8	193	772	0.4	579	1,351	1.0	-	-	-
Connecticut .....	43	262	0.3	4	6	0.4	-	-	-	39	256	0.3
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	3,887	522,632	1.5	892	19,766	1.0	222	8,697	1.7	2,773	494,169	1.5
Georgia .....	721	79,780	1.2	80	28,176	1.2	4	2,800	1.2	637	48,804	1.3
Hawaii .....	480	6,653	2.4	130	1,116	0.6	54	814	2.5	296	4,723	2.9
Idaho .....	420	8,403	1.6	350	3,899	2.3	-	-	-	70	4,504	1.0
Illinois .....	48	525	0.4	1	(D)	(D)	13	(D)	(D)	34	(D)	0.4
Indiana .....	20	249	2.3	19	(D)	2.3	-	-	-	1	(D)	(D)
Iowa .....	14	72	0.1	4	2	0.4	-	-	-	10	70	0.1
Kansas .....	31	304	1.5	-	-	-	-	-	-	31	304	1.5
Kentucky .....	40	270	(D)	20	122	(D)	8	100	0.3	12	48	0.6
Louisiana .....	232	1,855	0.9	232	1,855	0.9	-	-	-	-	-	-
Maine .....	32	633	0.2	5	471	0.2	-	-	-	27	162	0.1
Maryland .....	49	664	0.6	3	3	0.3	-	-	-	46	661	0.6
Massachusetts .....	27	427	3.3	25	(D)	(D)	-	-	-	2	(D)	(D)
Michigan .....	327	12,519	0.5	67	2,498	0.5	25	250	0.4	235	9,771	0.5
Minnesota .....	94	1,003	0.4	50	583	0.4	-	-	-	44	421	0.4
Mississippi .....	131	530	0.7	-	-	-	1	(D)	(D)	130	(D)	(D)
Missouri .....	38	2,090	0.1	-	-	-	-	-	-	38	2,090	0.1
Montana .....	145	290	0.8	-	-	-	-	-	-	145	290	0.8
Nebraska .....	240	720	2.3	-	-	-	240	720	2.3	-	-	-
Nevada .....	64	589	4.8	-	-	-	13	520	5.0	51	69	3.2
New Hampshire .....	18	58	0.3	12	(D)	(D)	-	-	-	6	(D)	(D)
New Jersey .....	83	4,273	0.5	22	(D)	0.6	2	(D)	(D)	59	(D)	(D)
New Mexico .....	2,896	68,806	3.6	1,055	4,423	2.2	1,271	50,858	3.9	570	13,525	2.9
New York .....	150	5,413	0.6	27	2,637	0.6	-	-	-	123	2,776	0.5
North Carolina .....	172	2,153	0.4	125	1,105	0.2	-	-	-	47	1,048	0.5
North Dakota .....	12	39	2.0	12	39	2.0	-	-	-	-	-	-
Ohio .....	58	977	0.3	22	75	0.3	-	-	-	36	903	0.3
Oklahoma .....	249	1,531	1.7	52	375	1.1	42	153	3.5	155	1,003	1.6
Oregon .....	1,525	33,404	1.3	1,337	24,071	1.4	14	28	2.2	174	9,305	1.2
Pennsylvania .....	249	3,251	0.3	62	838	0.3	25	117	0.2	162	2,296	0.4
Rhode Island .....	24	158	0.8	12	42	0.6	-	-	-	12	116	0.9
South Carolina .....	209	9,843	0.8	12	8,289	0.8	-	-	-	197	1,554	0.6
South Dakota .....	2	(D)	(D)	-	-	-	-	-	-	2	(D)	(D)
Tennessee .....	78	434	0.4	29	179	(D)	2	(D)	(D)	47	248	0.3
Texas .....	3,026	87,682	2.8	572	3,280	0.9	724	68,016	3.5	1,730	16,386	0.4
Utah .....	829	4,602	1.9	382	4,185	1.9	309	279	1.7	138	138	0.6
Vermont .....	18	159	0.3	-	-	-	5	15	0.1	13	144	0.4
Virginia .....	240	1,169	0.7	41	111	1.0	41	328	1.5	158	731	0.4
Washington .....	5,659	286,697	2.5	3,443	195,273	2.7	7	290	3.3	2,209	91,134	2.0
West Virginia .....	21	118	0.9	14	(D)	0.8	5	(D)	(D)	2	(D)	(D)
Wisconsin .....	145	651	0.5	41	109	0.4	13	(D)	0.5	91	517	0.5
Wyoming .....	7	70	1.0	-	-	-	-	-	-	7	70	1.0
<b>Water Resources Regions</b>												
Region 01 New England .....	146	1,562	1.1	58	659	0.4	-	-	-	88	903	1.6
Region 02 Mid-Atlantic .....	581	11,324	0.5	121	4,130	0.5	78	1,206	0.7	382	5,989	0.4
Region 03 South Atlantic-Gulf .....	5,264	615,299	1.4	1,140	56,928	1.1	254	11,591	1.6	3,870	546,780	1.4
Region 04 Great Lakes .....	529	16,466	0.4	131	3,986	0.4	38	276	0.4	360	12,204	0.5
Region 05 Ohio .....	147	1,044	1.0	59	473	1.7	21	139	0.3	67	432	0.5
Region 06 Tennessee .....	96	1,684	0.4	41	1,303	0.5	-	-	-	55	382	0.3
Region 07 Upper Mississippi .....	204	1,947	0.6	82	921	0.8	-	-	-	122	1,026	0.5
Region 08 Lower Mississippi .....	373	2,097	0.8	303	1,994	0.9	3	18	0.6	67	85	0.3
Region 09 Souris-Red-Rainy .....	7	14	1.5	7	14	1.5	-	-	-	-	-	-
Region 10 Missouri .....	289	1,191	1.9	5	25	2.3	240	720	2.3	44	446	1.3
Region 11 Arkansas-White-Red .....	997	6,919	1.2	58	975	2.6	297	1,235	1.8	642	4,709	0.8
Region 12 Texas-Gulf .....	2,919	64,851	2.1	574	3,760	1.3	628	45,550	2.7	1,717	15,541	0.3
Region 13 Rio Grande .....	2,604	89,177	3.9	1,046	3,119	1.6	1,303	73,000	4.2	255	13,058	2.9
Region 14 Upper Colorado .....	666	2,849	1.5	278	2,256	1.5	388	593	1.4	-	-	-
Region 15 Lower Colorado .....	754	30,787	5.9	221	2,384	5.7	302	19,997	6.5	231	8,406	4.5
Region 16 Great Basin .....	786	4,316	2.1	298	2,925	1.9	238	757	3.8	250	634	0.6
Region 17 Pacific Northwest .....	7,688	328,367	2.4	5,130	223,243	2.6	21	318	3.2	2,537	104,806	1.9
Region 18 California .....	32,651	2,546,785	2.6	8,802	364,920	2.7	6,179	423,632	2.6	17,670	1,758,233	2.6
Region 19 Alaska .....	3	9	0.3	3	9	0.3	-	-	-	-	-	-
Region 20 Hawaii .....	480	6,653	2.4	130	1,116	0.6	54	814	2.5	296	4,723	2.9

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All other crops (see text)									
	Farms	Irrigated acres harvested	Average acre-feet applied per acre	Primary method of distribution						
				Pressure system			Gravity system			
				Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	
United States .....	6,761	1,487,387	1.8	4,964	886,595	1.7	1,797	600,792	1.9	
2003 ..	6,541	1,418,982	1.7	3,162	597,744	1.3	2,379	745,158	1.9	
<b>2008 DATA</b>										
Alabama .....	35	294	0.6	30	284	0.6	5	10	0.6	
Alaska .....	1	(D)	(D)	-	-	-	1	(D)	(D)	
Arizona .....	370	17,005	3.1	338	5,921	2.4	32	11,084	3.5	
Arkansas .....	79	4,400	0.6	19	3,800	0.6	60	600	0.6	
California .....	2,155	263,763	2.9	1,484	135,040	2.8	671	128,723	2.9	
Colorado .....	368	24,607	1.6	128	19,877	1.3	240	4,730	3.0	
Connecticut .....	3	(D)	0.9	3	(D)	0.9	-	-	-	
Delaware .....	7	865	0.5	7	865	0.5	-	-	-	
Florida .....	114	355,879	1.3	40	23,658	1.4	74	332,221	1.2	
Georgia .....	69	20,498	0.7	69	20,498	0.7	-	-	-	
Hawaii .....	369	43,958	5.5	291	43,702	5.5	78	256	0.5	
Idaho .....	247	52,459	1.9	107	31,196	1.3	140	21,263	2.8	
Illinois .....	82	26,248	0.6	82	26,248	0.6	-	-	-	
Indiana .....	38	12,974	0.3	38	12,974	0.3	-	-	-	
Iowa .....	12	944	0.6	12	944	0.6	-	-	-	
Kansas .....	104	21,020	0.8	80	19,778	0.8	24	1,242	1.2	
Kentucky .....	8	78	0.2	8	78	0.2	-	-	-	
Louisiana .....	20	10,302	0.5	8	7,922	0.3	12	2,380	1.2	
Maine .....	-	-	-	-	-	-	-	-	-	
Maryland .....	20	619	0.7	20	619	0.7	-	-	-	
Massachusetts .....	7	329	0.1	7	329	0.1	-	-	-	
Michigan .....	19	1,876	0.5	19	1,876	0.5	-	-	-	
Minnesota .....	68	17,933	2.0	33	2,889	0.6	35	15,044	2.2	
Mississippi .....	2	(D)	(D)	-	-	-	2	(D)	(D)	
Missouri .....	7	1,336	0.8	4	496	0.2	3	840	1.2	
Montana .....	92	15,090	1.8	58	7,900	1.4	34	7,190	2.2	
Nebraska .....	523	123,750	0.8	498	121,925	0.8	25	1,825	0.3	
Nevada .....	12	5,983	2.3	5	4,247	2.4	7	1,736	1.9	
New Hampshire .....	1	(D)	(D)	1	(D)	(D)	-	-	-	
New Jersey .....	28	1,605	0.3	28	1,605	0.3	-	-	-	
New Mexico .....	55	9,147	2.0	13	7,341	1.9	42	1,806	2.5	
New York .....	52	1,368	1.0	48	1,336	1.1	4	32	0.4	
North Carolina .....	28	3,004	0.4	28	3,004	0.4	-	-	-	
North Dakota .....	30	7,415	0.7	30	7,415	0.7	-	-	-	
Ohio .....	41	66	2.4	32	48	1.8	9	18	4.0	
Oklahoma .....	44	4,621	0.7	44	4,621	0.7	-	-	-	
Oregon .....	615	215,863	1.5	579	205,276	1.4	36	10,587	1.8	
Pennsylvania .....	97	649	0.3	97	649	0.3	-	-	-	
Rhode Island .....	9	18	(D)	9	18	(D)	-	-	-	
South Carolina .....	25	1,543	0.8	25	1,543	0.8	-	-	-	
South Dakota .....	34	4,285	1.0	8	3,843	1.1	26	442	0.5	
Tennessee .....	33	598	0.2	24	589	0.2	9	9	1.2	
Texas .....	173	54,872	1.9	112	26,204	1.1	61	28,668	2.5	
Utah .....	28	2,577	2.4	13	942	1.9	15	1,635	2.6	
Vermont .....	-	-	-	-	-	-	-	-	-	
Virginia .....	41	953	0.7	33	801	0.7	8	152	0.8	
Washington .....	387	118,702	2.1	359	109,493	2.1	28	9,209	1.9	
West Virginia .....	5	25	1.7	5	25	1.7	-	-	-	
Wisconsin .....	81	9,850	0.6	81	9,850	0.6	-	-	-	
Wyoming .....	123	26,102	3.6	7	8,842	2.7	116	17,260	4.1	
<b>Water Resources Regions</b>										
Region 01 New England .....	20	431	0.3	20	431	0.3	-	-	-	
Region 02 Mid-Atlantic .....	184	5,473	0.6	176	5,321	0.6	8	152	0.8	
Region 03 South Atlantic-Gulf .....	293	381,693	1.2	214	49,462	1.0	79	332,231	1.2	
Region 04 Great Lakes .....	64	6,688	0.6	51	6,638	0.6	13	50	1.7	
Region 05 Ohio .....	85	11,171	0.3	85	11,171	0.3	-	-	-	
Region 06 Tennessee .....	27	206	(D)	18	197	0.2	9	9	(D)	
Region 07 Upper Mississippi .....	221	39,066	0.7	194	35,252	0.6	27	3,814	1.6	
Region 08 Lower Mississippi .....	113	(D)	0.6	36	12,088	0.4	77	(D)	1.1	
Region 09 Souris-Red-Rainy .....	25	15,892	1.9	17	4,662	0.6	8	11,230	2.4	
Region 10 Missouri .....	979	200,717	1.3	750	172,877	1.0	229	27,840	3.2	
Region 11 Arkansas-White-Red .....	166	33,830	1.0	133	29,348	0.9	33	4,482	1.5	
Region 12 Texas-Gulf .....	119	41,498	2.2	71	16,210	1.4	48	25,288	2.7	
Region 13 Rio Grande .....	65	8,927	1.8	23	7,121	1.6	42	1,806	2.5	
Region 14 Upper Colorado .....	222	4,137	3.1	6	390	3.3	216	3,747	3.1	
Region 15 Lower Colorado .....	370	17,005	3.1	338	5,921	2.4	32	11,084	3.5	
Region 16 Great Basin .....	103	28,110	1.3	81	24,739	1.1	22	3,371	2.2	
Region 17 Pacific Northwest .....	1,176	364,950	1.7	973	324,591	1.7	203	40,359	2.3	
Region 18 California .....	2,159	265,897	2.9	1,487	136,474	2.8	672	129,423	2.9	
Region 19 Alaska .....	1	(D)	(D)	-	-	-	1	(D)	(D)	
Region 20 Hawaii .....	369	43,958	5.5	291	43,702	5.5	78	256	0.5	

See footnote(s) at end of table.

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**Table 28. Estimated Quantity of Water Applied and Primary Method of Distribution by Selected Crops Harvested: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Pastureland, all types									
	Farms	Irrigated acres harvested	Average acre-feet applied per acre	Primary method of distribution						
				Pressure system			Gravity system			
				Farms	Acres	Average acre-feet applied per acre	Farms	Acres	Average acre-feet applied per acre	
United States .....	2008 .. 49,582	3,611,216	1.6	25,912	1,166,593	1.4	23,670	2,444,623	1.7	
	2003 .. 49,843	3,629,492	1.7	18,131	831,484	1.6	31,629	2,796,562	1.7	
<b>2008 DATA</b>										
Alabama .....	47	1,614	0.4	42	1,599	0.4	5	15	0.6	
Alaska .....	1	(D)	(D)	1	(D)	(D)	-	-	-	
Arizona .....	1,336	42,104	2.5	344	15,185	1.8	992	26,919	3.0	
Arkansas .....	129	3,272	0.6	50	1,517	0.6	79	1,755	0.6	
California .....	6,787	367,405	2.5	5,432	83,125	2.1	1,355	284,280	2.7	
Colorado .....	4,088	435,226	1.5	597	52,763	1.6	3,491	382,463	1.5	
Connecticut .....	-	-	-	-	-	-	-	-	-	
Delaware .....	8	116	0.5	8	116	0.5	-	-	-	
Florida .....	404	74,344	1.0	134	14,943	1.2	270	59,401	1.0	
Georgia .....	213	26,795	0.7	213	26,795	0.7	-	-	-	
Hawaii .....	58	1,492	1.8	43	766	1.8	15	726	1.8	
Idaho .....	8,179	379,140	1.1	4,004	168,387	1.0	4,175	210,753	1.2	
Illinois .....	2	(D)	(D)	2	(D)	(D)	-	-	-	
Indiana .....	60	2,092	0.4	60	2,092	0.4	-	-	-	
Iowa .....	12	209	(D)	2	(D)	(D)	10	(D)	(D)	
Kansas .....	113	29,958	1.1	113	29,958	1.1	-	-	-	
Kentucky .....	30	566	0.5	7	175	(D)	23	391	(D)	
Louisiana .....	8	240	0.9	-	-	-	8	240	0.9	
Maine .....	3	45	0.1	3	45	0.1	-	-	-	
Maryland .....	7	248	0.3	7	248	0.3	-	-	-	
Massachusetts .....	37	111	0.1	37	111	0.1	-	-	-	
Michigan .....	163	3,251	0.3	163	3,251	0.3	-	-	-	
Minnesota .....	21	464	0.6	21	464	0.6	-	-	-	
Mississippi .....	-	-	-	-	-	-	-	-	-	
Missouri .....	58	1,889	0.4	54	1,285	0.3	4	604	0.5	
Montana .....	3,379	392,545	1.1	1,008	109,028	1.0	2,371	283,517	1.2	
Nebraska .....	584	44,057	2.4	416	21,883	1.0	168	22,174	3.8	
Nevada .....	627	152,895	2.6	96	8,034	3.0	531	144,861	2.6	
New Hampshire .....	-	-	-	-	-	-	-	-	-	
New Jersey .....	47	365	0.7	47	365	0.7	-	-	-	
New Mexico .....	2,502	111,475	1.2	720	30,791	1.5	1,782	80,684	1.0	
New York .....	-	-	-	-	-	-	-	-	-	
North Carolina .....	316	11,790	0.3	316	11,790	0.3	-	-	-	
North Dakota .....	6	652	0.8	6	652	0.8	-	-	-	
Ohio .....	3	65	0.8	3	65	0.8	-	-	-	
Oklahoma .....	253	38,509	0.7	231	35,892	0.6	22	2,617	1.5	
Oregon .....	6,538	338,710	1.9	4,606	89,316	1.7	1,932	249,394	1.9	
Pennsylvania .....	9	158	0.6	8	(D)	(D)	1	(D)	(D)	
Rhode Island .....	4	4	1.8	-	-	-	4	4	1.8	
South Carolina .....	82	2,815	1.0	75	2,475	1.0	7	340	0.7	
South Dakota .....	25	2,003	1.5	3	360	1.5	22	1,643	1.5	
Tennessee .....	31	(D)	1.7	27	1,087	1.7	4	(D)	1.7	
Texas .....	2,013	350,030	1.0	1,287	256,228	1.1	726	93,802	0.6	
Utah .....	4,997	253,812	2.0	1,996	75,511	2.0	3,001	178,301	2.0	
Vermont .....	-	-	-	-	-	-	-	-	-	
Virginia .....	7	250	0.3	7	250	0.3	-	-	-	
Washington .....	4,293	132,393	2.0	3,441	95,181	2.0	852	37,212	1.9	
West Virginia .....	4	16	0.2	4	16	0.2	-	-	-	
Wisconsin .....	30	905	0.5	30	905	0.5	-	-	-	
Wyoming .....	2,068	405,592	1.7	248	23,344	1.4	1,820	382,248	1.7	
<b>Water Resources Regions</b>										
Region 01 New England .....	44	160	0.1	40	156	0.1	4	4	1.8	
Region 02 Mid-Atlantic .....	80	(D)	(D)	79	(D)	(D)	1	(D)	(D)	
Region 03 South Atlantic-Gulf .....	1,056	117,118	0.9	774	57,362	0.7	282	59,756	1.0	
Region 04 Great Lakes .....	221	4,886	0.4	221	4,886	0.4	-	-	-	
Region 05 Ohio .....	66	1,323	0.5	43	(D)	(D)	23	(D)	(D)	
Region 06 Tennessee .....	15	1,267	1.5	11	1,205	1.5	4	62	1.7	
Region 07 Upper Mississippi .....	25	977	0.6	25	977	0.6	-	-	-	
Region 08 Lower Mississippi .....	106	2,174	0.6	19	179	0.3	87	1,995	0.7	
Region 09 Souris-Red-Rainy .....	8	292	0.4	8	292	0.4	-	-	-	
Region 10 Missouri .....	5,173	685,704	1.5	1,238	121,032	1.1	3,935	564,672	1.5	
Region 11 Arkansas-White-Red .....	1,034	285,709	1.1	671	239,566	1.1	363	46,143	1.0	
Region 12 Texas-Gulf .....	1,779	189,306	0.8	1,052	93,454	0.9	727	95,852	0.6	
Region 13 Rio Grande .....	2,244	153,797	1.6	545	26,912	1.5	1,699	126,885	1.7	
Region 14 Upper Colorado .....	5,165	490,301	1.7	1,414	73,652	1.9	3,751	416,649	1.7	
Region 15 Lower Colorado .....	1,712	53,539	2.4	462	19,912	1.8	1,250	33,627	2.8	
Region 16 Great Basin .....	4,225	297,680	2.5	1,520	40,400	2.1	2,705	257,280	2.6	
Region 17 Pacific Northwest .....	19,207	898,867	1.4	12,250	388,882	1.4	6,957	509,985	1.5	
Region 18 California .....	7,363	425,116	2.3	5,496	94,542	2.1	1,867	330,574	2.3	
Region 19 Alaska .....	1	(D)	(D)	1	(D)	(D)	-	-	-	
Region 20 Hawaii .....	58	1,492	1.8	43	766	1.8	15	726	1.8	

<sup>1</sup> Respondents were asked to report tons dry.

<sup>2</sup> 2003 data do not include potatoes.

**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Corn for grain or seed											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	33,571	11,991,515	7,620	2,925,295	2,961	992,784	28,085	10,731,588	5,487	750,600	4,361	833,522
2003 ..	32,231	9,747,474	6,157	1,921,676	2,343	674,530	27,287	8,647,575	4,154	521,864	4,035	676,134
<b>2008 DATA</b>												
Alabama .....	140	24,111	1	(D)	-	-	36	5,873	95	15,210	18	3,028
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	40	13,987	28	10,669	18	5,621	33	11,717	2	(D)	12	1,604
Arkansas .....	960	381,321	65	21,108	31	6,623	895	348,600	160	38,791	14	11,250
California .....	433	122,554	21	22,840	6	8,989	323	52,932	80	14,810	197	64,067
Colorado .....	2,337	796,040	803	342,400	294	115,894	1,511	621,152	197	39,218	994	187,747
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	223	49,381	49	12,134	15	3,356	208	43,030	40	(D)	1	(D)
Florida .....	72	9,899	26	4,020	23	1,470	72	12,799	-	-	-	-
Georgia .....	1,174	155,035	172	20,569	18	3,903	658	118,635	656	39,194	-	-
Hawaii .....	10	2,037	9	1,898	2	(D)	5	688	-	-	7	1,750
Idaho .....	540	72,800	118	20,907	27	5,195	61	17,125	60	7,856	444	47,820
Illinois .....	875	309,187	177	61,823	13	4,962	834	301,205	49	10,055	16	1,334
Indiana .....	778	244,574	36	11,938	11	5,400	667	207,425	203	35,929	28	3,580
Iowa .....	430	107,979	49	8,228	16	3,370	383	103,170	51	5,459	3	360
Kansas .....	2,896	1,368,126	897	416,291	380	158,233	2,780	1,334,045	144	18,399	55	18,478
Kentucky .....	76	14,099	5	1,167	3	831	44	10,978	32	2,661	4	460
Louisiana .....	470	212,824	17	12,914	13	7,590	443	194,817	54	23,991	5	700
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	231	36,981	33	6,822	7	2,037	168	25,937	91	10,744	2	(D)
Massachusetts .....	5	(D)	-	-	-	-	-	-	5	(D)	-	-
Michigan .....	778	248,790	52	7,950	10	1,830	501	177,577	418	69,917	13	1,611
Minnesota .....	1,071	254,960	147	42,159	6	790	1,038	246,580	75	9,005	9	368
Mississippi .....	522	351,869	15	6,011	4	2,210	487	336,832	82	22,465	1	(D)
Missouri .....	1,057	361,275	105	43,813	36	11,252	922	334,567	144	31,521	4	1,000
Montana .....	162	28,653	7	2,638	-	-	-	-	32	4,648	134	24,005
Nebraska .....	12,530	5,058,195	3,205	1,147,770	1,576	450,043	12,350	4,817,357	1,809	192,082	934	197,389
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	2	(D)	-	-	-	-	-	-	2	(D)	-	-
New Jersey .....	43	5,620	2	(D)	2	(D)	32	4,314	15	1,306	-	-
New Mexico .....	88	(D)	27	24,685	19	16,024	86	42,218	1	(D)	4	(D)
New York .....	9	375	-	-	-	-	6	200	3	175	-	-
North Carolina .....	210	24,738	12	2,460	-	-	34	7,510	179	16,380	8	1,028
North Dakota .....	311	90,271	81	32,182	18	7,505	242	74,168	30	6,167	57	10,730
Ohio .....	23	7,260	1	(D)	-	-	12	2,461	9	3,694	3	2,025
Oklahoma .....	211	95,182	64	41,483	36	31,947	180	87,938	25	7,040	18	3,030
Oregon .....	291	32,584	52	10,011	26	4,674	44	9,148	76	3,538	186	19,898
Pennsylvania .....	16	912	-	-	-	-	-	-	14	830	2	(D)
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	158	35,411	32	8,125	6	2,700	122	27,660	64	9,590	3	285
South Dakota .....	669	175,593	73	22,961	3	366	500	126,021	38	5,608	142	44,354
Tennessee .....	72	17,794	3	790	-	-	56	14,766	19	3,173	-	-
Texas .....	1,998	954,026	960	467,765	266	98,869	1,736	882,792	189	40,745	240	70,301
Utah .....	296	26,848	27	4,240	8	1,850	4	475	80	5,380	216	21,153
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	86	12,729	4	740	2	(D)	6	1,127	78	10,532	8	1,160
Washington .....	402	87,919	141	44,312	47	23,700	35	10,239	37	16,967	346	63,413
West Virginia .....	2	(D)	-	-	-	-	-	-	2	(D)	-	-
Wisconsin .....	479	105,809	74	27,289	-	-	430	97,616	83	8,486	3	427
Wyoming .....	395	39,896	30	11,078	19	4,470	141	19,894	64	11,018	230	16,504
<b>Water Resources Regions</b>												
Region 01 New England .....	7	134	-	-	-	-	-	-	7	134	-	-
Region 02 Mid-Atlantic .....	587	104,218	88	19,816	26	6,213	420	74,608	220	28,129	13	1,749
Region 03 South Atlantic-Gulf .....	1,761	244,887	248	37,279	47	8,073	923	171,390	1,013	78,635	22	2,863
Region 04 Great Lakes .....	1,098	330,435	75	15,721	12	2,930	768	244,685	510	83,412	34	3,833
Region 05 Ohio .....	554	156,931	29	8,727	7	3,866	459	137,876	119	19,525	19	3,072
Region 06 Tennessee .....	55	15,763	1	(D)	-	-	14	4,972	36	9,438	7	1,478
Region 07 Upper Mississippi .....	2,616	734,442	425	135,124	32	7,764	2,423	685,589	303	51,769	24	3,000
Region 08 Lower Mississippi .....	2,483	1,159,644	148	59,102	71	23,100	2,386	1,106,603	245	73,571	14	9,495
Region 09 Souris-Red-Rainy .....	228	64,333	37	16,889	12	4,820	212	59,299	16	5,180	6	1,042
Region 10 Missouri .....	17,097	6,541,812	4,316	1,601,561	1,949	590,190	15,581	6,016,880	2,286	277,773	2,252	459,412
Region 11 Arkansas-White-Red .....	3,736	1,839,620	1,364	725,595	525	240,504	3,390	1,780,600	303	57,803	197	33,588
Region 12 Texas-Gulf .....	1,040	376,884	427	170,059	113	39,261	886	312,800	60	13,618	218	65,694
Region 13 Rio Grande .....	78	8,980	43	3,642	11	(D)	32	2,768	24	1,272	22	4,940
Region 14 Upper Colorado .....	230	53,182	29	15,159	28	14,706	82	27,560	19	(D)	132	23,563
Region 15 Lower Colorado .....	44	17,621	30	13,643	20	7,421	37	15,351	2	(D)	14	2,264
Region 16 Great Basin .....	273	23,995	19	(D)	-	-	4	475	71	3,679	199	19,841
Region 17 Pacific Northwest .....	1,241	194,043	311	75,230	100	33,569	140	36,512	173	28,361	984	131,871
Region 18 California .....	433	122,554	21	22,840	6	8,989	323	52,932	80	14,810	197	64,067
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	10	2,037	9	1,898	2	(D)	5	688	-	-	7	1,750

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area		Corn for silage or greenchop											
		Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
				Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
				Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	2008 ..	9,135	1,633,540	2,191	504,670	962	271,377	5,132	1,011,824	2,266	378,548	3,844	604,188
	2003 ..	10,111	1,311,674	1,738	292,065	776	121,054	5,459	718,176	1,351	(D)	4,409	(D)
<b>2008 DATA</b>													
Alabama .....		9	1,269	-	-	-	-	2	(D)	7	(D)	-	-
Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....		81	30,591	46	12,171	7	2,565	40	10,179	17	4,343	65	23,777
Arkansas .....		1	(D)	-	-	-	-	1	(D)	-	-	-	-
California .....		1,684	530,406	797	200,674	370	109,174	1,335	401,476	824	184,227	882	220,556
Colorado .....		848	92,563	107	19,085	47	11,062	339	36,445	167	33,624	426	48,843
Connecticut .....		-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....		17	750	-	-	-	-	11	240	6	510	-	-
Florida .....		169	30,670	44	9,932	35	7,852	148	23,011	46	10,359	3	1,002
Georgia .....		186	26,147	24	1,500	34	2,895	120	17,255	104	10,938	6	120
Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....		1,391	253,615	283	56,294	160	42,447	300	83,605	236	39,937	1,076	133,673
Illinois .....		11	766	-	-	-	-	11	766	-	-	-	-
Indiana .....		55	8,417	6	1,300	4	1,200	49	7,435	4	(D)	2	(D)
Iowa .....		11	1,730	-	-	-	-	8	1,520	-	-	3	210
Kansas .....		394	75,978	90	18,995	32	8,715	393	75,911	-	-	1	(D)
Kentucky .....		9	114	-	-	-	-	-	-	9	114	-	-
Louisiana .....		4	120	-	-	-	-	4	120	-	-	-	-
Maine .....		-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....		16	2,096	2	(D)	-	-	9	1,524	7	572	-	-
Massachusetts .....		-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....		99	18,379	26	2,520	1	(D)	56	10,811	51	7,821	9	1,630
Minnesota .....		183	10,673	22	2,079	1	(D)	178	10,644	3	77	5	100
Mississippi .....		-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....		29	4,019	7	900	-	-	12	1,635	17	2,384	-	-
Montana .....		297	40,377	37	3,140	6	420	1	(D)	108	13,098	213	28,264
Nebraska .....		1,115	89,346	82	32,140	27	26,040	1,114	89,316	54	9,470	53	11,860
Nevada .....		34	5,880	18	3,600	4	2,520	22	4,214	4	380	16	1,686
New Hampshire .....		5	61	3	(D)	3	(D)	3	(D)	2	(D)	-	-
New Jersey .....		4	746	2	(D)	2	(D)	-	-	4	746	-	-
New Mexico .....		281	86,730	115	34,176	42	20,966	270	80,950	15	9,146	25	8,700
New York .....		4	12	-	-	-	-	-	-	4	12	-	-
North Carolina .....		25	1,830	-	-	-	-	-	-	25	1,830	-	-
North Dakota .....		60	4,946	14	1,085	5	720	21	1,137	13	1,201	28	2,608
Ohio .....		4	635	-	-	-	-	1	(D)	3	(D)	-	-
Oklahoma .....		49	12,665	16	8,109	6	1,563	48	7,536	3	(D)	-	-
Oregon .....		166	18,977	60	3,979	39	2,168	65	3,463	79	8,416	70	7,978
Pennsylvania .....		7	511	-	-	-	-	1	(D)	6	(D)	-	-
Rhode Island .....		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....		35	4,519	6	860	2	(D)	12	2,315	27	2,204	-	-
South Dakota .....		61	4,595	6	350	-	-	39	1,345	6	285	16	2,965
Tennessee .....		17	1,572	-	-	-	-	6	785	12	892	-	-
Texas .....		324	108,226	84	44,418	35	15,915	242	96,316	76	8,228	25	4,480
Utah .....		751	51,380	103	9,414	42	10,444	68	8,123	149	6,005	541	37,510
Vermont .....		-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....		64	3,287	19	910	17	810	5	375	64	3,287	5	375
Washington .....		355	67,413	124	33,031	9	1,197	69	12,390	22	3,161	285	51,862
West Virginia .....		2	(D)	1	(D)	1	(D)	-	-	2	(D)	-	-
Wisconsin .....		119	12,442	10	1,391	1	(D)	100	10,522	31	1,979	-	-
Wyoming .....		159	29,027	37	2,450	30	1,612	29	9,544	59	5,261	89	15,622
<b>Water Resources Regions</b>													
Region 01 New England .....		5	61	3	(D)	3	(D)	3	(D)	2	(D)	-	-
Region 02 Mid-Atlantic .....		112	7,402	23	1,036	19	896	26	2,344	91	5,433	5	375
Region 03 South Atlantic-Gulf .....		424	64,435	74	12,292	71	11,247	282	43,161	209	26,020	9	1,122
Region 04 Great Lakes .....		149	22,893	29	2,650	2	(D)	102	14,901	56	8,074	11	1,810
Region 05 Ohio .....		33	2,271	4	(D)	4	(D)	16	1,478	17	793	-	-
Region 06 Tennessee .....		11	1,323	-	-	-	-	4	(D)	8	733	-	-
Region 07 Upper Mississippi .....		296	26,761	32	4,040	2	(D)	256	22,715	45	4,090	5	100
Region 08 Lower Mississippi .....		19	1,855	7	900	-	-	19	1,855	-	-	-	-
Region 09 Souris-Red-Rainy .....		25	1,494	-	-	-	-	25	1,494	2	(D)	-	-
Region 10 Missouri .....		2,477	263,062	276	59,775	105	39,104	1,639	158,017	356	56,019	713	98,500
Region 11 Arkansas-White-Red .....		475	121,955	167	52,239	59	16,268	450	113,349	42	9,519	3	547
Region 12 Texas-Gulf .....		313	97,872	66	33,996	48	20,558	231	86,682	72	13,223	24	4,320
Region 13 Rio Grande .....		191	48,162	79	17,938	18	11,083	180	41,662	6	4,021	25	8,700
Region 14 Upper Colorado .....		183	11,943	16	840	11	470	-	-	58	4,799	125	7,184
Region 15 Lower Colorado .....		81	30,591	46	12,171	7	2,565	40	10,179	17	4,343	65	23,777
Region 16 Great Basin .....		806	58,129	106	12,364	35	12,494	106	12,652	124	5,646	592	40,449
Region 17 Pacific Northwest .....		1,848	342,625	466	93,114	208	45,812	418	99,143	334	51,214	1,385	196,748
Region 18 California .....		1,687	530,706	797	200,674	370	109,174	1,335	401,476	827	184,527	882	220,556
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sorghum for grain or seed											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	4,118	1,042,392	1,007	190,798	418	170,858	3,535	909,357	379	59,011	387	110,393
2003 ..	6,134	1,108,375	957	171,293	128	14,486	4,985	948,647	401	54,197	804	107,721
<b>2008 DATA</b>												
Alabama .....	-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	80	24,328	47	12,657	17	4,282	47	11,325	8	2,130	38	12,073
Arkansas .....	290	65,738	3	1,700	18	3,360	259	56,324	43	20,664	-	-
California .....	39	14,620	5	(D)	5	(D)	29	13,785	5	440	5	395
Colorado .....	103	8,308	-	-	-	-	28	(D)	14	(D)	61	(D)
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	2	(D)	-	-	-	-	-	-	2	(D)	-	-
Georgia .....	45	8,201	11	3,011	-	-	41	6,201	4	2,000	-	-
Hawaii .....	1	(D)	1	(D)	-	-	1	(D)	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	4	103	1	(D)	-	-	4	103	-	-	-	-
Indiana .....	1	(D)	-	-	-	-	1	(D)	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	779	107,525	115	11,891	29	2,184	683	104,884	87	1,670	10	981
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	18	4,833	-	-	-	-	18	4,833	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....	25	3,895	3	450	-	-	25	3,895	-	-	-	-
Missouri .....	70	3,135	2	(D)	-	-	32	2,565	38	570	-	-
Montana .....	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	172	12,100	-	-	-	-	172	12,100	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	69	15,262	39	8,933	5	(D)	68	15,218	3	3,918	6	1,487
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	2	(D)	-	-	-	-	-	-	-	-	2	(D)
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	137	26,832	35	6,389	15	3,747	126	25,247	5	699	12	1,711
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	1	(D)	-	-	-	-	1	(D)	-	-	-	-
South Dakota .....	6	456	-	-	-	-	-	-	-	-	6	456
Tennessee .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Texas .....	2,263	743,172	745	145,215	329	154,890	1,998	645,448	170	25,470	238	89,977
Utah .....	9	540	-	-	-	-	-	-	-	-	9	540
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Washington .....	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....	50	(D)	11	3,011	-	-	42	(D)	6	2,150	2	(D)
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	5	(D)	1	(D)	-	-	5	(D)	-	-	-	-
Region 08 Lower Mississippi .....	319	73,200	8	2,390	18	3,360	288	63,786	43	20,664	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	438	31,551	45	5,433	-	-	298	28,256	125	2,240	15	1,055
Region 11 Arkansas-White-Red .....	1,518	332,814	252	47,105	46	7,091	1,432	326,864	128	10,996	75	4,816
Region 12 Texas-Gulf .....	1,597	545,110	588	112,540	327	153,730	1,355	450,150	39	16,177	238	89,991
Region 13 Rio Grande .....	60	8,621	49	7,350	5	(D)	36	(D)	25	4,214	3	(D)
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	82	24,428	47	12,657	17	4,282	49	11,425	8	2,130	40	12,573
Region 16 Great Basin .....	9	540	-	-	-	-	-	-	-	-	9	540
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....	39	14,620	5	(D)	5	(D)	29	13,785	5	440	5	395
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	1	(D)	1	(D)	-	-	1	(D)	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Wheat for grain or seed												
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>						
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers		
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	
United States .....	2008 ..	16,265	4,107,464	3,358	1,225,432	906	298,427	9,535	2,767,469	2,448	414,102	5,925	1,135,509
	2003 ..	13,524	3,267,978	2,573	738,017	417	136,431	7,831	2,121,367	1,308	356,190	5,304	968,721
<b>2008 DATA</b>													
Alabama .....		17	1,850	-	-	-	-	7	496	10	1,354	-	-
Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....		254	138,472	148	87,096	34	18,148	84	42,187	50	25,039	189	101,409
Arkansas .....		160	46,737	-	-	-	-	144	41,297	16	5,440	-	-
California .....		1,338	493,133	416	215,282	166	66,062	702	233,798	226	65,050	836	294,246
Colorado .....		997	171,323	224	60,832	62	19,485	522	125,859	283	22,523	319	34,289
Connecticut .....		-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....		77	10,929	4	525	-	-	67	9,547	12	(D)	1	(D)
Florida .....		6	1,750	4	1,600	2	(D)	6	1,750	-	-	-	-
Georgia .....		321	65,933	24	4,970	12	710	281	55,107	91	11,486	-	-
Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....		2,062	638,220	251	125,202	103	28,461	748	340,503	345	74,553	1,210	240,427
Illinois .....		49	5,312	-	-	-	-	49	5,312	-	-	-	-
Indiana .....		69	10,163	5	4,600	3	4,200	57	8,419	12	1,436	2	(D)
Iowa .....		2	(D)	-	-	-	-	2	(D)	-	-	-	-
Kansas .....		1,541	455,558	252	80,739	107	29,152	1,537	459,783	4	480	5	668
Kentucky .....		-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....		23	6,706	1	(D)	-	-	21	5,486	3	1,220	-	-
Maine .....		-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....		75	7,992	8	1,117	5	897	60	6,398	21	(D)	1	(D)
Massachusetts .....		-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....		88	16,732	1	(D)	1	(D)	64	14,403	35	2,329	-	-
Minnesota .....		88	9,450	-	-	-	-	82	8,580	4	(D)	2	(D)
Mississippi .....		13	3,941	-	-	-	-	13	3,941	-	-	-	-
Missouri .....		87	27,163	-	-	-	-	87	27,163	-	-	-	-
Montana .....		1,235	212,886	88	28,298	8	2,794	85	25,382	197	48,972	1,034	141,365
Nebraska .....		1,000	174,922	207	50,168	84	16,559	895	150,849	76	12,275	132	11,798
Nevada .....		46	12,282	2	(D)	-	-	37	10,510	2	(D)	9	1,344
New Hampshire .....		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....		8	1,635	-	-	-	-	8	1,635	-	-	-	-
New Mexico .....		174	83,868	69	41,813	21	25,132	165	72,375	30	6,496	13	12,537
New York .....		2	(D)	-	-	-	-	-	-	-	-	2	(D)
North Carolina .....		51	4,610	16	(D)	16	(D)	10	(D)	40	4,246	2	(D)
North Dakota .....		144	30,427	22	7,257	1	(D)	81	16,020	9	3,234	64	11,793
Ohio .....		-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....		479	147,489	112	46,111	24	10,051	449	144,772	54	11,244	10	2,736
Oregon .....		747	177,497	95	54,292	46	14,402	181	56,141	278	30,337	427	93,440
Pennsylvania .....		-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....		38	6,748	-	-	-	-	33	5,258	11	2,090	-	-
South Dakota .....		81	15,948	30	2,795	3	180	36	7,709	7	774	38	7,465
Tennessee .....		3	675	-	-	-	-	3	675	-	-	-	-
Texas .....		2,583	796,071	865	292,728	120	36,875	2,486	777,603	197	28,748	34	5,998
Utah .....		952	44,356	24	5,026	-	-	117	5,096	193	3,362	737	37,938
Vermont .....		-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....		8	655	-	-	-	-	-	-	6	(D)	2	(D)
Washington .....		1,195	260,958	474	112,446	88	24,019	267	91,503	194	40,549	793	129,347
West Virginia .....		-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....		27	2,176	2	(D)	-	-	23	1,694	6	492	-	-
Wyoming .....		225	22,861	14	70	-	-	126	10,032	36	5,659	63	7,170
<b>Water Resources Regions</b>													
Region 01 New England .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....		170	21,225	12	1,642	5	897	135	17,580	39	2,766	6	879
Region 03 South Atlantic-Gulf .....		429	80,183	44	6,890	30	1,430	335	62,575	150	18,668	2	(D)
Region 04 Great Lakes .....		98	17,672	4	575	1	(D)	71	15,013	38	2,659	-	-
Region 05 Ohio .....		30	8,911	3	(D)	3	(D)	26	8,411	4	500	-	-
Region 06 Tennessee .....		5	1,058	-	-	-	-	3	(D)	2	(D)	-	-
Region 07 Upper Mississippi .....		158	12,392	1	(D)	-	-	149	10,996	11	1,098	2	(D)
Region 08 Lower Mississippi .....		243	70,852	1	(D)	-	-	241	69,632	3	1,220	-	-
Region 09 Souris-Red-Rainy .....		75	9,921	7	1,645	1	(D)	67	8,901	6	1,320	4	310
Region 10 Missouri .....		3,495	598,607	523	130,540	129	26,948	1,898	342,750	445	80,436	1,432	185,634
Region 11 Arkansas-White-Red .....		3,189	1,117,022	835	328,387	159	61,598	2,970	1,080,460	245	46,690	83	13,648
Region 12 Texas-Gulf .....		1,373	324,595	453	115,617	109	29,160	1,345	321,936	71	9,051	27	5,724
Region 13 Rio Grande .....		270	53,841	43	24,741	12	13,367	153	44,801	134	6,388	46	11,154
Region 14 Upper Colorado .....		156	14,539	23	9,275	20	9,155	84	(D)	9	(D)	147	14,127
Region 15 Lower Colorado .....		265	142,692	159	91,317	39	18,661	86	42,913	50	25,039	198	104,903
Region 16 Great Basin .....		1,111	80,748	24	6,234	-	-	165	26,638	224	6,277	750	49,665
Region 17 Pacific Northwest .....		3,831	1,056,344	816	291,240	237	66,882	1,089	479,031	781	142,902	2,373	454,536
Region 18 California .....		1,367	496,862	410	212,387	161	65,549	718	234,274	236	68,130	855	294,419
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Barley for grain or seed											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	4,334	762,240	465	131,124	174	31,508	887	258,127	1,058	152,497	2,744	404,628
2003 ..	4,651	990,827	450	125,356	190	72,578	1,154	316,249	648	123,235	3,260	565,323
<b>2008 DATA</b>												
Alabama .....	-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	90	28,459	46	13,134	1	(D)	43	33,304	11	3,658	64	17,619
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	46	11,836	1	(D)	-	-	39	10,102	10	725	21	2,491
Colorado .....	320	71,675	109	41,933	26	12,221	152	56,517	112	11,333	95	20,821
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	15	1,919	-	-	-	-	13	1,453	3	466	-	-
Florida .....	-	-	-	-	-	-	-	-	-	-	-	-
Georgia .....	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	1,446	329,449	88	(D)	43	12,366	479	134,699	481	73,400	710	122,750
Illinois .....	-	-	-	-	-	-	-	-	-	-	-	-
Indiana .....	1	(D)	-	-	-	-	1	(D)	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	14	918	1	(D)	1	(D)	9	(D)	5	(D)	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Minnesota .....	6	876	-	-	-	-	4	(D)	2	(D)	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	927	180,238	162	30,506	67	3,990	15	3,573	239	45,704	696	135,513
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	8	1,330	2	(D)	-	-	7	(D)	-	-	1	(D)
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	4	335	2	(D)	-	-	4	335	-	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....	83	17,088	5	826	1	(D)	35	5,764	6	1,450	46	(D)
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	-	-	-	-	-	-	-	-	-	-
Oregon .....	201	15,159	-	-	-	-	15	1,547	6	1,898	180	14,114
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....	11	622	6	285	3	180	-	-	-	-	11	622
Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-
Texas .....	24	3,840	-	-	-	-	24	3,840	-	-	-	-
Utah .....	702	27,027	35	1,994	9	90	37	2,225	152	3,973	520	20,829
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	1	(D)	-	-	-	-	-	-	1	(D)	-	-
Washington .....	14	1,279	1	(D)	1	(D)	4	650	-	-	10	629
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	419	68,620	7	1,594	22	1,868	4	(D)	30	8,774	390	59,326
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	30	3,587	1	(D)	1	(D)	22	2,081	9	1,506	-	-
Region 03 South Atlantic-Gulf .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 04 Great Lakes .....	3	(D)	-	-	-	-	3	(D)	-	-	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	6	876	-	-	-	-	4	(D)	2	(D)	-	-
Region 08 Lower Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	12	1,618	1	(D)	1	(D)	12	1,618	-	-	-	-
Region 10 Missouri .....	1,375	261,260	197	36,181	88	7,838	55	(D)	251	50,734	1,099	204,509
Region 11 Arkansas-White-Red .....	26	4,080	2	(D)	-	-	26	4,080	-	-	-	-
Region 12 Texas-Gulf .....	1	(D)	-	-	-	-	1	(D)	-	-	-	-
Region 13 Rio Grande .....	243	63,115	91	38,713	16	9,721	138	53,662	112	(D)	32	(D)
Region 14 Upper Colorado .....	26	(D)	-	-	-	-	-	-	-	-	26	(D)
Region 15 Lower Colorado .....	90	28,459	46	13,134	1	(D)	43	33,304	11	3,658	64	17,619
Region 16 Great Basin .....	853	49,475	37	2,900	9	90	151	16,721	239	9,031	531	23,723
Region 17 Pacific Northwest .....	1,593	330,799	89	39,167	58	13,389	387	123,998	420	73,624	951	136,977
Region 18 California .....	76	15,202	1	(D)	-	-	45	10,324	14	2,535	41	3,825
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Soybeans for beans											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	2008 .. 23,024	7,044,546	1,615	466,357	952	301,167	21,340	6,448,846	3,245	619,824	928	136,708
..... 2003 ..	21,062	5,346,276	1,111	238,509	431	113,035	19,702	4,851,532	3,146	407,184	776	114,314
<b>2008 DATA</b>												
Alabama .....	69	8,779	-	-	-	-	18	1,860	45	5,433	11	1,486
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	3,119	2,167,646	194	133,529	146	92,779	2,842	1,862,488	771	369,066	116	28,182
California .....	-	-	-	-	-	-	-	-	-	-	-	-
Colorado .....	30	4,832	-	-	-	-	11	3,607	3	750	19	475
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	187	33,770	12	613	9	500	172	29,298	30	(D)	1	(D)
Florida .....	2	(D)	-	-	-	-	-	-	-	-	2	(D)
Georgia .....	413	71,621	30	1,434	3	300	336	51,970	175	21,187	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	485	90,497	12	1,937	2	(D)	454	89,053	33	2,342	9	252
Indiana .....	563	102,279	3	(D)	3	(D)	479	88,668	147	15,489	4	454
Iowa .....	252	48,946	2	(D)	1	(D)	239	48,212	13	620	2	(D)
Kansas .....	2,148	396,613	351	72,474	196	49,121	1,971	382,680	221	14,509	46	8,664
Kentucky .....	39	6,173	3	44	3	(D)	28	5,262	13	911	-	-
Louisiana .....	448	184,976	13	6,575	8	4,151	415	168,413	56	17,799	2	(D)
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	199	26,119	10	1,557	10	1,407	148	20,281	68	5,438	2	(D)
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	406	73,986	10	1,398	1	(D)	260	46,851	223	26,155	10	1,220
Minnesota .....	665	100,513	6	822	7	922	639	100,076	43	3,489	-	-
Mississippi .....	860	712,268	6	3,130	23	21,925	840	691,105	116	40,582	3	70
Missouri .....	1,208	488,319	50	22,202	40	14,112	1,050	473,942	179	15,997	-	-
Montana .....	8	624	-	-	-	-	-	-	-	-	8	624
Nebraska .....	10,541	2,272,944	818	207,602	473	109,237	10,397	2,188,152	837	41,109	568	67,183
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	36	3,418	-	-	-	-	23	2,198	16	1,220	-	-
New Mexico .....	2	(D)	2	(D)	-	-	2	(D)	-	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	112	14,839	-	-	-	-	47	7,405	67	7,252	2	(D)
North Dakota .....	106	18,939	7	1,080	4	620	83	15,019	9	1,802	17	2,738
Ohio .....	12	1,702	2	(D)	-	-	8	1,852	6	(D)	2	(D)
Oklahoma .....	95	23,793	12	1,535	11	2,320	83	19,263	13	3,210	9	1,940
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	9	363	-	-	-	-	-	-	9	363	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	77	12,741	2	(D)	-	-	57	9,613	26	3,543	5	385
South Dakota .....	417	79,296	38	4,790	5	795	325	57,533	29	5,420	72	16,733
Tennessee .....	65	27,325	-	-	-	-	58	26,589	8	809	-	-
Texas .....	187	30,607	25	3,650	5	1,050	171	28,433	5	500	11	1,674
Utah .....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	51	8,796	-	-	2	(D)	1	(D)	47	7,830	6	(D)
Washington .....	5	382	-	-	-	-	3	(D)	2	(D)	-	-
West Virginia .....	1	(D)	-	-	-	-	-	-	1	(D)	-	-
Wisconsin .....	207	30,410	7	319	-	-	180	28,403	34	1,975	1	(D)
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	472	71,515	22	2,170	21	2,641	344	51,787	162	18,252	7	1,526
Region 03 South Atlantic-Gulf .....	660	105,746	32	1,734	3	300	452	70,183	312	36,073	18	2,059
Region 04 Great Lakes .....	579	107,159	12	(D)	1	(D)	401	73,834	295	32,793	12	1,582
Region 05 Ohio .....	442	97,622	12	1,694	5	636	370	91,323	84	9,376	10	1,045
Region 06 Tennessee .....	36	5,012	-	-	-	-	14	(D)	18	(D)	4	792
Region 07 Upper Mississippi .....	1,425	208,298	25	3,074	10	1,100	1,311	198,545	155	13,058	6	361
Region 08 Lower Mississippi .....	4,847	3,240,957	235	144,776	188	126,947	4,571	2,956,283	842	364,893	104	23,364
Region 09 Souris-Red-Rainy .....	111	19,383	3	(D)	3	(D)	98	17,424	13	2,411	4	500
Region 10 Missouri .....	12,023	2,539,475	942	226,282	501	119,957	11,518	2,406,182	1,131	66,625	703	95,418
Region 11 Arkansas-White-Red .....	2,331	633,293	308	81,309	215	47,986	2,204	568,862	226	72,633	26	7,888
Region 12 Texas-Gulf .....	70	15,205	24	3,450	5	1,050	54	13,031	5	500	11	1,674
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	19	475	-	-	-	-	-	-	-	-	19	475
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	9	406	-	-	-	-	3	(D)	2	(D)	4	24
Region 18 California .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Beans, dry edible											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	2,849	431,329	359	73,830	167	48,696	1,025	200,983	689	58,425	1,397	183,853
2003 ..	2,697	458,265	452	70,279	243	36,561	1,207	243,051	243	39,137	1,375	185,691
<b>2008 DATA</b>												
Alabama .....	4	54	-	-	-	-	4	54	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	18	3,228	10	1,632	8	1,626	13	1,915	4	(D)	1	(D)
Arkansas .....	21	9,530	-	-	-	-	13	9,130	8	400	-	-
California .....	245	41,230	12	2,602	11	4,942	186	11,303	25	7,510	158	27,963
Colorado .....	227	35,305	38	10,222	20	6,482	132	22,198	40	9,382	85	7,453
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Georgia .....	11	3,219	-	-	-	-	7	1,824	7	1,395	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	749	63,665	123	10,901	25	6,465	50	6,987	146	15,862	579	42,416
Illinois .....	6	980	-	-	-	-	6	980	-	-	-	-
Indiana .....	19	506	-	-	-	-	6	493	13	13	-	-
Iowa .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Kansas .....	27	8,242	2	(D)	-	-	27	8,242	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	2	(D)	-	-	-	-	-	-	2	(D)	2	(D)
Maryland .....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	51	9,637	1	(D)	1	(D)	36	7,690	12	1,707	8	240
Minnesota .....	84	28,747	19	5,744	-	-	80	28,307	6	446	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	85	9,424	4	400	-	-	-	-	22	3,808	63	5,616
Nebraska .....	368	127,985	62	17,566	57	13,756	213	67,201	51	5,580	136	55,639
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
New Mexico .....	15	9,130	6	(D)	6	(D)	14	1,897	1	(D)	1	(D)
New York .....	35	37	-	-	-	-	33	33	5	7	-	-
North Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....	55	11,227	17	2,364	7	560	43	9,711	8	856	4	660
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Oregon .....	50	4,756	3	345	3	585	19	1,790	16	495	31	2,540
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	3	15	-	-	-	-	-	-	3	15	-	-
South Dakota .....	4	2,533	2	(D)	-	-	2	(D)	-	-	2	(D)
Tennessee .....	18	(D)	9	(D)	9	(D)	18	(D)	9	9	-	-
Texas .....	60	8,545	5	(D)	5	(D)	60	8,545	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	2	(D)	-	-	-	-	-	-	2	(D)	-	-
Washington .....	484	20,826	41	10,310	15	5,043	7	2,498	299	4,939	182	13,399
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	12	5,888	2	(D)	-	-	12	5,888	-	-	-	-
Wyoming .....	186	24,743	3	420	-	-	36	2,726	10	4,105	145	18,182
<b>Water Resources Regions</b>												
Region 01 New England .....	2	(D)	-	-	-	-	-	-	2	(D)	2	(D)
Region 02 Mid-Atlantic .....	39	(D)	-	-	-	-	35	45	7	567	-	-
Region 03 South Atlantic-Gulf .....	18	3,548	-	-	-	-	11	2,138	10	1,410	-	-
Region 04 Great Lakes .....	53	9,737	1	(D)	1	(D)	38	7,790	12	1,707	8	240
Region 05 Ohio .....	17	406	-	-	-	-	4	393	13	13	-	-
Region 06 Tennessee .....	19	57	9	(D)	9	(D)	19	57	9	9	-	-
Region 07 Upper Mississippi .....	77	31,035	19	5,869	-	-	75	30,953	2	(D)	-	-
Region 08 Lower Mississippi .....	13	7,530	-	-	-	-	5	7,130	8	400	-	-
Region 09 Souris-Red-Rainy .....	61	10,843	14	1,198	7	560	50	9,765	11	(D)	2	(D)
Region 10 Missouri .....	859	205,588	114	30,294	77	20,238	426	103,105	114	21,571	386	85,345
Region 11 Arkansas-White-Red .....	13	4,672	2	(D)	-	-	13	4,672	-	-	-	-
Region 12 Texas-Gulf .....	61	8,795	5	(D)	5	(D)	61	8,795	1	(D)	-	-
Region 13 Rio Grande .....	13	1,647	5	495	5	845	13	1,647	-	-	-	-
Region 14 Upper Colorado .....	58	13,151	1	(D)	1	(D)	-	-	10	1,600	48	11,551
Region 15 Lower Colorado .....	18	3,228	10	1,632	8	1,626	13	1,915	4	(D)	1	(D)
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	1,283	89,247	167	21,556	43	12,093	76	11,275	461	21,296	792	58,355
Region 18 California .....	245	41,230	12	2,602	11	4,942	186	11,303	25	7,510	158	27,963
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Rice												
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>						
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers		
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	
United States .....	2008 ..	5,265	2,683,363	646	292,972	481	214,051	3,861	1,800,236	1,563	549,532	1,058	497,879
	2003 ..	6,836	2,994,757	658	245,595	698	171,939	4,930	1,929,234	1,684	447,305	1,543	634,980
<b>2008 DATA</b>													
Alabama .....		-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....		-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....		2,550	1,303,574	262	125,184	156	64,779	2,237	1,063,876	846	291,364	43	(D)
California .....		1,033	432,208	203	90,072	197	83,338	318	73,598	379	96,621	771	339,468
Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....		-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....		-	-	-	-	-	-	-	-	-	-	-	-
Florida .....		6	11,272	-	-	-	-	-	-	3	1,266	3	10,006
Georgia .....		-	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....		-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....		4	1,750	-	-	-	-	4	(D)	2	(D)	-	-
Indiana .....		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Iowa .....		-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....		-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....		-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....		784	412,691	101	36,904	63	27,770	615	277,149	235	123,228	41	18,982
Maine .....		-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....		-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....		-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....		-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....		-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....		345	201,893	20	(D)	22	15,678	338	194,861	42	16,234	2	(D)
Missouri .....		278	142,450	31	13,458	14	(D)	278	141,945	5	505	-	-
Montana .....		-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....		-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....		-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....		-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....		-	-	-	-	-	-	-	-	-	-	-	-
New York .....		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....		-	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....		-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....		-	-	-	-	-	-	-	-	-	-	-	-
Oregon .....		-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....		-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....		-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....		3	(D)	-	-	-	-	2	(D)	1	(D)	-	-
Texas .....		261	174,565	29	(D)	29	(D)	68	44,827	50	19,584	198	119,938
Utah .....		-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....		-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....		-	-	-	-	-	-	-	-	-	-	-	-
Washington .....		-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....		-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....		-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....		-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>													
Region 01 New England .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....		6	11,272	-	-	-	-	-	-	3	1,266	3	10,006
Region 04 Great Lakes .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Region 06 Tennessee .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....		5	(D)	-	-	-	-	5	(D)	2	(D)	-	-
Region 08 Lower Mississippi .....		3,397	1,812,399	389	170,984	240	101,377	3,036	1,465,230	941	386,462	75	26,828
Region 09 Souris-Red-Rainy .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....		562	248,989	25	(D)	15	(D)	433	213,051	188	45,199	11	1,639
Region 12 Texas-Gulf .....		261	174,565	29	(D)	29	(D)	68	(D)	50	(D)	198	119,938
Region 13 Rio Grande .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....		1,033	432,208	203	90,072	197	83,338	318	73,598	379	96,621	771	339,468
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Other small grains (oats, rye, etc.)											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	2,975	344,195	386	43,628	137	9,259	1,248	162,800	702	101,687	1,453	124,617
2003 ..	2,825	240,264	149	21,646	51	4,473	927	121,692	459	32,951	1,528	(D)
<b>2008 DATA</b>												
Alabama .....	3	194	-	-	-	-	-	-	3	194	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	73	6,595	3	855	-	-	5	1,095	63	3,351	11	3,859
Arkansas .....	61	1,952	-	-	-	-	61	1,952	-	-	-	-
California .....	427	114,973	101	18,377	-	-	296	70,362	230	41,697	141	29,164
Colorado .....	336	21,974	19	3,040	-	-	57	14,295	32	1,913	258	8,186
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Florida .....	25	2,820	2	(D)	-	-	23	2,720	-	-	2	(D)
Georgia .....	214	17,660	51	1,020	-	-	155	13,556	71	5,214	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	269	42,764	-	-	-	-	50	7,116	58	9,036	188	27,412
Illinois .....	4	414	-	-	-	-	4	414	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Iowa .....	3	180	-	-	-	-	3	180	-	-	-	-
Kansas .....	2	(D)	2	(D)	-	-	2	(D)	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	5	540	-	-	-	-	3	(D)	2	(D)	-	-
Minnesota .....	23	1,487	-	-	-	-	19	1,402	4	(D)	-	-
Mississippi .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Missouri .....	3	(D)	-	-	-	-	3	(D)	-	-	-	-
Montana .....	138	13,983	2	(D)	6	190	29	1,380	64	5,730	70	7,153
Nebraska .....	96	6,216	94	(D)	94	(D)	96	6,216	-	-	-	-
Nevada .....	21	2,490	2	(D)	1	(D)	19	2,098	3	592	1	(D)
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	59	11,918	12	2,009	5	1,409	32	10,298	-	-	27	1,630
New York .....	40	5,486	-	-	-	-	-	-	40	5,486	-	-
North Carolina .....	17	1,357	-	-	-	-	8	896	-	-	9	461
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	13	4,194	3	1,514	-	-	10	3,834	8	2,654	-	-
Oregon .....	78	17,029	9	1,356	-	-	38	9,469	17	3,850	31	4,172
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	1	(D)	-	-	-	-	-	-	-	-	1	(D)
South Carolina .....	7	155	-	-	-	-	1	(D)	6	(D)	-	-
South Dakota .....	33	1,118	2	(D)	-	-	1	(D)	5	(D)	27	888
Tennessee .....	1	(D)	-	-	-	-	1	(D)	-	-	-	-
Texas .....	48	4,724	14	(D)	14	(D)	48	4,724	-	-	-	-
Utah .....	598	29,763	18	2,100	9	900	202	3,400	60	14,310	420	12,473
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Washington .....	179	13,687	15	1,972	-	-	48	2,003	4	680	133	11,004
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	18	1,930	5	1,330	-	-	17	1,390	3	540	-	-
Wyoming .....	176	16,165	32	1,506	8	80	13	975	29	6,035	134	17,875
<b>Water Resources Regions</b>												
Region 01 New England .....	1	(D)	-	-	-	-	-	-	-	-	1	(D)
Region 02 Mid-Atlantic .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Region 03 South Atlantic-Gulf .....	289	26,315	53	1,680	-	-	179	16,301	120	11,024	2	(D)
Region 04 Great Lakes .....	9	1,900	-	-	-	-	7	1,560	4	340	-	-
Region 05 Ohio .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Region 06 Tennessee .....	1	(D)	-	-	-	-	1	(D)	-	-	-	-
Region 07 Upper Mississippi .....	42	2,373	5	1,330	-	-	37	2,068	5	310	-	-
Region 08 Lower Mississippi .....	66	3,350	-	-	-	-	66	3,350	-	-	-	-
Region 09 Souris-Red-Rainy .....	4	132	-	-	-	-	4	132	-	-	-	-
Region 10 Missouri .....	452	42,738	150	11,630	108	6,380	160	14,699	96	11,470	221	25,569
Region 11 Arkansas-White-Red .....	36	6,358	4	1,629	-	-	14	4,858	8	2,654	19	2,660
Region 12 Texas-Gulf .....	57	9,999	14	(D)	14	(D)	57	10,009	-	-	-	-
Region 13 Rio Grande .....	100	15,704	11	1,679	4	1,079	48	12,859	19	760	44	2,985
Region 14 Upper Colorado .....	383	7,560	4	(D)	1	(D)	120	(D)	22	1,252	325	5,103
Region 15 Lower Colorado .....	73	6,595	3	855	-	-	5	1,095	63	3,351	11	3,859
Region 16 Great Basin .....	480	30,914	17	2,010	10	1,050	112	4,790	54	14,803	316	11,561
Region 17 Pacific Northwest .....	526	68,587	24	3,328	-	-	133	16,694	73	11,472	356	41,221
Region 18 California .....	452	121,212	101	18,377	-	-	301	72,314	238	44,251	158	31,359
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage)												
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>						
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers		
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	
United States .....	2008 ..	48,315	6,187,983	3,685	859,111	1,819	425,254	12,282	2,379,074	12,016	1,352,443	27,603	2,990,549
	2003 ..	46,179	6,204,874	3,724	731,710	1,481	343,827	13,026	2,395,640	9,103	1,044,074	27,048	2,919,620
<b>2008 DATA</b>													
Alabama .....		4	20	-	-	-	-	-	-	4	20	-	-
Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....		553	280,741	157	127,218	46	22,024	206	86,295	139	47,555	335	189,384
Arkansas .....		-	-	-	-	-	-	-	-	-	-	-	-
California .....		2,808	968,715	332	166,008	416	108,905	1,968	614,488	779	201,776	1,513	491,991
Colorado .....		6,079	631,443	469	54,390	56	6,030	934	171,008	1,292	134,074	4,115	354,673
Connecticut .....		-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....		18	887	-	-	-	-	14	452	4	270	3	165
Florida .....		-	-	-	-	-	-	-	-	-	-	-	-
Georgia .....		53	1,336	3	210	-	-	23	1,021	44	469	-	-
Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....		6,801	823,523	267	41,919	69	24,267	1,131	248,112	1,899	181,458	4,127	406,943
Illinois .....		23	970	-	-	-	-	23	970	-	-	-	-
Indiana .....		76	5,376	-	-	-	-	49	3,996	28	(D)	2	(D)
Iowa .....		21	844	-	-	-	-	21	844	-	-	-	-
Kansas .....		768	176,976	58	43,247	214	78,212	661	170,880	-	-	107	6,931
Kentucky .....		16	(D)	-	-	-	-	2	(D)	7	175	7	(D)
Louisiana .....		4	440	-	-	-	-	-	-	-	-	4	440
Maine .....		-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....		25	1,203	-	-	-	-	13	338	15	874	-	-
Massachusetts .....		-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....		175	14,559	-	-	-	-	98	9,678	118	8,395	-	-
Minnesota .....		342	20,616	16	304	-	-	299	18,276	30	2,023	22	785
Mississippi .....		-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....		16	560	-	-	-	-	2	(D)	14	(D)	-	-
Montana .....		5,061	657,151	339	46,708	21	5,408	102	17,779	1,999	283,393	3,213	367,677
Nebraska .....		2,956	238,408	268	49,353	94	3,760	2,546	210,939	256	7,503	208	21,786
Nevada .....		1,133	304,932	185	51,980	67	24,906	488	207,097	466	57,402	297	64,806
New Hampshire .....		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....		22	390	13	13	-	-	19	278	3	112	-	-
New Mexico .....		3,798	231,913	366	60,487	174	43,030	699	114,362	973	43,718	2,310	101,994
New York .....		7	219	-	-	-	-	3	30	7	144	3	45
North Carolina .....		39	1,046	-	-	-	-	-	-	39	1,046	-	-
North Dakota .....		178	17,627	2	(D)	-	-	53	7,060	61	3,497	70	7,150
Ohio .....		4	535	-	-	-	-	1	(D)	2	(D)	1	(D)
Oklahoma .....		166	21,698	6	3,378	20	2,739	152	18,838	16	2,860	5	900
Oregon .....		2,864	347,117	100	24,657	52	17,800	686	132,631	1,188	91,301	1,113	131,369
Pennsylvania .....		9	569	-	-	-	-	1	(D)	8	(D)	-	-
Rhode Island .....		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....		3	114	-	-	-	-	-	-	3	114	-	-
South Dakota .....		532	62,859	2	(D)	2	(D)	163	12,935	43	9,872	345	40,052
Tennessee .....		4	64	-	-	-	-	-	-	4	64	-	-
Texas .....		849	147,375	171	29,055	146	27,120	494	107,122	69	8,085	355	40,253
Utah .....		7,418	517,526	579	42,436	317	26,712	590	113,846	1,123	95,370	5,889	315,730
Vermont .....		-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....		25	1,062	-	-	-	-	5	325	23	782	7	605
Washington .....		2,152	272,641	164	60,839	93	27,741	403	48,418	627	46,591	1,190	180,350
West Virginia .....		2	(D)	-	-	-	-	-	-	2	(D)	-	-
Wisconsin .....		221	20,734	6	3,163	-	-	186	18,797	44	2,256	-	-
Wyoming .....		3,090	415,474	182	52,886	32	6,340	247	41,628	687	119,088	2,362	266,118
<b>Water Resources Regions</b>													
Region 01 New England .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....		103	4,233	13	13	-	-	55	1,728	57	2,349	13	815
Region 03 South Atlantic-Gulf .....		99	2,516	3	210	-	-	23	1,021	90	1,649	-	-
Region 04 Great Lakes .....		274	21,280	-	-	-	-	166	15,236	152	9,553	2	(D)
Region 05 Ohio .....		33	1,585	-	-	-	-	13	408	12	885	8	292
Region 06 Tennessee .....		4	40	-	-	-	-	2	(D)	2	(D)	-	-
Region 07 Upper Mississippi .....		504	36,371	22	3,467	-	-	444	33,488	69	3,177	5	100
Region 08 Lower Mississippi .....		6	510	-	-	-	-	2	(D)	-	-	4	(D)
Region 09 Souris-Red-Rainy .....		84	6,341	-	-	-	-	64	4,801	5	(D)	19	925
Region 10 Missouri .....		12,650	1,489,418	922	171,501	171	19,157	3,522	371,564	2,676	404,752	6,990	746,995
Region 11 Arkansas-White-Red .....		2,201	387,203	340	63,170	297	83,471	1,203	259,124	203	27,095	836	104,559
Region 12 Texas-Gulf .....		387	77,768	53	16,670	113	25,970	368	75,603	6	2,300	19	2,294
Region 13 Rio Grande .....		3,764	333,905	363	49,139	123	19,862	747	152,193	869	84,588	2,487	134,223
Region 14 Upper Colorado .....		5,405	340,744	212	46,188	65	26,685	122	5,759	1,769	90,189	3,612	256,943
Region 15 Lower Colorado .....		948	323,132	242	145,913	65	35,619	366	99,365	212	51,345	565	217,511
Region 16 Great Basin .....		7,030	742,150	633	83,208	365	50,158	1,391	338,125	1,151	131,655	4,794	306,215
Region 17 Pacific Northwest .....		11,878	1,431,044	538	124,885	201	63,867	1,789	399,996	3,931	327,702	6,642	727,144
Region 18 California .....		2,945	989,743	344	154,747	419	100,465	2,005	620,577	812	214,277	1,607	491,983
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area		All other hay (dry hay, greenchop, and silage)											
		Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
				Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres		
United States .....	2008 ..	29,553	3,351,986	3,525	500,401	616	95,815	7,819	916,199	9,597	1,338,828	14,444	1,430,196
	2003 ..	27,449	3,245,618	3,086	341,005	718	55,515	6,573	758,309	8,471	1,240,942	13,174	1,302,489
<b>2008 DATA</b>													
Alabama .....		63	2,998	2	(D)	2	(D)	9	(D)	55	2,438	1	(D)
Alaska .....		4	842	1	(D)	-	-	4	842	-	-	-	-
Arizona .....		548	61,995	360	54,046	11	2,445	190	23,169	140	5,251	323	41,539
Arkansas .....		117	12,336	-	-	-	-	40	6,800	69	7,336	25	3,000
California .....		3,376	556,013	862	158,091	145	49,214	1,556	332,748	766	149,408	2,080	316,435
Colorado .....		3,358	441,727	164	39,795	22	4,590	543	53,007	857	189,965	2,040	208,552
Connecticut .....		-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....		17	438	-	-	-	-	16	(D)	1	(D)	-	-
Florida .....		306	31,718	80	4,550	7	2,450	283	22,101	93	12,077	2	(D)
Georgia .....		484	37,022	-	-	-	-	162	17,887	344	16,555	6	3,000
Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....		2,209	182,393	306	11,686	8	1,600	205	50,466	426	41,182	1,619	95,765
Illinois .....		5	645	-	-	-	-	5	645	-	-	-	-
Indiana .....		12	786	-	-	-	-	10	(D)	2	(D)	-	-
Iowa .....		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Kansas .....		158	17,453	33	2,279	-	-	127	16,120	31	1,333	-	-
Kentucky .....		16	693	7	420	-	-	-	-	16	693	-	-
Louisiana .....		29	1,620	-	-	-	-	29	1,620	-	-	-	-
Maine .....		-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....		35	1,936	-	-	-	-	30	385	7	1,551	-	-
Massachusetts .....		-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....		-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....		64	2,535	-	-	-	-	52	2,315	10	(D)	2	(D)
Mississippi .....		35	(D)	-	-	-	-	1	(D)	34	(D)	-	-
Missouri .....		90	2,827	-	-	-	-	-	-	90	2,827	-	-
Montana .....		3,008	362,777	359	42,184	63	7,058	17	3,605	1,260	223,688	1,866	140,079
Nebraska .....		515	34,503	-	-	-	-	490	27,653	-	-	25	7,500
Nevada .....		558	192,482	117	17,449	13	3,266	216	31,901	229	120,038	209	45,144
New Hampshire .....		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....		15	581	-	-	-	-	15	581	3	(D)	-	-
New Mexico .....		1,769	93,528	183	15,272	14	1,760	734	61,907	591	12,399	501	26,656
New York .....		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....		640	35,438	89	910	-	-	103	1,313	535	34,237	4	560
North Dakota .....		26	1,295	1	(D)	-	-	5	403	9	480	12	412
Ohio .....		-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....		323	34,981	14	4,727	3	1,920	227	29,423	105	8,368	5	1,060
Oregon .....		3,878	354,232	125	19,164	4	590	717	37,675	1,769	171,222	1,476	150,000
Pennsylvania .....		29	558	-	-	-	-	25	378	4	180	-	-
Rhode Island .....		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....		50	2,505	12	1,114	11	914	13	387	33	1,974	6	264
South Dakota .....		132	10,510	3	(D)	3	(D)	8	884	5	194	122	9,432
Tennessee .....		28	1,118	4	450	-	-	4	85	21	978	3	55
Texas .....		2,298	175,291	266	46,530	108	13,031	1,315	138,980	524	21,213	832	31,639
Utah .....		2,261	126,581	264	8,434	155	1,847	81	12,638	433	23,543	1,767	91,180
Vermont .....		-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....		15	2,129	1	(D)	8	280	-	-	15	2,145	-	-
Washington .....		1,423	149,682	132	31,033	22	2,460	487	31,921	400	23,465	580	96,876
West Virginia .....		-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....		20	2,500	-	-	-	-	15	1,745	9	1,295	5	780
Wyoming .....		1,638	411,808	140	40,010	17	(D)	84	5,286	711	258,833	933	158,693
<b>Water Resources Regions</b>													
Region 01 New England .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....		99	3,588	-	-	-	-	86	1,732	18	1,916	-	-
Region 03 South Atlantic-Gulf .....		1,565	113,551	184	8,394	28	3,764	567	41,963	1,085	71,287	19	5,279
Region 04 Great Lakes .....		15	1,081	-	-	-	-	15	1,081	8	960	-	-
Region 05 Ohio .....		25	947	9	444	-	-	3	(D)	21	907	1	(D)
Region 06 Tennessee .....		28	1,108	2	(D)	-	-	6	(D)	20	888	2	(D)
Region 07 Upper Mississippi .....		62	4,670	-	-	-	-	55	3,265	3	985	5	780
Region 08 Lower Mississippi .....		79	10,210	-	-	-	-	56	8,525	40	6,485	-	-
Region 09 Souris-Red-Rainy .....		26	988	-	-	-	-	14	(D)	10	100	2	(D)
Region 10 Missouri .....		3,987	643,642	289	64,354	25	3,708	959	61,351	1,261	347,301	1,917	250,625
Region 11 Arkansas-White-Red .....		1,937	160,726	115	20,617	49	9,715	629	99,973	385	30,766	950	36,018
Region 12 Texas-Gulf .....		1,852	145,241	263	41,046	71	5,096	1,209	117,068	515	22,590	492	23,571
Region 13 Rio Grande .....		1,477	121,149	115	9,825	5	1,900	647	53,298	405	32,743	530	45,954
Region 14 Upper Colorado .....		3,101	392,631	157	34,985	24	4,610	115	5,410	1,133	205,392	1,879	184,970
Region 15 Lower Colorado .....		626	64,214	362	54,246	11	2,445	192	23,369	142	5,451	397	43,358
Region 16 Great Basin .....		2,212	287,526	355	24,663	168	5,113	305	46,139	586	136,203	1,437	110,265
Region 17 Pacific Northwest .....		8,721	817,493	792	79,468	90	10,250	1,384	114,697	3,171	320,366	4,401	394,345
Region 18 California .....		3,737	582,379	881	161,841	145	49,214	1,573	336,513	794	154,488	2,412	334,856
Region 19 Alaska .....		4	842	1	(D)	-	-	4	842	-	-	-	-
Region 20 Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area		Peanuts for nuts											
		Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
				Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
				Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	2008 ..	2,535	540,577	502	127,898	163	33,842	1,945	480,465	755	87,622	20	3,177
	2003 ..	2,115	(D)	320	57,782	111	10,765	1,701	(D)	561	60,985	11	1,858
<b>2008 DATA</b>													
Alabama .....		53	9,988	-	-	-	-	22	4,799	30	4,195	3	994
Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....		-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....		-	-	-	-	-	-	-	-	-	-	-	-
California .....		-	-	-	-	-	-	-	-	-	-	-	-
Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....		-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....		-	-	-	-	-	-	-	-	-	-	-	-
Florida .....		82	22,014	2	(D)	2	(D)	73	20,084	11	1,930	-	-
Georgia .....		1,268	227,591	38	5,283	34	6,390	862	181,168	562	53,443	-	-
Hawaii .....		2	(D)	-	-	-	-	-	-	-	-	2	(D)
Idaho .....		-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....		-	-	-	-	-	-	-	-	-	-	-	-
Indiana .....		-	-	-	-	-	-	-	-	-	-	-	-
Iowa .....		-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....		-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....		-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Maine .....		-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....		-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....		-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....		-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....		-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....		-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....		-	-	-	-	-	-	-	-	-	-	-	-
Montana .....		-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....		-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....		-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....		-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....		15	(D)	2	(D)	-	-	14	(D)	-	-	1	(D)
New York .....		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....		65	6,031	-	-	-	-	15	(D)	50	4,325	2	(D)
North Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....		-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....		55	9,020	12	1,710	12	2,444	52	8,720	-	-	6	840
Oregon .....		-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....		-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....		114	10,864	-	-	2	(D)	49	9,291	67	3,187	2	(D)
South Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....		-	-	-	-	-	-	-	-	-	-	-	-
Texas .....		862	248,473	448	118,430	113	23,958	854	250,091	21	19,797	-	-
Utah .....		-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....		-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....		18	1,045	-	-	-	-	3	(D)	14	745	4	360
Washington .....		-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....		-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....		-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....		-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>													
Region 01 New England .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....		1,600	277,533	40	6,083	38	7,440	1,024	(D)	734	67,825	11	1,562
Region 04 Great Lakes .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi .....		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Region 09 Souris-Red-Rainy .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....		115	20,285	21	(D)	16	3,804	112	19,985	-	-	6	(D)
Region 12 Texas-Gulf .....		816	(D)	440	116,402	109	22,598	807	242,096	21	19,797	1	(D)
Region 13 Rio Grande .....		1	(D)	1	(D)	-	-	1	(D)	-	-	-	-
Region 14 Upper Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		2	(D)	-	-	-	-	-	-	-	-	2	(D)

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All cotton												
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>						
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers		
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	
United States .....	2008 ..	6,612	3,123,664	1,514	728,494	405	277,388	5,451	2,716,176	983	302,625	911	488,954
	2003 ..	8,615	4,075,124	1,390	645,169	520	259,755	6,929	(D)	951	(D)	1,591	741,542
<b>2008 DATA</b>													
Alabama .....		65	16,789	1	(D)	-	-	19	3,530	39	11,166	11	2,093
Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....		234	142,163	115	63,810	20	13,100	103	53,635	33	16,334	171	103,899
Arkansas .....		643	519,707	32	17,655	32	18,255	607	478,676	57	40,141	7	1,200
California .....		544	266,947	119	138,400	43	105,170	269	238,167	124	47,397	458	264,934
Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....		-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....		-	-	-	-	-	-	-	-	-	-	-	-
Florida .....		8	4,928	3	1,400	2	(D)	8	4,973	-	-	-	-
Georgia .....		903	246,790	56	12,610	27	9,100	711	195,134	284	54,089	-	-
Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....		-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....		-	-	-	-	-	-	-	-	-	-	-	-
Indiana .....		-	-	-	-	-	-	-	-	-	-	-	-
Iowa .....		-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....		22	9,170	9	1,650	-	-	22	9,170	-	-	-	-
Kentucky .....		-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....		146	84,565	7	(D)	7	(D)	131	71,185	20	14,046	1	(D)
Maine .....		-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....		-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....		-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....		-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....		-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....		259	174,147	11	(D)	11	(D)	247	187,045	33	5,012	3	(D)
Missouri .....		290	200,968	26	12,245	36	45,723	290	202,358	-	-	-	-
Montana .....		-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....		-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....		-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....		-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....		158	29,811	26	6,953	8	1,519	139	24,086	17	4,553	24	7,066
New York .....		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....		70	14,156	4	(D)	4	(D)	17	(D)	53	(D)	6	1,472
North Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....		-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....		148	60,033	39	16,029	9	3,870	104	24,818	10	2,175	45	34,380
Oregon .....		-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....		-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....		53	10,585	4	600	2	(D)	48	9,313	9	1,272	-	-
South Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....		30	12,227	2	(D)	-	-	29	(D)	1	(D)	-	-
Texas .....		3,030	1,329,803	1,060	452,383	204	74,852	2,704	1,200,099	294	94,641	185	72,970
Utah .....		-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....		-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....		9	875	-	-	-	-	3	120	9	755	-	-
Washington .....		-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....		-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....		-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....		-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>													
Region 01 New England .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....		1,109	290,680	70	15,740	37	11,350	810	214,384	399	75,728	14	3,046
Region 04 Great Lakes .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....		19	6,604	-	-	-	-	4	1,326	13	4,759	3	519
Region 07 Upper Mississippi .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi .....		1,323	973,925	76	33,529	84	67,527	1,271	938,783	88	53,698	11	2,140
Region 09 Souris-Red-Rainy .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....		739	299,193	178	77,362	32	7,822	681	252,936	64	18,753	46	34,420
Region 12 Texas-Gulf .....		2,459	1,067,907	932	389,924	176	65,440	2,184	990,086	246	81,643	142	29,114
Region 13 Rio Grande .....		183	75,319	24	9,729	13	6,979	127	25,933	16	4,313	64	49,956
Region 14 Upper Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....		245	151,085	124	68,206	25	17,096	105	54,561	33	16,334	182	112,821
Region 16 Great Basin .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....		535	258,951	110	134,004	38	101,174	269	238,167	124	47,397	449	256,938
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area		Sugarbeets for sugar											
		Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
				Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
				Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	2008 ..	1,590	382,267	385	109,975	293	57,254	500	150,984	195	28,782	1,096	220,617
	2003 ..	2,495	561,653	348	97,185	162	47,124	1,285	247,904	303	53,375	1,192	276,380
<b>2008 DATA</b>													
Alabama .....		-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....		-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....		-	-	-	-	-	-	-	-	-	-	-	-
California .....		181	57,251	125	45,422	102	32,462	12	4,112	15	2,465	170	59,036
Colorado .....		199	31,258	71	13,667	49	10,130	77	16,364	41	3,626	116	12,533
Connecticut .....		-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....		-	-	-	-	-	-	-	-	-	-	-	-
Florida .....		-	-	-	-	-	-	-	-	-	-	-	-
Georgia .....		-	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....		456	141,792	34	17,718	8	(D)	224	76,309	38	7,121	273	65,352
Illinois .....		-	-	-	-	-	-	-	-	-	-	-	-
Indiana .....		-	-	-	-	-	-	-	-	-	-	-	-
Iowa .....		-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....		-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....		-	-	-	-	-	-	-	-	-	-	-	-
Louisiana .....		-	-	-	-	-	-	-	-	-	-	-	-
Maine .....		-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....		-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts .....		-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....		18	1,388	-	-	-	-	12	822	5	(D)	2	(D)
Minnesota .....		20	3,313	-	-	-	-	15	2,598	3	(D)	2	(D)
Mississippi .....		-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....		-	-	-	-	-	-	-	-	-	-	-	-
Montana .....		156	24,928	8	(D)	-	-	-	-	9	3,216	147	21,712
Nebraska .....		257	59,553	122	21,470	94	5,170	111	42,148	25	4,875	150	12,530
Nevada .....		-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....		-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....		-	-	-	-	-	-	-	-	-	-	-	-
New York .....		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....		-	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....		58	14,740	4	(D)	4	(D)	-	-	10	2,686	50	12,054
Ohio .....		-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....		-	-	-	-	-	-	-	-	-	-	-	-
Oregon .....		85	11,953	5	(D)	22	2,173	24	2,641	39	3,101	53	7,290
Pennsylvania .....		-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....		-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....		-	-	-	-	-	-	-	-	-	-	-	-
Texas .....		-	-	-	-	-	-	-	-	-	-	-	-
Utah .....		-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....		-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....		-	-	-	-	-	-	-	-	-	-	-	-
Washington .....		4	2,068	4	(D)	4	(D)	-	-	-	-	4	2,068
West Virginia .....		-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....		-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....		156	34,023	12	7,275	10	(D)	25	5,990	10	877	129	27,576
<b>Water Resources Regions</b>													
Region 01 New England .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 04 Great Lakes .....		18	1,388	-	-	-	-	12	822	5	(D)	2	(D)
Region 05 Ohio .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....		15	2,598	-	-	-	-	15	2,598	-	-	-	-
Region 08 Lower Mississippi .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....		9	1,461	-	-	-	-	-	-	7	(D)	2	(D)
Region 10 Missouri .....		822	163,756	217	44,396	157	18,424	213	64,502	91	14,534	592	86,405
Region 11 Arkansas-White-Red .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 12 Texas-Gulf .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....		545	155,813	43	20,157	34	6,368	248	78,950	77	10,222	330	74,710
Region 18 California .....		181	57,251	125	45,422	102	32,462	12	4,112	15	2,465	170	59,036
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

--continued

**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Tobacco, all types											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	811	23,614	62	1,467	25	867	148	3,431	696	20,154	39	1,642
.....2008 ..												
.....2003 ..	1,507	35,059	52	628	31	2,528	314	11,766	1,226	23,467	28	970
<b>2008 DATA</b>												
Alabama .....	-	-	-	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	-	-	-	-	-	-	-	-	-	-	-	-
Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....	17	837	1	(D)	1	(D)	3	(D)	16	392	2	(D)
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Georgia .....	16	1,300	-	-	-	-	-	-	16	1,300	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	1	(D)	-	-	-	-	1	(D)	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	379	8,498	27	800	6	240	92	1,679	293	6,749	35	1,479
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	22	154	-	-	-	-	-	-	22	154	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	-	-	-	-	-	-	-	-	-	-	-	-
New York .....	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....	222	8,488	31	542	16	512	41	586	206	8,102	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	-	-	-	-	-	-	-	-	-	-
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	3	24	-	-	-	-	-	-	3	24	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	3	195	-	-	-	-	3	195	-	-	-	-
South Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....	72	1,444	3	(D)	2	(D)	6	(D)	66	1,266	2	(D)
Texas .....	-	-	-	-	-	-	-	-	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	74	2,167	-	-	-	-	-	-	74	2,167	-	-
Washington .....	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	17	837	1	(D)	1	(D)	3	(D)	16	392	2	(D)
Region 02 Mid-Atlantic .....	25	178	-	-	-	-	-	-	25	178	-	-
Region 03 South Atlantic-Gulf .....	302	12,360	16	(D)	16	(D)	46	1,021	281	11,539	-	-
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio .....	345	8,071	30	840	8	270	32	(D)	305	6,798	28	1,304
Region 06 Tennessee .....	76	1,138	15	30	-	-	27	790	54	432	9	(D)
Region 07 Upper Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi .....	46	1,030	-	-	-	-	40	767	15	815	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 12 Texas-Gulf .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Land in vegetables <sup>2</sup>												
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>						
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers		
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	
United States .....	2008 ..	16,899	3,084,879	4,169	1,422,855	1,746	843,358	7,940	1,789,349	6,395	617,239	4,258	941,493
	2003 ..	15,954	2,068,317	2,507	485,501	889	236,373	8,009	1,040,922	5,003	354,553	4,012	733,231
<b>2008 DATA</b>													
Alabama .....		236	5,218	42	1,510	5	15	115	3,046	95	2,119	34	64
Alaska .....		14	330	-	-	-	-	11	321	3	9	-	-
Arizona .....		95	102,471	35	72,665	17	45,154	28	33,501	12	10,660	77	77,368
Arkansas .....		199	12,054	61	(D)	61	(D)	199	12,054	-	-	-	-
California .....		2,086	911,694	635	371,959	341	265,335	1,272	535,215	390	170,823	1,092	408,244
Colorado .....		468	97,416	112	60,911	93	50,736	196	81,694	106	14,786	254	9,269
Connecticut .....		91	1,030	1	(D)	-	-	47	478	43	444	12	108
Delaware .....		112	16,401	34	2,406	11	1,045	89	12,752	40	3,648	-	-
Florida .....		325	171,644	60	49,542	11	10,337	259	114,713	67	45,276	12	17,106
Georgia .....		753	57,772	90	13,956	30	9,974	308	38,214	496	21,998	-	-
Hawaii .....		392	5,156	23	2,075	17	88	22	689	108	696	265	3,815
Idaho .....		908	356,957	343	120,728	140	66,052	337	147,002	174	48,605	554	165,984
Illinois .....		178	20,627	57	4,704	-	-	170	20,351	8	280	-	-
Indiana .....		212	14,510	45	1,554	6	840	177	12,126	42	1,900	8	532
Iowa .....		46	1,391	3	166	-	-	46	1,391	-	-	-	-
Kansas .....		127	5,428	-	-	-	-	71	3,468	56	1,960	-	-
Kentucky .....		267	1,417	86	725	26	274	63	668	118	535	106	529
Louisiana .....		115	4,616	-	-	-	-	115	4,616	-	-	-	-
Maine .....		88	4,934	-	-	-	-	53	53	27	4,536	10	553
Maryland .....		317	16,953	88	2,958	52	1,795	98	10,265	202	6,607	47	175
Massachusetts .....		128	2,568	7	(D)	7	(D)	51	205	33	1,554	44	809
Michigan .....		670	114,222	72	26,777	17	7,658	463	80,199	307	34,250	2	(D)
Minnesota .....		274	56,747	39	21,203	4	638	250	55,351	48	3,579	17	319
Mississippi .....		68	2,598	-	-	-	-	2	(D)	66	(D)	-	-
Missouri .....		256	21,052	6	6,202	1	(D)	142	20,805	114	247	-	-
Montana .....		79	13,430	21	3,429	9	2,495	14	1,741	44	7,577	31	4,603
Nebraska .....		137	145,848	82	144,082	80	125,118	137	145,848	-	-	-	-
Nevada .....		6	6,189	4	959	4	659	4	(D)	2	(D)	-	-
New Hampshire .....		57	474	2	(D)	-	-	34	(D)	23	307	5	(D)
New Jersey .....		367	31,545	41	4,779	21	2,367	266	21,630	121	9,576	2	(D)
New Mexico .....		200	27,459	28	17,176	10	11,438	56	12,907	142	6,593	23	13,140
New York .....		356	11,314	12	43	1	(D)	214	4,551	106	7,046	55	669
North Carolina .....		416	18,596	80	3,496	116	2,157	53	5,352	389	14,541	-	(D)
North Dakota .....		36	29,633	17	18,807	2	(D)	30	26,943	7	2,402	2	(D)
Ohio .....		276	7,228	29	1,253	2	(D)	137	2,949	138	4,449	23	1,958
Oklahoma .....		94	7,754	3	(D)	3	(D)	89	6,884	6	1,080	2	(D)
Oregon .....		1,123	182,045	619	91,843	134	33,797	673	25,812	259	68,906	288	88,727
Pennsylvania .....		801	10,538	164	1,254	16	159	376	2,688	385	7,594	54	306
Rhode Island .....		34	353	-	-	-	-	8	(D)	23	203	5	(D)
South Carolina .....		287	13,336	62	2,079	7	1,225	87	8,485	200	4,847	4	12
South Dakota .....		38	128	-	-	-	-	33	97	-	-	5	31
Tennessee .....		228	6,609	35	1,090	11	295	93	(D)	99	2,767	71	315
Texas .....		1,344	78,821	656	50,519	307	17,474	457	52,052	873	17,216	20	12,628
Utah .....		376	2,208	4	(D)	4	(D)	7	139	-	-	370	2,069
Vermont .....		30	121	-	-	-	-	20	40	14	82	-	-
Virginia .....		118	11,170	9	45	-	-	39	2,085	81	8,354	6	816
Washington .....		1,601	284,122	370	213,140	172	172,936	138	91,514	786	63,338	754	129,808
West Virginia .....		51	320	6	(D)	1	(D)	31	(D)	29	256	-	-
Wisconsin .....		412	187,461	79	100,617	-	-	353	173,150	113	15,339	4	236
Wyoming .....		7	2,975	7	(D)	7	(D)	7	2,975	-	-	-	-
<b>Water Resources Regions</b>													
Region 01 New England .....		410	9,379	10	161	7	(D)	201	918	157	7,054	76	1,615
Region 02 Mid-Atlantic .....		1,792	89,513	310	11,475	102	5,442	1,009	53,406	772	34,689	112	2,048
Region 03 South Atlantic-Gulf .....		2,014	264,197	299	69,860	164	23,693	813	169,705	1,253	86,595	42	17,178
Region 04 Great Lakes .....		1,142	168,001	150	50,785	19	8,698	749	120,356	478	47,491	70	2,812
Region 05 Ohio .....		771	14,729	152	2,536	33	1,229	296	10,231	375	5,703	140	995
Region 06 Tennessee .....		247	5,606	76	1,716	15	195	79	276	165	5,191	46	180
Region 07 Upper Mississippi .....		784	217,897	141	97,411	4	638	701	205,709	144	14,455	16	297
Region 08 Lower Mississippi .....		412	33,466	66	4,651	61	549	393	33,397	2	(D)	17	52
Region 09 Souris-Red-Rainy .....		42	25,365	10	16,025	2	(D)	33	21,752	11	3,019	4	594
Region 10 Missouri .....		502	198,438	149	166,798	124	137,081	320	180,166	202	15,242	36	4,634
Region 11 Arkansas-White-Red .....		290	28,990	5	8,432	4	4,500	227	24,618	63	(D)	4	(D)
Region 12 Texas-Gulf .....		1,274	56,837	628	40,460	297	7,764	419	40,458	845	13,511	10	2,918
Region 13 Rio Grande .....		382	106,501	135	69,676	80	57,928	208	88,034	184	15,255	59	18,169
Region 14 Upper Colorado .....		242	14,934	8	9,304	8	9,303	3	24	10	1,840	229	13,070
Region 15 Lower Colorado .....		101	106,394	40	75,199	22	47,688	29	34,301	12	10,660	82	80,491
Region 16 Great Basin .....		384	14,881	9	1,536	5	856	15	9,885	3	(D)	376	(D)
Region 17 Pacific Northwest .....		3,579	811,669	1,291	422,724	428	270,817	1,122	259,112	1,214	179,859	1,552	379,270
Region 18 California .....		2,125	912,598	667	372,031	354	264,769	1,290	535,992	394	171,340	1,122	407,854
Region 19 Alaska .....		14	330	-	-	-	-	11	321	3	9	-	-
Region 20 Hawaii .....		392	5,156	23	2,075	17	88	22	689	108	696	265	3,815

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sweet corn											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	4,341	294,855	536	124,220	176	51,662	1,768	156,598	1,990	77,133	724	78,340
2003 ..	4,052	282,158	423	91,559	294	35,236	2,151	142,057	1,150	61,628	993	91,760
<b>2008 DATA</b>												
Alabama .....	79	467	-	-	4	3	44	246	26	232	9	9
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	3	6	3	6	-	-	3	6	-	-	3	6
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	38	23,890	14	5,160	1	(D)	10	9,900	13	12,300	24	9,690
Colorado .....	231	4,744	-	-	-	-	-	-	10	1,840	221	2,904
Connecticut .....	38	213	-	-	-	-	-	-	26	125	12	88
Delaware .....	35	5,760	15	1,367	4	380	30	4,502	8	1,330	-	-
Florida .....	163	30,459	-	-	-	-	143	7,423	18	13,664	8	9,392
Georgia .....	227	15,209	58	2,445	51	15	120	12,081	107	3,133	-	-
Hawaii .....	22	342	1	(D)	-	-	3	310	16	12	3	20
Idaho .....	267	23,286	98	9,515	17	2,318	72	6,492	36	2,838	166	14,614
Illinois .....	73	5,381	17	1,404	-	-	73	5,341	2	(D)	-	-
Indiana .....	83	1,917	16	607	3	600	43	928	40	989	-	-
Iowa .....	14	393	3	166	-	-	14	393	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	121	376	40	200	19	81	41	145	46	180	41	52
Louisiana .....	4	3,402	-	-	-	-	4	3,402	-	-	-	-
Maine .....	11	161	-	-	-	-	-	8	159	5	82	
Maryland .....	131	7,494	12	1,886	2	(D)	51	4,641	90	3,163	3	60
Massachusetts .....	33	1,606	14	301	14	826	-	-	26	871	7	735
Michigan .....	183	3,783	4	1,450	2	(D)	80	2,639	129	(D)	2	(D)
Minnesota .....	139	9,300	18	457	2	(D)	120	11,009	6	710	15	2
Mississippi .....	68	2,532	-	-	-	-	2	(D)	66	(D)	-	-
Missouri .....	38	114	-	-	-	-	38	114	-	-	-	-
Montana .....	9	7	-	-	-	-	-	-	4	3	5	4
Nebraska .....	51	34	-	-	-	-	51	34	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	25	310	-	-	-	-	8	25	17	246	5	40
New Jersey .....	115	3,599	7	298	4	132	54	1,853	66	2,084	-	-
New Mexico .....	139	(D)	2	(D)	2	(D)	1	(D)	130	258	14	302
New York .....	162	2,455	-	-	-	-	118	985	40	1,475	9	173
North Carolina .....	188	1,587	4	360	-	-	1	(D)	188	(D)	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	85	1,187	-	-	-	-	63	1,170	22	777	3	74
Oklahoma .....	43	610	-	-	-	-	43	820	-	-	2	(D)
Oregon .....	110	16,474	19	5,295	5	5,155	59	3,391	26	1,919	34	11,164
Pennsylvania .....	207	2,060	39	224	2	(D)	96	613	117	1,665	-	-
Rhode Island .....	8	80	-	-	-	-	-	-	4	72	4	8
South Carolina .....	144	901	-	-	-	-	49	303	96	598	-	-
South Dakota .....	38	60	-	-	-	-	33	59	-	-	5	1
Tennessee .....	79	159	20	95	-	-	27	27	26	111	26	30
Texas .....	24	24	-	-	-	-	24	24	-	-	-	-
Utah .....	4	(D)	-	-	-	-	3	15	-	-	1	(D)
Vermont .....	6	1	-	-	-	-	-	-	6	1	-	-
Virginia .....	46	2,405	-	-	-	-	13	55	27	1,912	6	439
Washington .....	626	66,522	82	55,470	42	40,458	46	21,251	500	19,735	91	27,985
West Virginia .....	17	93	1	(D)	1	(D)	6	(D)	11	(D)	-	-
Wisconsin .....	214	54,718	49	37,211	1	(D)	182	53,764	37	1,984	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	115	2,370	14	301	14	826	8	25	81	1,472	33	953
Region 02 Mid-Atlantic .....	617	21,682	74	3,845	13	1,535	321	12,207	312	9,927	11	549
Region 03 South Atlantic-Gulf .....	880	48,306	62	2,805	55	18	364	20,240	507	18,709	17	9,401
Region 04 Great Lakes .....	364	18,274	19	8,639	3	51	202	14,975	188	3,613	10	221
Region 05 Ohio .....	264	2,323	56	807	22	681	120	1,687	110	1,395	43	76
Region 06 Tennessee .....	65	811	20	95	-	-	18	62	29	744	18	14
Region 07 Upper Mississippi .....	361	58,323	70	31,964	2	(D)	325	59,065	28	2,367	15	2
Region 08 Lower Mississippi .....	25	5,832	-	-	-	-	17	5,816	-	-	8	16
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	105	187	2	(D)	-	-	91	180	4	3	10	5
Region 11 Arkansas-White-Red .....	81	724	-	-	-	-	81	934	-	-	2	(D)
Region 12 Texas-Gulf .....	24	24	-	-	-	-	24	24	-	-	-	-
Region 13 Rio Grande .....	137	(D)	-	-	-	-	1	(D)	130	258	12	300
Region 14 Upper Colorado .....	233	4,746	2	(D)	2	(D)	-	-	10	1,840	223	2,906
Region 15 Lower Colorado .....	3	6	3	6	-	-	3	6	-	-	3	6
Region 16 Great Basin .....	4	(D)	-	-	-	-	3	(D)	-	-	1	(D)
Region 17 Pacific Northwest .....	1,003	106,282	199	70,280	64	47,931	177	31,134	562	24,492	291	53,763
Region 18 California .....	38	23,890	14	5,160	1	(D)	10	9,900	13	12,300	24	9,690
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	22	342	1	(D)	-	-	3	310	16	12	3	20

See footnote(s) at end of table.

--continued



**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area		Tomatoes											
		Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
				Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
				Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	2008 ..	5,937	305,565	1,333	156,256	654	79,990	2,584	190,580	2,323	75,905	1,401	143,649
	2003 ..	6,101	426,656	829	81,971	323	31,156	2,970	213,337	1,951	128,955	1,378	169,686
<b>2008 DATA</b>													
Alabama .....		109	1,125	18	190	11	156	65	327	40	809	8	6
Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....		-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....		121	2,349	61	(D)	61	(D)	121	2,349	-	-	-	-
California .....		1,272	234,041	206	115,165	121	68,997	645	133,736	189	63,095	749	139,057
Colorado .....		193	386	-	-	-	-	-	-	-	-	193	386
Connecticut .....		43	70	-	-	-	-	14	(D)	29	(D)	-	-
Delaware .....		8	18	2	(D)	-	-	2	(D)	6	(D)	-	-
Florida .....		26	37,617	15	30,259	5	4,917	21	34,713	4	2,874	2	(D)
Georgia .....		129	2,496	51	(D)	51	(D)	113	2,401	16	95	-	-
Hawaii .....		96	852	7	146	2	(D)	16	105	35	13	45	1,908
Idaho .....		-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....		26	27	13	26	-	-	26	27	-	-	-	-
Indiana .....		92	3,979	26	4	-	-	62	3,876	30	(D)	1	(D)
Iowa .....		34	34	-	-	-	-	29	29	5	5	-	-
Kansas .....		56	39	-	-	-	-	56	39	-	-	-	-
Kentucky .....		168	399	66	264	26	29	49	382	53	96	73	236
Louisiana .....		107	58	-	-	-	-	107	58	-	-	-	-
Maine .....		7	4	-	-	-	-	-	7	4	2	(D)	-
Maryland .....		73	426	5	108	-	-	23	222	48	199	3	6
Massachusetts .....		47	132	14	84	7	14	21	78	26	54	-	-
Michigan .....		315	6,286	13	3,500	11	3,300	207	4,959	106	1,367	2	(D)
Minnesota .....		50	75	16	41	-	-	36	68	14	7	-	-
Mississippi .....		66	7	-	-	-	-	-	66	7	-	-	-
Missouri .....		81	56	-	-	-	-	43	48	38	8	-	-
Montana .....		9	2	-	-	-	-	-	-	4	(D)	5	2
Nebraska .....		-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....		-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....		43	31	3	2	-	-	28	(D)	10	(D)	5	(D)
New Jersey .....		185	1,997	40	722	30	263	127	1,634	59	414	-	-
New Mexico .....		13	25	-	-	-	-	1	(D)	6	1	12	25
New York .....		253	432	35	7	-	-	184	266	65	218	4	16
North Carolina .....		138	852	118	540	4	80	4	80	134	772	-	-
North Dakota .....		-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....		162	2,127	17	129	1	(D)	75	1,881	82	894	7	302
Oklahoma .....		78	298	-	-	-	-	78	298	-	-	-	-
Oregon .....		3	15	3	15	3	45	-	-	3	15	-	-
Pennsylvania .....		425	1,821	125	242	25	50	217	467	203	1,335	9	53
Rhode Island .....		16	33	-	-	-	-	7	7	9	26	-	-
South Carolina .....		90	2,837	14	1,504	4	1,150	6	1,850	83	(D)	2	(D)
South Dakota .....		35	(D)	-	-	-	-	33	(D)	-	-	2	(D)
Tennessee .....		168	1,888	41	1,095	12	167	54	113	70	1,687	60	90
Texas .....		303	256	303	256	279	112	-	-	303	256	-	-
Utah .....		1	(D)	-	-	-	-	-	-	-	-	1	(D)
Vermont .....		11	1	-	-	-	-	9	1	2	(D)	-	-
Virginia .....		61	886	9	14	-	-	23	450	36	433	3	3
Washington .....		703	1,511	106	1,378	-	-	-	490	123	-	213	1,389
West Virginia .....		43	41	6	6	1	(D)	17	23	26	18	-	-
Wisconsin .....		78	23	-	-	-	-	65	22	26	13	-	-
Wyoming .....		-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>													
Region 01 New England .....		160	271	17	86	7	14	74	143	81	122	7	(D)
Region 02 Mid-Atlantic .....		839	5,214	198	1,075	56	316	501	3,003	336	2,306	9	54
Region 03 South Atlantic-Gulf .....		527	44,109	188	31,992	75	6,313	208	39,267	310	4,821	11	87
Region 04 Great Lakes .....		507	8,578	36	3,606	12	3,440	334	6,267	179	2,107	7	265
Region 05 Ohio .....		473	3,198	106	444	27	69	176	3,391	208	735	98	339
Region 06 Tennessee .....		181	2,481	73	1,479	11	127	52	(D)	109	2,289	40	46
Region 07 Upper Mississippi .....		196	1,732	29	67	-	-	126	1,637	70	22	1	(D)
Region 08 Lower Mississippi .....		245	2,504	61	(D)	61	(D)	237	2,496	-	-	8	8
Region 09 Souris-Red-Rainy .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....		91	53	-	-	-	-	80	51	4	(Z)	7	2
Region 11 Arkansas-White-Red .....		134	337	-	-	-	-	134	337	-	-	-	-
Region 12 Texas-Gulf .....		279	112	279	(D)	279	(D)	-	-	279	112	-	-
Region 13 Rio Grande .....		37	(D)	24	144	-	-	1	(D)	30	145	12	25
Region 14 Upper Colorado .....		193	386	-	-	-	-	-	-	-	-	193	386
Region 15 Lower Colorado .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....		1	(D)	-	-	-	-	-	-	-	-	1	(D)
Region 17 Pacific Northwest .....		706	1,526	109	1,393	3	45	-	-	493	138	213	1,389
Region 18 California .....		1,272	234,041	206	115,165	121	68,997	645	133,736	189	63,095	749	139,057
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		96	852	7	146	2	(D)	16	105	35	13	45	1,908

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Lettuce and romaine											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	2,203	255,880	275	120,864	180	80,968	1,050	146,038	923	34,835	335	98,559
2003 ..	2,051	276,426	173	103,397	94	(D)	1,258	166,285	659	11,168	162	111,269
<b>2008 DATA</b>												
Alabama .....	13	5	-	-	-	-	4	1	9	5	-	-
Alaska .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Arizona .....	33	38,310	19	26,551	8	13,273	6	6,268	4	4,260	29	35,110
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	439	200,470	166	91,622	58	65,579	355	128,299	62	25,231	114	62,547
Colorado .....	6	4,471	2	(D)	2	(D)	6	4,471	-	-	-	-
Connecticut .....	13	16	-	-	-	-	-	-	13	16	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	74	8,581	-	-	-	-	73	(D)	1	(D)	-	-
Georgia .....	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....	96	184	2	(D)	2	(D)	-	-	49	62	47	133
Idaho .....	-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	13	26	13	26	-	-	13	26	-	-	-	-
Indiana .....	13	3	-	-	-	-	-	-	13	3	-	-
Iowa .....	8	2	-	-	-	-	8	2	-	-	-	-
Kansas .....	56	6	-	-	-	-	56	6	-	-	-	-
Kentucky .....	27	16	13	(D)	13	(D)	7	1	-	-	20	16
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	2	(D)	-	-	-	-	-	-	2	(D)	-	-
Maryland .....	2	(D)	2	(D)	-	-	-	-	2	(D)	-	-
Massachusetts .....	19	26	-	-	-	-	7	7	12	19	-	-
Michigan .....	85	688	-	-	-	-	35	46	50	642	-	-
Minnesota .....	31	23	14	1	-	-	31	23	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-	-	-	-
Montana .....	5	1	-	-	-	-	-	-	4	(Z)	1	(D)
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	17	8	-	-	-	-	6	2	11	6	-	-
New Jersey .....	94	918	10	330	7	230	76	765	18	156	-	-
New Mexico .....	10	690	8	450	-	-	10	690	2	(D)	2	(D)
New York .....	180	494	1	(D)	1	(D)	164	322	14	29	4	(D)
North Carolina .....	89	21	-	-	89	21	4	4	85	17	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	25	(D)	-	-	-	-	12	2	12	(D)	2	(D)
Oklahoma .....	38	8	-	-	-	-	38	8	-	-	-	-
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	80	134	3	1	-	-	71	(D)	9	(D)	-	-
Rhode Island .....	19	9	-	-	-	-	10	8	9	2	-	-
South Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....	5	1	-	-	-	-	5	1	-	-	-	-
Tennessee .....	22	(D)	9	3	-	-	2	(D)	11	(D)	9	3
Texas .....	-	-	-	-	-	-	-	-	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont .....	14	(D)	-	-	-	-	8	1	6	(D)	-	-
Virginia .....	9	27	-	-	-	-	9	27	-	-	-	-
Washington .....	596	182	-	-	-	-	-	-	489	171	107	11
West Virginia .....	16	5	-	-	-	-	6	3	10	2	-	-
Wisconsin .....	52	18	13	13	-	-	26	4	26	14	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	78	64	-	-	-	-	31	17	47	47	-	-
Region 02 Mid-Atlantic .....	295	1,500	16	333	8	231	243	1,096	50	266	4	(D)
Region 03 South Atlantic-Gulf .....	167	8,603	-	-	89	21	81	(D)	86	(D)	-	-
Region 04 Great Lakes .....	160	1,210	13	13	-	-	91	(D)	68	909	2	(D)
Region 05 Ohio .....	123	89	13	(D)	13	(D)	72	63	31	10	20	16
Region 06 Tennessee .....	27	9	9	3	-	-	-	-	18	6	9	3
Region 07 Upper Mississippi .....	61	(D)	27	27	-	-	48	(D)	13	1	-	-
Region 08 Lower Mississippi .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	14	3	-	-	-	-	9	3	4	(Z)	1	(D)
Region 11 Arkansas-White-Red .....	94	13	-	-	-	-	94	13	-	-	-	-
Region 12 Texas-Gulf .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....	16	5,161	10	2,281	2	(D)	16	5,161	2	(D)	2	(D)
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	34	38,899	20	27,140	9	13,862	6	6,268	4	4,260	30	35,699
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	596	182	-	-	-	-	-	-	489	171	107	11
Region 18 California .....	438	199,881	165	91,033	57	64,990	355	128,299	62	25,231	113	61,958
Region 19 Alaska .....	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Region 20 Hawaii .....	96	184	2	(D)	2	(D)	-	-	49	62	47	133

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Potatoes											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	2008 .. 3,727	974,606	981	579,985	628	412,045	1,752	607,779	1,536	131,500	861	259,898
.....	2003 .. 3,126	1,032,155	1,187	483,941	863	294,243	1,753	637,331	573	126,035	1,189	284,200
<b>2008 DATA</b>												
Alabama .....	13	10	-	-	-	-	9	9	4	4	-	-
Alaska .....	3	(D)	-	-	-	-	3	(D)	-	-	-	-
Arizona .....	4	2,421	3	903	-	-	3	481	-	-	4	2,336
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	122	43,304	34	26,531	29	22,491	88	20,573	10	5,660	100	20,582
Colorado .....	137	53,878	96	44,827	67	40,584	134	50,542	33	5,603	31	4,043
Connecticut .....	20	12	-	-	-	-	-	-	10	2	10	10
Delaware .....	8	1,283	-	-	-	-	7	649	4	634	-	-
Florida .....	45	26,343	2	(D)	2	(D)	38	21,651	9	5,423	2	(D)
Georgia .....	103	62	51	(D)	51	(D)	51	10	52	52	-	-
Hawaii .....	24	2	-	-	-	-	-	-	24	2	-	-
Idaho .....	520	286,937	226	119,607	114	76,026	214	126,057	99	41,101	311	124,305
Illinois .....	15	(D)	1	(D)	-	-	15	(D)	-	-	-	-
Indiana .....	22	639	3	(D)	3	(D)	5	620	17	19	-	-
Iowa .....	11	287	-	-	-	-	11	287	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	55	48	13	19	6	12	21	25	27	25	14	2
Louisiana .....	53	53	-	-	-	-	53	53	-	-	-	-
Maine .....	14	(D)	-	-	-	-	-	-	12	2,222	2	(D)
Maryland .....	18	724	-	-	-	-	9	224	10	500	-	-
Massachusetts .....	14	14	-	-	-	-	7	7	7	7	-	-
Michigan .....	226	42,363	13	9,549	4	1,495	162	36,616	88	6,369	2	(D)
Minnesota .....	127	37,642	21	20,227	-	-	108	35,594	21	2,048	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	121	9,927	3	4,002	-	-	45	9,881	76	46	-	-
Montana .....	66	11,943	9	2,531	9	2,495	14	1,741	32	6,061	30	4,592
Nebraska .....	86	145,814	82	144,082	80	125,118	86	145,814	-	-	-	-
Nevada .....	3	(D)	2	(D)	2	(D)	1	(D)	2	(D)	-	-
New Hampshire .....	15	7	-	-	-	-	5	(D)	10	(D)	-	-
New Jersey .....	99	1,156	23	258	13	3	57	815	43	340	-	-
New Mexico .....	3	(D)	3	(D)	3	(D)	1	(D)	-	-	2	(D)
New York .....	62	2,094	-	-	-	-	50	1,634	11	(D)	2	(D)
North Carolina .....	117	65	-	-	-	-	-	-	117	65	-	-
North Dakota .....	30	28,353	16	18,237	2	(D)	24	25,813	7	2,402	2	(D)
Ohio .....	25	30	-	-	-	-	23	16	2	(D)	2	(D)
Oklahoma .....	78	684	2	(D)	2	(D)	78	684	-	-	-	-
Oregon .....	192	46,806	132	20,715	112	19,887	42	8,812	10	4,612	157	34,462
Pennsylvania .....	132	2,382	2	(D)	2	(D)	57	92	75	2,304	-	-
Rhode Island .....	5	(D)	-	-	-	-	-	4	1	1	1	(D)
South Carolina .....	97	58	-	-	-	-	45	45	52	13	-	-
South Dakota .....	33	10	-	-	-	-	31	(D)	-	-	2	(D)
Tennessee .....	37	25	8	2	-	-	16	2	29	24	8	1
Texas .....	8	5,083	7	4,832	-	-	8	5,083	-	-	-	-
Utah .....	2	(D)	1	(D)	1	(D)	-	-	-	-	2	(D)
Vermont .....	10	1	-	-	-	-	8	1	2	(D)	-	-
Virginia .....	28	3,080	-	-	-	-	7	492	24	6,188	-	-
Washington .....	720	142,357	184	117,013	119	108,670	72	53,497	521	31,274	175	59,181
West Virginia .....	14	5	5	2	-	-	-	-	14	5	-	-
Wisconsin .....	183	57,287	32	30,798	-	-	137	49,815	78	7,974	2	(D)
Wyoming .....	7	2,975	7	(D)	7	(D)	7	2,975	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	76	2,619	-	-	-	-	20	(D)	43	2,234	13	373
Region 02 Mid-Atlantic .....	318	9,120	25	260	15	5	186	(D)	138	8,973	2	(D)
Region 03 South Atlantic-Gulf .....	386	26,552	53	(D)	53	(D)	143	21,715	245	5,571	2	(D)
Region 04 Great Lakes .....	356	55,030	24	17,953	4	1,495	237	48,093	159	7,591	4	188
Region 05 Ohio .....	99	1,202	21	321	9	312	37	340	55	(D)	16	18
Region 06 Tennessee .....	35	21	8	2	-	-	16	2	27	20	8	1
Region 07 Upper Mississippi .....	257	75,319	40	38,851	-	-	186	67,450	88	8,339	-	-
Region 08 Lower Mississippi .....	60	9,915	3	4,002	-	-	60	9,915	-	-	-	-
Region 09 Souris-Red-Rainy .....	40	(D)	10	16,025	2	(D)	31	21,312	11	(D)	2	(D)
Region 10 Missouri .....	266	177,037	108	158,859	97	131,277	212	165,920	52	7,197	32	4,593
Region 11 Arkansas-White-Red .....	117	4,654	3	(D)	2	(D)	79	4,616	38	38	-	-
Region 12 Texas-Gulf .....	8	1,214	7	963	1	(D)	8	1,214	-	-	-	-
Region 13 Rio Grande .....	117	52,543	95	44,138	66	39,895	114	49,663	14	4,957	31	4,043
Region 14 Upper Colorado .....	2	(D)	2	(D)	2	(D)	-	-	-	-	2	(D)
Region 15 Lower Colorado .....	4	2,421	3	903	-	-	3	481	-	-	4	2,336
Region 16 Great Basin .....	14	12,593	8	1,764	3	256	9	8,746	3	(D)	11	(D)
Region 17 Pacific Northwest .....	1,382	465,108	505	253,648	330	202,882	302	183,150	628	76,264	599	212,896
Region 18 California .....	163	46,868	66	28,710	44	24,192	106	21,350	11	5,910	135	23,119
Region 19 Alaska .....	3	(D)	-	-	-	-	3	(D)	-	-	-	-
Region 20 Hawaii .....	24	2	-	-	-	-	-	-	24	2	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Berries, bearing and non-bearing											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	9,021	222,857	1,207	88,816	781	62,635	4,575	159,134	3,810	71,597	955	11,992
2003 .....	7,961	225,475	1,537	55,854	954	26,413	3,411	98,547	4,121	100,550	866	28,647
<b>2008 DATA</b>												
Alabama .....	111	394	20	67	12	45	77	329	22	56	12	9
Alaska .....	3	3	-	-	-	-	3	3	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-
California .....	1,138	74,362	194	55,533	128	38,652	737	70,567	5	2,674	458	3,830
Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....	44	143	1	(D)	-	-	23	25	21	118	-	-
Delaware .....	9	57	1	(D)	4	40	4	16	5	41	-	-
Florida .....	612	10,184	61	5,391	-	-	583	8,299	29	1,885	-	-
Georgia .....	351	23,967	69	4,296	-	-	298	19,585	83	4,383	-	-
Hawaii .....	12	1	-	-	-	-	-	-	12	1	-	-
Idaho .....	1	(D)	-	-	-	-	-	-	-	-	1	(D)
Illinois .....	61	145	-	-	-	-	61	106	13	39	-	-
Indiana .....	40	336	13	56	-	-	27	281	13	56	-	-
Iowa .....	23	98	-	-	-	-	9	1	9	92	5	5
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	106	179	26	33	7	2	41	91	19	25	46	65
Louisiana .....	53	53	-	-	-	-	53	53	-	-	-	-
Maine .....	114	8,082	5	39	1	(D)	62	(D)	48	4,382	12	155
Maryland .....	47	120	29	26	-	-	11	68	33	49	3	3
Massachusetts .....	545	13,883	143	5,048	331	10,519	135	1,223	402	12,160	15	506
Michigan .....	451	16,054	58	1,807	22	1,122	256	8,256	250	8,078	-	-
Minnesota .....	132	798	14	3	-	-	101	302	43	553	2	(D)
Mississippi .....	65	1,950	65	780	-	-	65	1,950	-	-	-	-
Missouri .....	38	4	-	-	-	-	-	-	38	4	-	-
Montana .....	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	52	119	3	1	-	-	27	(D)	22	77	4	(D)
New Jersey .....	199	11,391	32	2,622	22	1,947	140	15,917	72	3,514	-	-
New Mexico .....	-	-	-	-	-	-	-	-	-	-	-	-
New York .....	218	1,195	17	132	12	78	116	339	88	704	16	155
North Carolina .....	385	8,110	113	(D)	113	(D)	32	1,660	296	6,401	85	85
North Dakota .....	7	105	-	105	-	-	7	105	-	-	-	-
Ohio .....	116	373	29	38	4	36	23	992	91	268	2	(D)
Oklahoma .....	76	114	-	-	-	-	38	76	-	-	38	38
Oregon .....	1,082	17,275	96	8,608	83	(D)	521	10,036	560	3,648	24	3,601
Pennsylvania .....	311	776	93	94	-	-	106	255	182	492	25	31
Rhode Island .....	10	136	1	(D)	1	(D)	1	(D)	5	119	4	(D)
South Carolina .....	80	228	23	118	8	80	59	151	18	55	10	22
South Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....	157	314	42	152	1	(D)	59	73	51	141	55	108
Texas .....	558	4,046	-	-	-	-	279	3,906	279	140	-	-
Utah .....	84	84	-	-	-	-	-	-	-	-	84	84
Vermont .....	38	208	5	(D)	5	(D)	12	31	26	177	-	-
Virginia .....	122	567	9	9	-	-	108	457	14	110	-	-
Washington .....	1,107	(D)	8	1,487	2	(D)	355	1,990	751	3,046	9	(D)
West Virginia .....	46	113	9	37	2	(D)	11	55	40	64	-	-
Wisconsin .....	417	21,444	21	650	23	1,060	135	3,911	270	18,046	45	2,810
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	776	22,476	153	5,189	333	10,634	248	9,277	509	16,970	35	681
Region 02 Mid-Atlantic .....	765	13,124	147	2,831	40	2,036	450	16,927	327	4,244	3	3
Region 03 South Atlantic-Gulf .....	1,598	44,923	348	12,219	129	1,693	1,105	31,964	459	12,884	99	111
Region 04 Great Lakes .....	669	17,316	69	1,889	26	1,170	365	8,559	345	8,887	16	155
Region 05 Ohio .....	367	1,162	107	188	12	(D)	116	1,402	175	542	81	108
Region 06 Tennessee .....	140	246	43	115	5	(D)	62	59	41	113	45	83
Region 07 Upper Mississippi .....	554	22,055	35	653	23	1,060	220	4,175	347	18,448	47	2,858
Region 08 Lower Mississippi .....	74	111	-	-	-	-	64	89	-	-	10	22
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	17	111	7	105	-	-	12	106	-	-	5	5
Region 11 Arkansas-White-Red .....	76	114	-	-	-	-	38	76	-	-	38	38
Region 12 Texas-Gulf .....	558	4,046	-	-	-	-	279	3,906	279	140	-	-
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	84	84	-	-	-	-	-	-	-	-	84	84
Region 17 Pacific Northwest .....	2,190	22,724	104	10,095	85	7,328	876	12,026	1,311	6,694	34	4,014
Region 18 California .....	1,138	74,362	194	55,533	128	38,652	737	70,567	5	2,674	458	3,830
Region 19 Alaska .....	3	3	-	-	-	-	3	3	-	-	-	-
Region 20 Hawaii .....	12	1	-	-	-	-	-	-	12	1	-	-

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Land in bearing and non-bearing orchards, vineyards, and nut trees												
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>						
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers		
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	
United States .....	2008 ..	57,184	3,733,339	16,839	1,940,094	7,773	596,354	30,196	2,417,543	9,778	602,304	22,521	1,128,498
	2003 ..	57,820	4,098,357	10,927	1,254,804	5,781	488,557	31,221	2,380,538	7,685	512,318	23,227	1,448,357
<b>2008 DATA</b>													
Alabama .....		155	1,286	21	72	4	3	96	903	30	326	29	59
Alaska .....		3	9	-	-	-	-	3	9	-	-	-	-
Arizona .....		670	30,745	392	16,794	164	8,876	225	9,984	77	10,335	368	10,426
Arkansas .....		180	420	-	-	60	120	-	-	120	300	60	120
California .....		32,651	2,546,785	12,639	1,702,494	6,010	521,644	19,142	1,770,041	4,259	317,026	13,683	810,423
Colorado .....		772	2,123	-	-	-	-	-	-	386	965	386	1,158
Connecticut .....		43	262	-	-	-	-	5	(D)	37	148	1	(D)
Delaware .....		-	-	-	-	-	-	-	-	-	-	-	-
Florida .....		3,887	522,632	834	123,998	351	36,618	3,032	373,426	729	140,513	242	25,970
Georgia .....		721	79,780	81	4,994	27	4,548	635	66,185	106	15,295	-	-
Hawaii .....		480	6,653	33	4,040	14	(D)	49	2,929	101	2,244	333	1,761
Idaho .....		420	8,403	9	4,077	-	-	411	4,326	9	558	9	3,519
Illinois .....		48	525	-	-	-	-	48	525	-	-	-	-
Indiana .....		20	249	-	-	-	-	20	249	-	-	-	-
Iowa .....		14	72	-	-	-	-	14	72	-	-	-	-
Kansas .....		31	304	-	-	-	-	31	304	-	-	-	-
Kentucky .....		40	270	7	(D)	7	(D)	2	(D)	19	190	26	(D)
Louisiana .....		232	1,855	53	212	-	-	71	2,639	-	-	161	296
Maine .....		32	633	-	-	-	-	2	(D)	32	617	-	-
Maryland .....		49	664	3	6	-	-	33	210	18	466	-	-
Massachusetts .....		27	427	-	-	6	6	7	21	20	406	-	-
Michigan .....		327	12,519	14	2,170	-	-	253	11,338	86	1,181	-	-
Minnesota .....		94	1,003	-	-	-	-	79	975	15	30	-	-
Mississippi .....		131	530	-	-	-	-	65	455	1	(D)	65	(D)
Missouri .....		38	2,090	-	-	-	-	38	2,090	-	-	-	-
Montana .....		145	290	-	-	-	-	-	-	145	290	-	-
Nebraska .....		240	720	-	-	-	-	240	720	-	-	-	-
Nevada .....		64	589	49	49	-	-	62	(D)	-	-	2	(D)
New Hampshire .....		18	58	-	-	-	-	10	(D)	7	42	1	(D)
New Jersey .....		83	4,273	19	181	13	72	41	2,928	48	1,345	-	-
New Mexico .....		2,896	68,806	1,233	14,886	331	2,862	1,480	58,751	667	13,964	900	30,347
New York .....		150	5,413	49	1,060	33	479	70	1,224	35	3,186	49	1,121
North Carolina .....		172	2,153	-	-	-	-	31	1,548	141	1,537	-	-
North Dakota .....		12	39	-	-	-	-	12	39	-	-	-	-
Ohio .....		58	977	-	-	2	(D)	45	1,517	23	348	-	-
Oklahoma .....		249	1,531	38	(D)	38	(D)	209	875	2	(D)	77	269
Oregon .....		1,525	33,404	540	2,730	265	326	284	956	504	2,675	740	29,783
Pennsylvania .....		249	3,251	6	129	25	48	163	(D)	88	1,774	2	(D)
Rhode Island .....		24	158	-	-	-	-	10	(D)	12	52	2	(D)
South Carolina .....		209	9,843	2	(D)	-	-	144	5,785	71	3,943	5	115
South Dakota .....		2	(D)	-	-	-	-	-	-	-	-	2	(D)
Tennessee .....		78	434	3	8	1	(D)	41	247	20	186	33	(D)
Texas .....		3,026	87,682	284	11,304	279	279	1,544	25,941	855	25,185	695	43,111
Utah .....		829	4,602	-	-	-	-	107	2,870	3	15	742	1,717
Vermont .....		18	159	-	-	-	-	9	28	10	131	-	-
Virginia .....		240	1,169	-	-	-	-	149	405	50	436	41	328
Washington .....		5,659	286,697	528	50,380	130	20,015	1,160	64,475	1,008	55,602	3,860	167,566
West Virginia .....		21	118	2	(D)	-	-	7	47	16	72	-	-
Wisconsin .....		145	651	-	-	13	13	117	244	28	408	-	-
Wyoming .....		7	70	-	-	-	-	-	-	-	-	7	70
<b>Water Resources Regions</b>													
Region 01 New England .....		146	1,562	-	-	6	6	34	262	110	1,289	4	(D)
Region 02 Mid-Atlantic .....		581	11,324	40	854	40	413	381	5,820	172	5,193	43	360
Region 03 South Atlantic-Gulf .....		5,264	615,299	930	129,339	378	41,166	4,034	448,047	1,109	161,042	268	26,121
Region 04 Great Lakes .....		529	16,466	51	2,670	31	186	356	12,214	151	3,427	47	908
Region 05 Ohio .....		147	1,044	11	98	9	6	85	1,165	42	484	28	283
Region 06 Tennessee .....		96	1,684	9	16	5	8	52	584	27	1,084	33	(D)
Region 07 Upper Mississippi .....		204	1,947	-	-	13	13	174	1,836	30	(D)	-	-
Region 08 Lower Mississippi .....		373	2,097	53	212	60	120	78	2,678	1	(D)	294	489
Region 09 Souris-Red-Rainy .....		7	14	-	-	-	-	7	14	-	-	-	-
Region 10 Missouri .....		289	1,191	-	-	-	-	280	1,105	-	-	9	86
Region 11 Arkansas-White-Red .....		997	6,919	366	(D)	366	(D)	248	2,969	184	1,114	604	2,953
Region 12 Texas-Gulf .....		2,919	64,851	279	(D)	279	(D)	1,459	13,692	857	25,425	610	32,529
Region 13 Rio Grande .....		2,604	89,177	908	24,585	3	1,550	1,565	71,000	603	13,414	648	38,779
Region 14 Upper Colorado .....		666	2,849	2	(D)	-	-	84	1,260	386	965	196	624
Region 15 Lower Colorado .....		754	30,787	392	16,794	164	8,876	225	9,984	77	10,335	452	10,468
Region 16 Great Basin .....		786	4,316	49	49	-	-	146	2,606	3	15	660	1,695
Region 17 Pacific Northwest .....		7,688	328,367	1,077	57,187	395	20,341	1,794	69,330	1,666	59,125	4,609	200,868
Region 18 California .....		32,651	2,546,785	12,639	1,702,494	6,010	521,644	19,142	1,770,041	4,259	317,026	13,683	810,423
Region 19 Alaska .....		3	9	-	-	-	-	3	9	-	-	-	-
Region 20 Hawaii .....		480	6,653	33	4,040	14	(D)	49	2,929	101	2,244	333	1,761

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All other crops											
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>					
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers	
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States .....	6,761	1,487,387	864	338,294	490	182,141	2,984	605,386	2,040	188,144	2,284	742,710
2003 ..	6,541	1,418,982	825	275,574	307	103,520	2,908	563,017	838	294,969	3,581	607,103
<b>2008 DATA</b>												
Alabama .....	35	294	-	-	-	-	18	118	17	176	-	-
Alaska .....	1	(D)	-	-	-	-	-	-	1	(D)	-	-
Arizona .....	370	17,005	25	7,537	1	(D)	127	6,982	115	2,240	137	7,783
Arkansas .....	79	4,400	-	-	-	-	79	4,400	-	-	-	-
California .....	2,155	263,763	112	74,766	105	55,836	786	110,301	855	59,085	676	124,452
Colorado .....	368	24,607	39	5,947	35	5,710	111	14,056	241	7,366	54	6,819
Connecticut .....	3	(D)	-	-	-	-	1	(D)	2	(D)	-	-
Delaware .....	7	865	-	-	-	-	2	(D)	5	(D)	-	-
Florida .....	114	355,879	9	4,208	-	-	45	27,374	50	32,561	29	297,969
Georgia .....	69	20,498	-	-	-	-	62	18,878	7	1,760	-	-
Hawaii .....	369	43,958	99	42,779	29	1,896	50	(D)	130	1,919	215	38,621
Idaho .....	247	52,459	70	21,216	65	20,920	78	23,320	23	4,280	166	27,319
Illinois .....	82	26,248	19	6,034	2	(D)	80	25,872	4	420	-	-
Indiana .....	38	12,974	4	650	2	(D)	32	8,556	9	2,573	3	1,845
Iowa .....	12	944	3	320	-	-	6	(D)	6	(D)	-	-
Kansas .....	104	21,020	7	2,493	5	1,200	95	18,776	9	2,244	-	-
Kentucky .....	8	78	-	-	-	-	-	-	8	78	-	-
Louisiana .....	20	10,302	-	-	-	-	20	10,302	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	20	619	-	-	-	-	9	264	14	360	-	-
Massachusetts .....	7	329	-	-	-	-	-	-	7	329	-	-
Michigan .....	19	1,876	-	-	-	-	17	1,700	6	176	-	-
Minnesota .....	68	17,933	12	(D)	10	100	24	4,071	38	9,442	7	4,490
Mississippi .....	2	(D)	-	-	-	-	2	(D)	2	(D)	-	-
Missouri .....	7	1,336	4	496	-	-	3	840	4	496	-	-
Montana .....	92	15,090	7	1,270	-	-	13	1,268	5	538	79	13,284
Nebraska .....	523	123,750	136	57,229	133	55,589	498	121,925	-	-	25	1,825
Nevada .....	12	5,983	2	(D)	2	(D)	5	3,807	4	3,224	5	912
New Hampshire .....	1	(D)	-	-	-	-	-	-	-	-	1	(D)
New Jersey .....	28	1,605	14	907	2	(D)	24	1,165	4	140	2	(D)
New Mexico .....	55	9,147	33	6,476	3	3,511	21	8,534	12	1,000	34	1,244
New York .....	52	1,368	-	-	-	-	12	799	42	837	2	(D)
North Carolina .....	28	3,004	-	-	-	-	21	(D)	8	1,378	2	(D)
North Dakota .....	30	7,415	3	1,360	1	(D)	21	5,959	2	(D)	9	(D)
Ohio .....	41	66	-	-	-	-	19	19	13	29	9	18
Oklahoma .....	44	4,621	-	-	-	-	32	4,628	12	600	3	360
Oregon .....	615	215,863	85	26,255	28	13,040	182	78,840	161	26,828	446	113,019
Pennsylvania .....	97	649	-	-	-	-	32	120	64	549	3	6
Rhode Island .....	9	18	-	-	-	-	5	10	-	-	4	8
South Carolina .....	25	1,543	8	72	-	-	12	1,251	10	172	3	120
South Dakota .....	34	4,285	3	2,939	2	(D)	5	638	3	390	31	3,647
Tennessee .....	33	598	-	-	-	-	1	(D)	15	151	17	(D)
Texas .....	173	54,872	38	12,572	5	492	125	29,588	5	1,200	47	24,888
Utah .....	28	2,577	9	480	6	270	3	195	6	300	22	2,277
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	41	953	-	-	-	-	13	343	28	610	-	-
Washington .....	387	118,702	84	51,459	42	19,081	226	53,540	55	13,650	131	51,512
West Virginia .....	5	25	-	-	-	-	-	-	5	25	-	-
Wisconsin .....	81	9,850	37	5,999	12	48	67	9,920	29	263	2	(D)
Wyoming .....	123	26,102	2	(D)	-	-	-	-	4	8,475	120	17,627
<b>Water Resources Regions</b>												
Region 01 New England .....	20	431	-	-	-	-	6	(D)	9	(D)	5	(D)
Region 02 Mid-Atlantic .....	184	5,473	14	907	2	(D)	60	2,796	131	2,676	4	858
Region 03 South Atlantic-Gulf .....	293	381,693	17	4,280	-	-	163	48,870	109	36,499	34	298,489
Region 04 Great Lakes .....	64	6,688	2	(D)	-	-	43	6,286	18	454	11	84
Region 05 Ohio .....	85	11,171	2	(D)	-	-	48	6,583	37	2,737	6	1,851
Region 06 Tennessee .....	27	206	-	-	-	-	4	4	14	121	9	81
Region 07 Upper Mississippi .....	221	39,066	67	11,913	26	1,278	170	36,920	64	1,923	2	(D)
Region 08 Lower Mississippi .....	113	(D)	-	-	-	-	105	16,792	2	(D)	8	(D)
Region 09 Souris-Red-Rainy .....	25	15,892	4	3,670	1	(D)	13	3,776	10	8,226	5	3,890
Region 10 Missouri .....	979	200,717	181	66,811	160	60,549	686	146,144	51	17,351	282	40,796
Region 11 Arkansas-White-Red .....	166	33,830	21	5,811	4	252	131	32,680	35	1,761	12	810
Region 12 Texas-Gulf .....	119	41,498	27	10,870	3	2,040	69	16,220	7	1,330	47	24,888
Region 13 Rio Grande .....	65	8,927	43	6,556	16	4,201	29	7,504	10	870	38	2,044
Region 14 Upper Colorado .....	222	4,137	3	210	-	-	-	-	196	1,531	26	2,606
Region 15 Lower Colorado .....	370	17,005	25	7,537	1	(D)	127	6,982	115	2,240	137	7,783
Region 16 Great Basin .....	103	28,110	69	18,734	69	19,624	77	23,942	7	3,344	24	2,979
Region 17 Pacific Northwest .....	1,176	364,950	178	80,630	74	34,741	417	135,760	236	43,324	742	191,150
Region 18 California .....	2,159	265,897	112	74,766	105	55,836	786	110,301	858	60,519	677	125,152
Region 19 Alaska .....	1	(D)	-	-	-	-	-	-	1	(D)	-	-
Region 20 Hawaii .....	369	43,958	99	42,779	29	1,896	50	(D)	130	1,919	215	38,621

See footnote(s) at end of table.

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**Table 29. Selected Crops Harvested by Chemigation and Water Source: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Pastureland, all types												
	Farms	Irrigated acres harvested	Chemigation				Water source <sup>1</sup>						
			Commercial fertilizer		Pesticide application		Ground water from wells		On-farm surface water		Water from off-farm suppliers		
			Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	
United States .....	2008 ..	49,582	3,611,216	2,831	115,681	910	23,144	9,967	834,039	14,673	1,377,830	26,876	1,648,457
	2003 ..	49,843	3,629,492	2,472	112,945	1,083	32,449	11,006	703,220	11,289	1,240,469	28,748	1,723,395
<b>2008 DATA</b>													
Alabama .....		47	1,614	1	(D)	-	-	17	95	27	1,461	3	(D)
Alaska .....		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Arizona .....		1,336	42,104	145	5,677	3	36	416	23,064	225	9,630	923	15,810
Arkansas .....		129	3,272	-	-	-	-	50	1,707	79	2,800	-	-
California .....		6,787	367,405	4	1,744	-	-	1,202	191,817	1,950	202,872	3,734	129,707
Colorado .....		4,088	435,226	28	5,548	3	168	250	25,049	1,158	181,103	2,931	232,615
Connecticut .....		-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....		8	116	-	-	-	-	7	(D)	1	(D)	-	-
Florida .....		404	74,344	1	(D)	-	-	358	42,174	47	32,420	5	6,050
Georgia .....		213	26,795	-	-	-	-	88	10,816	134	13,709	4	3,600
Hawaii .....		58	1,492	-	-	-	-	17	446	7	750	36	302
Idaho .....		8,179	379,140	293	848	273	(D)	1,034	32,716	2,184	134,248	5,331	239,393
Illinois .....		2	(D)	-	-	-	-	2	(D)	-	-	-	-
Indiana .....		60	2,092	-	-	-	-	47	1,832	13	260	-	-
Iowa .....		12	209	-	-	-	-	7	34	-	-	5	175
Kansas .....		113	29,958	39	11,722	1	(D)	109	29,921	4	480	-	-
Kentucky .....		30	566	-	-	-	-	7	140	16	349	7	77
Louisiana .....		8	240	-	-	-	-	8	240	-	-	-	-
Maine .....		3	45	-	-	-	-	3	45	-	-	-	-
Maryland .....		7	248	-	-	-	-	3	(D)	2	(D)	2	(D)
Massachusetts .....		37	111	-	-	-	-	37	111	-	-	-	-
Michigan .....		163	3,251	-	-	-	-	68	1,815	95	1,436	-	-
Minnesota .....		21	464	-	-	-	-	15	338	6	186	-	-
Mississippi .....		-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....		58	1,889	-	-	-	-	4	604	54	1,285	-	-
Montana .....		3,379	392,545	25	2,545	-	-	13	1,340	1,571	196,776	1,900	195,052
Nebraska .....		584	44,057	138	3,466	-	-	559	23,807	-	-	25	20,250
Nevada .....		627	152,895	57	2,260	4	504	109	12,805	221	94,367	333	47,698
New Hampshire .....		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....		47	365	-	-	-	-	47	365	-	-	-	-
New Mexico .....		2,502	111,475	108	4,838	-	-	489	40,536	959	15,753	1,169	62,810
New York .....		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina .....		316	11,790	-	-	-	-	16	288	300	13,105	-	-
North Dakota .....		6	652	-	-	-	-	6	652	-	-	-	-
Ohio .....		3	65	-	-	-	-	3	65	-	-	-	-
Oklahoma .....		253	38,509	16	2,940	-	-	163	30,118	82	8,824	30	2,097
Oregon .....		6,538	338,710	1,568	16,636	542	5,096	2,047	45,668	2,394	146,503	2,313	152,412
Pennsylvania .....		9	158	-	-	-	-	-	-	9	158	-	-
Rhode Island .....		4	4	-	-	-	-	4	4	-	-	-	-
South Carolina .....		82	2,815	44	220	44	(D)	16	1,987	66	828	-	-
South Dakota .....		25	2,003	-	-	-	-	-	-	-	-	25	2,003
Tennessee .....		31	(D)	9	27	-	-	10	102	11	302	10	(D)
Texas .....		2,013	350,030	247	43,721	38	16,350	1,291	254,233	473	28,174	429	74,394
Utah .....		4,997	253,812	44	3,398	-	-	261	13,779	850	75,052	4,085	168,074
Vermont .....		-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....		7	250	-	-	-	-	-	-	7	250	-	-
Washington .....		4,293	132,393	52	4,430	2	(D)	1,012	33,175	1,123	43,179	2,245	58,139
West Virginia .....		4	16	-	-	-	-	-	-	4	16	-	-
Wisconsin .....		30	905	1	(D)	-	-	15	793	2	(D)	13	1,300
Wyoming .....		2,068	405,592	11	4,886	-	-	156	10,727	599	171,404	1,318	235,576
<b>Water Resources Regions</b>													
Region 01 New England .....		44	160	-	-	-	-	44	160	-	-	-	-
Region 02 Mid-Atlantic .....		80	(D)	-	-	-	-	57	(D)	21	494	2	(D)
Region 03 South Atlantic-Gulf .....		1,056	117,118	46	970	44	(D)	495	55,360	568	61,283	12	9,740
Region 04 Great Lakes .....		221	4,886	-	-	-	-	111	3,338	97	1,496	13	1,300
Region 05 Ohio .....		66	1,323	9	(D)	-	-	19	572	31	629	16	122
Region 06 Tennessee .....		15	1,267	-	-	-	-	1	(D)	13	(D)	1	(D)
Region 07 Upper Mississippi .....		25	977	1	(D)	-	-	25	977	-	-	-	-
Region 08 Lower Mississippi .....		106	2,174	-	-	-	-	42	1,224	64	950	-	-
Region 09 Souris-Red-Rainy .....		8	292	-	-	-	-	2	(D)	6	(D)	-	-
Region 10 Missouri .....		5,173	685,704	151	8,539	3	168	772	42,458	1,445	293,350	2,975	363,082
Region 11 Arkansas-White-Red .....		1,034	285,709	109	25,142	1	(D)	549	232,024	245	18,494	304	42,323
Region 12 Texas-Gulf .....		1,779	189,306	195	33,801	38	16,350	1,058	94,099	450	28,174	432	74,519
Region 13 Rio Grande .....		2,244	153,797	108	5,183	-	-	393	42,259	875	52,922	1,095	62,811
Region 14 Upper Colorado .....		5,165	490,301	35	7,851	-	-	112	7,320	1,511	181,392	3,741	306,641
Region 15 Lower Colorado .....		1,712	53,539	145	5,677	3	36	538	27,215	288	11,812	1,174	21,298
Region 16 Great Basin .....		4,225	297,680	96	2,928	4	504	727	29,176	835	150,613	2,866	119,912
Region 17 Pacific Northwest .....		19,207	898,867	1,932	23,794	817	5,373	3,509	91,226	6,068	360,411	10,369	482,642
Region 18 California .....		7,363	425,116	4	1,744	-	-	1,495	205,018	2,149	214,382	3,840	162,977
Region 19 Alaska .....		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Region 20 Hawaii .....		58	1,492	-	-	-	-	17	446	7	750	36	302

<sup>1</sup> Column totals may exceed total farms and acres of crop because more than one water source could be reported.  
<sup>2</sup> 2003 data do not include potatoes.

**Table 30. Selected Crops Irrigated and Harvested by Primary Method of Water Distribution, United States: 2008**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Crop	All methods		Pressure systems		Gravity systems					
	Farms	Acres	Farms	Acres	Farms	Acres				
Corn for grain or seed .....	33,571	11,991,515	26,592	9,786,501	6,979	2,205,014				
Corn for silage or greenchop .....	9,135	1,633,540	4,690	891,129	4,445	742,411				
Sorghum for grain or seed .....	4,118	1,042,392	2,860	798,388	1,258	244,004				
Wheat for grain or seed .....	16,265	4,107,464	11,781	3,201,888	4,484	905,576				
Barley for grain or seed .....	4,334	762,240	2,414	546,847	1,920	215,393				
Soybeans for beans .....	23,024	7,044,546	16,906	4,158,193	6,118	2,886,353				
Beans, dry edible .....	2,849	431,329	1,366	266,162	1,483	165,167				
Rice .....	5,265	2,683,363	75	48,154	5,190	2,635,209				
Other small grains (oats, rye, etc.) .....	2,975	344,195	1,521	201,540	1,454	142,655				
Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage) .....	48,315	6,187,983	24,879	3,596,494	23,436	2,591,489				
All other hay (dry hay, greenchop, and silage) .....	29,553	3,351,986	13,767	1,110,400	15,786	2,241,586				
Peanuts .....	2,535	540,577	2,482	(D)	53	(D)				
All cotton .....	6,612	3,123,664	4,532	1,953,746	2,080	1,169,918				
Sugarbeets for sugar .....	1,590	382,267	696	223,856	894	158,411				
Tobacco .....	811	23,614	794	23,175	17	439				
Land in vegetables .....	16,899	3,084,879	13,820	2,637,318	3,079	447,561				
Selected vegetables:										
Sweet corn .....	4,341	294,855	3,329	244,937	1,012	49,918				
Tomatoes in the open .....	5,937	305,565	4,887	195,472	1,050	110,093				
Lettuce and romaine .....	2,203	255,880	1,820	180,704	383	75,176				
Potatoes, excluding sweet potatoes .....	3,727	974,606	3,241	943,097	486	31,509				
All berries .....	9,021	222,857	8,519	212,636	502	10,221				
Land in orchards, vineyards, and nut trees .....	57,184	3,733,339	47,140	3,153,494	10,044	579,845				
All other crops (see text) .....	6,761	1,487,387	4,964	886,595	1,797	600,792				
Pastureland, all types .....	49,582	3,611,216	25,912	1,166,593	23,670	2,444,623				
	Pressure irrigation distribution systems <sup>1</sup>									
Crop	Hand move		Solid or permanent set		Side roll or wheel line		Big gun		Low-flow irrigation (drip, trickle, or micro sprinklers)	
	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>
Corn for grain or seed .....	0.4	(Z)	0.3	(Z)	0.7	0.2	2.0	0.4	0.5	0.1
Corn for silage or greenchop .....	0.6	0.8	0.4	0.5	1.8	1.1	7.0	1.8	0.3	0.2
Sorghum for grain or seed .....	0.1	0.1	0.1	0.4	0.3	0.1	0.2	(Z)	0.7	0.4
Wheat for grain or seed .....	3.4	1.4	0.4	0.6	8.6	3.8	0.8	0.1	0.4	0.4
Barley for grain or seed .....	5.5	1.6	0.3	0.3	22.8	11.4	0.2	(Z)	0.4	0.6
Soybeans for beans .....	0.1	(Z)	(Z)	(Z)	0.6	0.3	1.7	0.4	0.1	0.1
Beans, dry edible .....	5.3	2.5	3.9	0.2	3.5	2.9	0.6	0.3	4.2	1.3
Rice .....	-	-	(Z)	(D)	0.1	0.2	-	-	0.1	0.1
Other small grains (oats, rye, etc.) .....	0.8	1.9	1.5	1.1	16.7	7.2	5.3	2.3	0.5	0.9
Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage) .....	6.2	2.6	1.0	0.5	17.4	8.9	2.5	0.9	0.5	0.5
All other hay (dry hay, greenchop, and silage) .....	11.7	1.6	2.0	1.0	10.6	5.4	5.6	2.5	1.1	0.2
Peanuts .....	-	-	1.9	0.1	-	-	4.6	1.2	0.2	0.2
All cotton .....	0.5	0.2	0.2	0.3	1.5	0.5	1.1	0.2	2.9	2.6
Sugarbeets for sugar .....	-	-	0.3	0.4	7.7	6.8	0.5	0.1	0.9	0.5
Tobacco .....	33.8	24.7	1.4	(D)	7.9	8.6	43.6	45.1	2.2	0.6
Land in vegetables .....	18.7	6.2	5.3	4.1	2.0	1.7	5.1	2.8	31.8	17.5
Selected vegetables:										
Sweet corn .....	20.2	2.1	7.0	0.7	1.5	1.0	10.5	5.3	17.3	6.1
Tomatoes in the open .....	22.4	5.8	3.0	0.3	0.5	1.4	1.6	0.9	50.8	47.4
Lettuce and romaine .....	13.8	14.2	5.9	4.9	0.1	(Z)	1.1	1.6	54.4	35.2
Potatoes, excluding sweet potatoes .....	19.3	0.7	6.5	5.8	4.9	3.5	5.9	1.3	14.2	0.4
All berries .....	21.5	2.7	19.0	33.2	0.2	0.4	1.7	4.0	44.4	44.3
Land in orchards, vineyards, and nut trees .....	9.0	0.7	19.6	14.2	0.2	(Z)	0.2	0.4	50.1	62.3
All other crops (see text) .....	13.5	3.0	9.2	1.7	2.7	2.2	2.9	2.6	19.7	11.5
Pastureland, all types .....	24.9	4.0	7.5	0.7	7.3	4.6	2.6	1.8	2.2	0.7

See footnote(s) at end of table.

--continued



**Table 30. Selected Crops Irrigated and Harvested by Primary Method of Water Distribution, United States: 2008 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Crop	Pressure irrigation distribution systems <sup>1</sup> - con.									
	Center pivot and linear move systems								Other pressure systems	
	Less than 15 psi		15 to 29 psi		30 to 59 psi		60 psi or more			
	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>
Corn for grain or seed .....	2.8	3.3	30.9	32.9	34.8	32.6	6.5	3.6	0.4	0.2
Corn for silage or greenchop .....	4.4	5.5	14.9	18.2	16.2	16.9	5.3	4.1	0.5	0.9
Sorghum for grain or seed .....	11.6	10.5	39.5	45.0	13.3	15.1	3.6	1.5	-	-
Wheat for grain or seed .....	5.8	6.8	29.3	33.4	20.3	22.0	2.5	2.7	1.0	0.7
Barley for grain or seed .....	1.3	2.6	9.1	15.7	14.2	26.4	1.4	1.6	0.6	0.1
Soybeans for beans .....	1.0	1.1	28.4	19.9	33.9	26.3	7.4	3.3	0.4	0.5
Beans, dry edible .....	1.1	1.4	16.4	25.3	11.8	19.2	1.1	1.3	-	-
Rice .....	-	-	0.3	0.3	0.1	0.3	-	-	0.8	0.8
Other small grains (oats, rye, etc.) .....	1.6	3.1	10.5	12.1	9.5	13.7	2.8	4.1	1.8	5.9
Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage) .....	0.8	1.9	10.3	15.5	10.3	16.8	2.1	2.8	0.4	0.3
All other hay (dry hay, greenchop, and silage) .....	1.3	1.9	6.1	7.4	5.6	7.3	2.2	1.4	0.4	0.7
Peanuts .....	11.9	10.7	37.5	45.0	33.4	32.9	6.4	3.9	2.1	0.3
All cotton .....	11.1	10.3	31.8	26.0	16.0	12.8	2.8	1.1	0.6	0.4
Sugarbeets for sugar .....	0.9	2.4	14.7	19.7	17.1	17.7	1.3	4.2	0.4	0.3
Tobacco .....	0.1	(D)	0.7	3.3	1.2	2.0	5.8	5.4	1.1	0.8
Land in vegetables .....	1.1	2.1	5.2	12.6	9.3	23.5	2.7	4.4	0.6	0.4
Selected vegetables:										
Sweet corn .....	1.0	4.9	5.1	15.4	10.1	34.8	3.8	7.4	0.3	0.3
Tomatoes in the open .....	0.8	(Z)	0.4	0.6	1.8	1.5	0.7	0.1	0.3	(D)
Lettuce and romaine .....	1.3	(Z)	3.3	1.5	1.5	3.8	-	-	1.1	(Z)
Potatoes, excluding sweet potatoes .....	1.5	3.9	9.2	20.0	20.7	46.6	4.5	6.7	0.3	(Z)
All berries .....	0.2	0.1	0.5	0.1	5.7	2.7	0.5	0.4	0.8	1.7
Land in orchards, vineyards, and nut trees .....	0.1	(Z)	0.6	0.1	1.6	0.2	(Z)	(Z)	0.9	1.1
All other crops (see text) .....	2.9	3.2	11.9	13.2	8.1	13.9	1.0	1.3	1.4	1.8
Pastureland, all types .....	0.5	0.9	2.8	7.1	3.3	6.1	0.4	0.8	0.6	0.5
Crop	Gravity irrigation distribution systems <sup>1</sup>									
	Siphon tube				Portal or ditch-gate				Poly-pipe or lay flat tubing system	
	Unlined ditches		Lined ditches		Unlined ditches		Lined ditches			
	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>
Corn for grain or seed .....	2.4	1.2	1.8	0.5	1.0	0.6	0.4	0.2	6.9	6.9
Corn for silage or greenchop .....	13.3	11.0	4.5	2.5	5.4	4.7	1.7	1.4	5.2	3.5
Sorghum for grain or seed .....	1.7	1.7	2.5	1.9	3.0	2.5	1.3	2.1	8.8	9.6
Wheat for grain or seed .....	7.0	5.2	4.0	2.6	5.2	3.2	2.1	4.3	1.8	1.4
Barley for grain or seed .....	10.4	6.2	5.1	3.3	12.9	7.7	1.8	1.1	0.5	0.3
Soybeans for beans .....	0.3	0.3	0.2	0.1	1.3	2.3	0.6	1.1	15.6	28.3
Beans, dry edible .....	10.7	8.6	12.1	5.2	3.2	3.4	1.0	1.4	11.4	3.1
Rice .....	2.8	3.2	0.5	0.2	39.7	37.8	9.9	11.4	15.9	12.6
Other small grains (oats, rye, etc.) .....	9.5	9.4	4.7	6.3	17.9	8.4	1.0	2.4	5.6	3.1
Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage) .....	8.0	6.6	4.1	2.6	17.1	11.8	5.3	6.9	2.1	1.0
All other hay (dry hay, greenchop, and silage) .....	7.0	7.7	1.5	1.7	28.0	40.3	3.4	4.1	1.4	0.4
Peanuts .....	-	-	-	-	-	-	-	-	(Z)	(D)
All cotton .....	4.5	7.0	2.5	3.1	1.6	1.1	4.1	2.6	14.5	17.6
Sugarbeets for sugar .....	20.3	9.8	14.8	7.4	7.5	4.5	5.0	5.5	2.1	1.7
Tobacco .....	-	-	-	-	-	-	-	-	0.9	1.3
Land in vegetables .....	2.0	2.9	1.5	1.6	2.6	1.7	0.9	2.8	7.6	1.2
Selected vegetables:										
Sweet corn .....	0.5	1.9	2.8	3.7	3.6	1.1	0.3	0.3	6.9	0.9
Tomatoes in the open .....	3.0	19.3	0.3	2.4	1.1	4.0	0.1	0.1	8.0	1.3
Lettuce and romaine .....	0.1	(D)	0.5	2.1	0.8	0.5	1.9	21.8	13.8	(Z)
Potatoes, excluding sweet potatoes .....	0.3	0.2	0.5	0.2	1.7	1.3	(Z)	(D)	8.4	0.2
All berries .....	0.1	0.2	0.1	0.4	0.2	0.2	-	-	4.6	3.4
Land in orchards, vineyards, and nut trees .....	0.9	1.6	0.8	0.9	2.3	1.7	2.1	1.7	1.0	0.9
All other crops (see text) .....	3.6	3.4	2.6	2.4	3.8	24.2	2.1	2.5	8.5	1.7
Pastureland, all types .....	7.7	7.4	1.8	1.1	23.2	43.8	3.4	2.3	1.9	0.8

See footnote(s) at end of table.

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**Table 30. Selected Crops Irrigated and Harvested by Primary Method of Water Distribution, United States: 2008 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Crop	Gravity irrigation distribution systems <sup>1</sup> - con.									
	Gated-pipe (not poly-pipe)		Improved gated-pipe (surge-flow or cablegation)		Subirrigation		Open discharge (from a well or pump)		Other gravity systems	
	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>	Percent of farms	Percent of acres <sup>2</sup>
Corn for grain or seed .....	7.4	5.4	0.5	0.4	0.2	0.2	(Z)	(Z)	0.1	0.1
Corn for silage or greenchop .....	10.7	7.3	0.4	0.2	0.1	0.1	3.1	7.5	4.3	4.8
Sorghum for grain or seed .....	11.1	3.7	1.2	0.3	-	-	0.9	0.2	-	-
Wheat for grain or seed .....	4.6	2.1	0.8	0.1	(Z)	0.1	1.8	0.7	0.2	0.3
Barley for grain or seed .....	10.0	4.5	2.3	0.4	-	-	-	-	1.3	0.8
Soybeans for beans .....	7.5	2.8	0.3	0.1	(Z)	(D)	0.8	1.3	0.1	0.1
Beans, dry edible .....	13.3	8.0	0.1	0.1	-	-	0.1	(D)	0.1	0.4
Rice .....	0.8	0.9	0.8	0.6	0.1	(Z)	27.8	27.0	0.2	0.6
Other small grains (oats, rye, etc.) .....	8.7	9.9	0.5	0.1	-	-	0.7	1.4	0.1	0.1
Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage) .....	8.3	5.9	1.1	0.4	0.5	(Z)	1.4	2.0	0.6	1.0
All other hay (dry hay, greenchop, and silage) .....	7.5	3.8	0.7	0.3	0.1	0.4	1.6	2.9	2.3	2.8
Peanuts .....	-	-	-	-	2.1	(Z)	-	-	-	-
All cotton .....	3.5	1.8	0.4	0.5	-	-	0.1	0.1	-	-
Sugarbeets for sugar .....	4.7	2.6	0.3	0.4	0.1	(D)	-	-	1.4	1.2
Tobacco .....	0.2	(D)	1.0	(D)	-	-	-	-	-	-
Land in vegetables .....	2.7	1.5	0.1	(Z)	0.4	0.8	(Z)	(Z)	0.3	0.6
Selected vegetables:										
Sweet corn .....	7.5	2.0	0.1	(Z)	1.4	4.1	0.1	(Z)	0.2	1.6
Tomatoes in the open .....	5.1	6.6	-	-	(Z)	(D)	-	-	0.1	(Z)
Lettuce and romaine .....	0.2	0.8	-	-	-	-	-	-	0.2	(Z)
Potatoes, excluding sweet potatoes .....	0.1	(D)	-	-	1.6	0.4	-	-	0.3	0.7
All berries .....	0.3	(Z)	-	-	-	-	0.1	0.2	0.2	0.1
Land in orchards, vineyards, and nut trees .....	2.0	1.8	0.2	0.7	0.1	0.3	4.3	2.8	3.9	2.0
All other crops (see text) .....	2.0	1.1	3.0	0.1	0.2	1.4	0.3	0.5	0.5	0.8
Pastureland, all types .....	6.5	2.9	0.5	0.3	0.6	0.3	1.4	3.6	0.8	1.1

<sup>1</sup> Percentages are calculated across all methods by irrigated crop.

<sup>2</sup> The sum of percent acres irrigated across systems for a crop may not add to 100 percent due to the use of unknown secondary irrigation systems by crop.

**Table 31. Other Uses of Irrigation Water: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Prevent freeze damage		Crop cooling to delay early budding or blooming, or to reduce heat stress		Leaching to remove salts from soil	
	Farms	Acres applied	Farms	Acres applied	Farms	Acres applied
United States ..... 2008 ..	15,806	1,557,079	9,521	1,808,966	4,793	594,119
..... 2003 ..	14,288	1,430,642	6,744	1,004,189	1,346	497,401
<b>2008 DATA</b>						
Alabama .....	38	527	24	1,632	-	-
Alaska .....	-	-	-	-	3	12
Arizona .....	306	8,534	65	53,961	89	50,746
Arkansas .....	9	450	190	213,325	11	3,100
California .....	8,122	758,384	4,212	364,566	3,332	387,957
Colorado .....	49	15,014	225	53,510	197	4,486
Connecticut .....	11	106	2	(D)	-	-
Delaware .....	4	40	13	2,318	3	1,103
Florida .....	2,061	392,510	84	18,355	98	11,656
Georgia .....	243	21,193	141	40,185	15	1,200
Hawaii .....	-	-	14	230	2	(D)
Idaho .....	128	64,674	234	75,548	39	12,484
Illinois .....	17	699	49	17,893	-	-
Indiana .....	28	1,202	63	11,225	-	-
Iowa .....	6	134	26	3,042	7	180
Kansas .....	-	-	55	46,432	23	8,487
Kentucky .....	13	31	30	600	-	-
Louisiana .....	57	853	24	25,504	3	1,685
Maine .....	39	680	8	(D)	-	-
Maryland .....	5	(D)	11	1,438	-	-
Massachusetts .....	474	12,711	282	(D)	-	-
Michigan .....	191	10,702	167	27,386	-	-
Minnesota .....	85	6,370	55	11,532	-	-
Mississippi .....	68	1,446	87	50,128	-	-
Missouri .....	5	950	63	34,918	2	(D)
Montana .....	-	-	98	31,433	174	6,415
Nebraska .....	336	26,527	731	225,278	-	-
Nevada .....	5	1,996	16	1,786	90	11,137
New Hampshire .....	12	(D)	9	29	-	-
New Jersey .....	51	4,419	56	5,171	-	-
New Mexico .....	8	3,113	10	5,527	12	9,703
New York .....	77	510	16	344	-	-
North Carolina .....	118	6,961	75	5,486	4	1,440
North Dakota .....	7	725	13	5,370	-	-
Ohio .....	23	176	13	127	-	-
Oklahoma .....	61	1,736	114	10,867	-	-
Oregon .....	492	24,679	452	36,517	51	3,500
Pennsylvania .....	122	387	4	10	-	-
Rhode Island .....	5	(D)	10	121	4	8
South Carolina .....	67	1,093	61	6,807	-	-
South Dakota .....	2	(D)	28	7,815	3	630
Tennessee .....	39	305	42	2,050	8	8
Texas .....	102	38,425	367	248,876	447	43,970
Utah .....	177	4,494	3	120	117	11,247
Vermont .....	16	76	9	47	-	-
Virginia .....	24	298	52	842	-	-
Washington .....	1,698	113,865	862	89,114	27	14,530
West Virginia .....	11	20	12	20	-	-
Wisconsin .....	347	25,032	222	46,398	11	1,837
Wyoming .....	47	4,745	122	11,366	21	5,546
<b>Water Resources Regions</b>						
Region 01 New England .....	545	13,645	311	13,867	4	8
Region 02 Mid-Atlantic .....	220	5,172	111	9,716	3	1,103
Region 03 South Atlantic-Gulf .....	2,599	422,272	488	72,479	117	14,296
Region 04 Great Lakes .....	260	11,512	226	44,706	3	1,277
Region 05 Ohio .....	73	1,367	74	8,381	-	-
Region 06 Tennessee .....	49	543	31	743	8	(D)
Region 07 Upper Mississippi .....	437	31,964	352	66,114	8	560
Region 08 Lower Mississippi .....	79	3,353	242	292,204	16	5,825
Region 09 Souris-Red-Rainy .....	-	-	10	1,984	-	-
Region 10 Missouri .....	368	31,532	1,235	344,428	190	9,475
Region 11 Arkansas-White-Red .....	85	5,262	270	80,589	29	17,787
Region 12 Texas-Gulf .....	97	35,708	296	237,244	382	35,208
Region 13 Rio Grande .....	35	14,978	11	11,389	75	13,265
Region 14 Upper Colorado .....	84	1,260	-	-	217	4,042
Region 15 Lower Colorado .....	390	8,618	65	53,961	89	50,746
Region 16 Great Basin .....	18	5,546	19	1,906	199	22,524
Region 17 Pacific Northwest .....	2,316	201,986	1,551	204,192	113	29,474
Region 18 California .....	8,151	762,361	4,215	364,833	3,335	388,497
Region 19 Alaska .....	-	-	-	-	3	12
Region 20 Hawaii .....	-	-	14	230	2	(D)

--continued

**Table 31. Other Uses of Irrigation Water: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Disposal of liquid livestock waste		Wildlife or waterfowl habitat		Other purposes	
	Farms	Acres applied	Farms	Acres applied	Farms	Acres applied
United States .....	2,887	587,496	6,392	526,173	3,777	298,124
2008 ..						
2003 ..	2,967	(D)	4,502	608,588	3,091	465,808
<b>2008 DATA</b>						
Alabama .....	17	1,850	7	94	19	815
Alaska .....	-	-	-	-	-	-
Arizona .....	2	(D)	86	2,411	5	7,604
Arkansas .....	25	1,535	577	125,213	11	11,900
California .....	710	204,544	1,087	123,055	1,707	59,915
Colorado .....	31	7,865	1,049	38,072	43	7,099
Connecticut .....	-	-	-	-	10	50
Delaware .....	4	360	3	30	4	1,200
Florida .....	26	12,428	22	4,418	8	15,092
Georgia .....	209	19,505	93	861	79	8,680
Hawaii .....	-	-	2	(D)	28	428
Idaho .....	96	21,903	636	4,097	80	12,786
Illinois .....	13	1,110	4	920	19	5,243
Indiana .....	23	15,433	2	(D)	17	1,242
Iowa .....	14	1,880	8	145	2	(D)
Kansas .....	77	18,006	62	1,085	20	13,464
Kentucky .....	4	250	1	(D)	6	(D)
Louisiana .....	-	-	131	39,434	45	31,858
Maine .....	-	-	2	(D)	3	48
Maryland .....	7	2,639	3	101	5	343
Massachusetts .....	-	-	-	-	29	1,512
Michigan .....	36	11,062	24	240	9	2,660
Minnesota .....	14	642	3	(D)	8	2,670
Mississippi .....	15	1,620	78	11,548	7	7,758
Missouri .....	101	9,140	86	14,097	14	11,920
Montana .....	5	1,762	452	12,680	194	25,503
Nebraska .....	282	79,255	171	9,390	75	7,025
Nevada .....	2	(D)	113	22,424	23	4,918
New Hampshire .....	-	-	-	-	-	-
New Jersey .....	2	(D)	-	-	10	1,600
New Mexico .....	12	4,293	262	12,432	363	3,931
New York .....	-	-	-	-	11	328
North Carolina .....	581	45,528	26	298	48	2,966
North Dakota .....	-	-	5	168	-	-
Ohio .....	10	1,248	-	-	-	-
Oklahoma .....	70	7,210	12	1,920	17	816
Oregon .....	84	46,790	522	26,320	538	10,981
Pennsylvania .....	1	(D)	-	-	31	337
Rhode Island .....	4	4	4	(D)	-	-
South Carolina .....	36	3,937	55	734	14	803
South Dakota .....	16	3,095	30	711	-	-
Tennessee .....	24	2,846	15	1,757	25	2,384
Texas .....	176	38,986	99	9,279	33	17,873
Utah .....	1	(D)	52	15,897	-	-
Vermont .....	-	-	-	-	-	-
Virginia .....	14	2,014	5	150	11	122
Washington .....	130	12,542	182	3,965	121	2,412
West Virginia .....	3	210	-	-	-	-
Wisconsin .....	5	(D)	5	846	34	2,928
Wyoming .....	5	1,960	416	38,490	51	8,894
<b>Water Resources Regions</b>						
Region 01 New England .....	4	4	6	34	42	1,610
Region 02 Mid-Atlantic .....	19	3,649	6	131	51	3,594
Region 03 South Atlantic-Gulf .....	876	85,842	205	6,465	175	28,438
Region 04 Great Lakes .....	43	11,992	25	766	31	3,926
Region 05 Ohio .....	48	8,199	-	-	14	427
Region 06 Tennessee .....	19	2,102	5	112	24	199
Region 07 Upper Mississippi .....	21	17,757	24	1,904	61	10,841
Region 08 Lower Mississippi .....	19	1,435	779	177,863	71	63,896
Region 09 Souris-Red-Rainy .....	10	100	3	(D)	-	-
Region 10 Missouri .....	459	101,917	982	38,991	179	39,104
Region 11 Arkansas-White-Red .....	175	30,381	241	25,128	37	14,280
Region 12 Texas-Gulf .....	167	36,939	85	5,077	34	17,876
Region 13 Rio Grande .....	2	(D)	179	22,730	376	8,008
Region 14 Upper Colorado .....	-	-	971	35,712	31	4,019
Region 15 Lower Colorado .....	2	(D)	89	2,631	5	7,604
Region 16 Great Basin .....	3	380	207	37,718	23	4,918
Region 17 Pacific Northwest .....	305	78,701	1,488	40,664	885	25,141
Region 18 California .....	715	207,078	1,095	127,505	1,710	63,815
Region 19 Alaska .....	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	2	(D)	28	428

**Table 32. Irrigated Farms by Size of Farm: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Total			1 to 49 acres			50 to 99 acres		
	Farms	Land in farms (acres)	Acres irrigated	Farms	Land in farms (acres)	Acres irrigated	Farms	Land in farms (acres)	Acres irrigated
United States .....	206,834	198,160,896	54,929,915	82,150	1,342,378	920,648	21,771	1,515,731	761,854
2003 .....	210,106	195,969,172	52,492,687	77,738	1,383,478	962,067	20,206	1,421,185	(D)
<b>2008 DATA</b>									
Alabama .....	665	442,487	75,023	225	4,149	1,113	96	6,988	1,184
Alaska .....	23	5,785	1,589	9	132	(D)	5	(D)	(D)
Arizona .....	2,997	4,446,165	861,496	1,568	21,409	11,977	123	7,224	5,217
Arkansas .....	4,119	6,162,119	4,493,435	180	3,540	2,760	258	18,484	8,458
California .....	45,136	15,866,424	7,329,245	26,632	392,133	327,022	4,720	321,402	183,987
Colorado .....	12,778	10,647,744	2,865,840	4,822	119,908	67,072	1,707	124,753	54,657
Connecticut .....	147	10,403	2,337	81	(D)	263	33	2,125	(D)
Delaware .....	309	273,149	104,620	26	(D)	375	30	2,021	(D)
Florida .....	5,250	2,535,664	1,222,797	2,562	38,150	23,198	781	51,243	39,498
Georgia .....	3,584	2,999,922	1,007,763	429	6,730	2,938	319	21,800	5,275
Hawaii .....	1,077	213,387	99,577	1,009	9,194	4,463	32	2,498	(D)
Idaho .....	13,834	6,421,820	3,319,827	7,077	108,945	89,649	1,416	94,112	60,977
Illinois .....	1,091	1,309,942	457,078	104	2,145	975	14	1,218	868
Indiana .....	1,089	1,360,556	404,399	78	1,755	195	58	4,631	1,934
Iowa .....	527	590,047	162,838	32	343	80	5	460	175
Kansas .....	4,508	10,912,364	2,570,003	56	336	168	117	10,370	5,490
Kentucky .....	822	329,198	32,380	228	5,189	1,396	116	8,328	1,565
Louisiana .....	1,692	2,074,497	932,712	272	2,465	748	80	6,382	3,017
Maine .....	196	118,107	18,151	88	1,851	260	35	2,725	(D)
Maryland .....	597	278,277	85,552	137	(D)	(D)	95	5,919	1,108
Massachusetts .....	677	52,718	17,421	425	6,910	2,633	111	7,150	2,438
Michigan .....	2,121	1,503,006	531,927	429	10,003	3,801	289	20,171	5,497
Minnesota .....	1,546	1,397,018	504,330	176	4,315	782	43	2,876	885
Mississippi .....	1,277	2,512,434	1,451,652	66	2,310	198	12	900	720
Missouri .....	1,877	2,285,747	1,232,354	151	2,735	379	168	12,957	8,158
Montana .....	8,507	19,637,380	1,947,159	2,607	65,169	53,598	1,162	76,383	39,813
Nebraska .....	14,812	21,853,534	8,365,545	338	7,446	6,659	113	5,763	2,712
Nevada .....	1,734	5,600,694	685,261	648	16,505	11,509	228	16,821	11,315
New Hampshire .....	86	9,043	720	39	555	109	20	1,345	124
New Jersey .....	608	136,352	59,412	238	4,595	1,505	100	(D)	3,891
New Mexico .....	8,878	12,816,722	835,639	5,362	63,215	47,814	653	45,828	19,641
New York .....	596	144,640	20,158	294	7,792	1,891	64	4,293	1,216
North Carolina .....	1,975	990,106	148,999	398	12,595	3,062	424	30,196	6,106
North Dakota .....	601	1,706,080	248,070	14	140	119	11	985	635
Ohio .....	379	124,294	18,548	130	2,986	645	108	7,929	(D)
Oklahoma .....	1,454	2,382,239	461,235	153	3,120	535	168	12,414	4,098
Oregon .....	12,156	6,952,252	1,758,602	6,262	90,199	50,075	1,693	126,293	73,580
Pennsylvania .....	1,090	149,947	17,359	515	10,726	2,694	271	19,986	2,401
Rhode Island .....	61	5,501	681	40	(D)	(D)	10	944	218
South Carolina .....	712	443,293	104,091	279	7,087	1,320	50	4,169	269
South Dakota .....	1,165	2,807,203	360,071	80	2,208	1,407	35	2,630	1,402
Tennessee .....	582	424,980	72,862	231	4,965	926	73	4,891	804
Texas .....	12,673	16,634,484	5,356,876	3,627	56,358	34,038	900	68,931	15,777
Utah .....	10,876	5,512,452	1,068,929	5,908	88,523	59,707	1,297	89,730	61,534
Vermont .....	66	8,186	488	23	(D)	(D)	10	814	(D)
Virginia .....	657	323,778	44,818	209	4,965	920	88	6,664	1,328
Washington .....	12,712	8,085,090	1,675,898	6,324	99,220	69,236	3,016	201,669	94,431
West Virginia .....	90	13,493	906	48	955	174	13	909	(D)
Wisconsin .....	1,261	1,065,575	396,123	206	4,466	1,161	138	9,623	2,272
Wyoming .....	5,164	15,584,598	1,497,119	1,315	39,274	28,052	463	32,346	23,758
<b>Water Resources Regions</b>									
Region 01 New England .....	1,188	199,464	39,468	677	11,195	3,400	217	14,949	3,287
Region 02 Mid-Atlantic .....	3,200	1,052,547	309,972	1,157	23,195	6,761	485	34,567	9,858
Region 03 South Atlantic-Gulf .....	12,428	7,495,555	2,554,462	3,992	72,534	32,046	1,644	113,044	51,610
Region 04 Great Lakes .....	3,152	2,098,815	721,586	723	17,062	5,099	442	30,925	8,234
Region 05 Ohio .....	2,056	1,461,874	304,963	471	10,715	1,954	337	24,413	2,810
Region 06 Tennessee .....	527	283,315	41,141	239	5,522	(D)	87	(D)	(D)
Region 07 Upper Mississippi .....	3,863	3,827,858	1,339,287	464	10,037	2,682	155	10,842	3,476
Region 08 Lower Mississippi .....	7,341	11,412,924	7,346,743	466	6,227	3,499	417	30,909	15,940
Region 09 Souris-Red-Rainy .....	400	714,430	158,617	7	35	14	-	-	-
Region 10 Missouri .....	32,727	66,817,228	13,825,255	3,659	94,885	73,744	1,966	139,640	79,816
Region 11 Arkansas-White-Red .....	10,336	24,462,413	5,412,670	1,401	16,964	9,662	632	45,670	16,896
Region 12 Texas-Gulf .....	10,224	10,145,409	3,499,153	3,348	53,010	31,248	900	68,931	15,777
Region 13 Rio Grande .....	8,031	8,037,090	1,079,145	4,518	50,576	37,802	522	36,526	19,943
Region 14 Upper Colorado .....	10,771	5,822,461	1,359,888	6,115	151,619	89,284	1,355	93,377	41,680
Region 15 Lower Colorado .....	3,551	4,727,545	936,248	1,786	27,049	14,729	191	11,304	8,617
Region 16 Great Basin .....	10,157	9,893,297	1,599,757	5,272	78,512	57,109	1,058	77,218	59,076
Region 17 Pacific Northwest .....	40,017	23,242,402	6,855,656	20,050	309,767	216,581	6,604	453,324	238,237
Region 18 California .....	45,765	16,247,097	7,444,738	26,787	394,148	329,037	4,722	321,562	184,147
Region 19 Alaska .....	23	5,785	1,589	9	132	(D)	5	(D)	(D)
Region 20 Hawaii .....	1,077	213,387	99,577	1,009	9,194	4,463	32	2,498	(D)

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**Table 32. Irrigated Farms by Size of Farm: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	100 to 219 acres			220 to 499 acres			500 to 999 acres		
	Farms	Land in farms (acres)	Acres irrigated	Farms	Land in farms (acres)	Acres irrigated	Farms	Land in farms (acres)	Acres irrigated
United States .....	19,674	2,928,650	1,695,105	22,670	7,487,102	4,178,236	19,338	13,778,706	7,584,484
2003 ..	22,425	3,329,484	1,950,841	26,836	9,111,292	4,835,531	21,694	15,684,216	7,997,496
<b>2008 DATA</b>									
Alabama .....	94	13,572	2,234	64	19,934	4,626	44	32,586	5,546
Alaska .....	3	(D)	(D)	3	880	185	2	(D)	(D)
Arizona .....	389	58,534	28,256	191	68,122	37,341	287	206,621	101,661
Arkansas .....	213	36,256	20,130	562	197,346	106,893	897	657,621	477,410
California .....	4,769	678,708	473,535	3,273	1,037,385	778,295	2,105	1,489,146	1,193,489
Colorado .....	858	130,786	97,214	1,980	651,185	407,699	758	525,665	321,880
Connecticut .....	25	3,387	643	7	2,229	785	-	-	-
Delaware .....	29	4,207	2,502	64	22,493	10,295	64	43,763	17,959
Florida .....	853	128,407	50,656	361	123,103	68,065	254	171,512	96,085
Georgia .....	536	82,277	21,351	650	205,637	79,367	697	494,402	160,003
Hawaii .....	9	(D)	761	6	1,753	1,041	7	(D)	1,350
Idaho .....	1,370	204,175	174,568	1,421	434,737	338,158	1,140	827,606	588,888
Illinois .....	61	8,496	3,602	148	52,531	20,842	254	184,557	72,144
Indiana .....	96	14,071	4,311	157	54,048	21,941	202	145,462	58,448
Iowa .....	45	7,501	3,814	67	23,440	10,881	139	101,858	32,381
Kansas .....	253	33,873	19,417	404	149,554	65,287	751	544,973	238,674
Kentucky .....	139	21,073	1,848	159	51,025	3,508	105	72,419	5,813
Louisiana .....	120	18,938	11,201	207	71,184	35,453	307	222,173	121,281
Maine .....	3	420	45	43	12,419	1,541	12	(D)	919
Maryland .....	111	14,891	4,830	87	31,596	11,843	87	61,835	22,793
Massachusetts .....	87	12,401	4,604	41	12,681	2,936	7	4,791	1,625
Michigan .....	311	46,463	13,889	301	108,052	31,793	345	250,488	84,879
Minnesota .....	119	18,790	11,835	399	140,655	62,852	310	221,762	83,994
Mississippi .....	99	11,886	4,415	120	40,535	26,095	169	128,540	76,901
Missouri .....	168	24,448	9,874	213	69,187	33,474	357	265,187	133,254
Montana .....	648	105,601	58,880	1,068	356,992	171,306	562	374,404	221,330
Nebraska .....	703	112,804	67,504	3,362	1,152,337	692,083	3,988	2,876,806	1,673,762
Nevada .....	179	29,345	22,112	134	45,887	30,733	183	126,887	75,249
New Hampshire .....	15	2,109	245	8	2,914	(D)	4	2,120	(D)
New Jersey .....	112	16,167	7,519	77	24,950	13,449	49	33,809	15,183
New Mexico .....	850	127,640	65,014	359	111,990	68,557	283	200,042	78,357
New York .....	114	16,203	4,648	85	24,350	5,336	16	9,549	1,976
North Carolina .....	415	66,371	11,723	375	122,305	32,969	133	84,674	17,361
North Dakota .....	36	5,248	2,820	34	11,178	6,978	81	63,024	29,920
Ohio .....	49	7,178	1,082	15	4,424	1,133	43	27,244	4,346
Oklahoma .....	104	17,024	10,254	164	58,370	18,613	145	106,057	24,964
Oregon .....	1,185	185,535	87,325	1,072	351,465	239,831	863	578,610	280,746
Pennsylvania .....	155	20,187	2,669	90	27,810	3,312	36	24,943	2,251
Rhode Island .....	9	1,070	137	1	(D)	(D)	-	-	-
South Carolina .....	105	15,204	3,088	70	22,756	7,105	63	42,038	14,245
South Dakota .....	76	12,759	7,025	141	48,350	21,608	249	174,040	52,359
Tennessee .....	53	8,379	1,065	72	23,255	2,094	45	30,544	4,714
Texas .....	868	102,329	58,898	1,566	512,853	183,017	1,249	942,043	468,240
Utah .....	1,195	177,665	124,039	1,122	363,864	180,767	714	500,339	198,006
Vermont .....	28	3,974	166	2	(D)	(D)	1	(D)	(D)
Virginia .....	77	11,319	3,141	115	36,035	3,676	82	55,041	6,398
Washington .....	1,320	214,944	131,815	812	275,904	195,658	415	293,964	251,761
West Virginia .....	11	(D)	(D)	9	2,550	132	6	4,706	(D)
Wisconsin .....	103	15,386	4,090	250	87,875	28,801	228	156,031	65,256
Wyoming .....	504	77,757	54,030	739	236,022	109,596	600	403,803	199,719
<b>Water Resources Regions</b>									
Region 01 New England .....	146	20,391	5,784	100	30,718	5,508	23	15,203	2,640
Region 02 Mid-Atlantic .....	538	75,259	23,353	467	150,515	44,795	270	189,525	64,196
Region 03 South Atlantic-Gulf .....	2,027	308,783	90,468	1,542	501,187	191,914	1,250	860,627	295,770
Region 04 Great Lakes .....	404	59,378	18,446	453	157,178	47,144	509	364,942	130,007
Region 05 Ohio .....	278	40,857	4,909	273	91,942	15,140	238	169,085	37,820
Region 06 Tennessee .....	41	6,571	(D)	59	18,880	3,111	31	22,848	(D)
Region 07 Upper Mississippi .....	287	44,249	19,873	727	254,207	109,043	785	559,863	215,647
Region 08 Lower Mississippi .....	335	47,842	26,108	846	296,522	163,959	1,446	1,058,356	703,043
Region 09 Souris-Red-Rainy .....	24	3,578	2,430	76	29,074	8,990	73	57,365	19,476
Region 10 Missouri .....	2,273	356,670	228,724	5,965	2,006,492	1,165,149	5,888	4,196,889	2,325,255
Region 11 Arkansas-White-Red .....	644	98,590	48,205	1,025	346,756	158,318	1,502	1,119,676	509,009
Region 12 Texas-Gulf .....	551	71,879	28,763	1,454	477,426	167,794	850	625,355	327,254
Region 13 Rio Grande .....	981	127,361	103,840	447	156,017	105,160	343	235,892	115,861
Region 14 Upper Colorado .....	614	101,841	60,177	1,236	418,893	195,312	298	206,364	128,236
Region 15 Lower Colorado .....	570	81,898	35,208	172	61,272	35,746	291	209,721	104,761
Region 16 Great Basin .....	1,049	163,053	119,367	960	315,240	160,916	958	669,161	312,051
Region 17 Pacific Northwest .....	3,869	596,007	402,467	3,498	1,103,010	793,118	2,412	1,681,524	1,068,478
Region 18 California .....	5,031	722,724	475,631	3,361	1,069,140	805,893	2,162	1,530,091	1,218,777
Region 19 Alaska .....	3	(D)	(D)	3	880	185	2	(D)	(D)
Region 20 Hawaii .....	9	(D)	761	6	1,753	1,041	7	(D)	1,350

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**Table 32. Irrigated Farms by Size of Farm: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	1,000 to 1,999 acres			2,000 to 4,999 acres			5,000 acres or more		
	Farms	Land in farms (acres)	Acres irrigated	Farms	Land in farms (acres)	Acres irrigated	Farms	Land in farms (acres)	Acres irrigated
United States .....	19,378	26,932,682	12,437,643	14,670	43,446,247	15,360,655	7,183	100,729,400	11,991,290
2003 .....	20,402	28,567,950	12,317,012	14,439	(D)	13,454,565	6,366	(D)	(D)
<b>2008 DATA</b>									
Alabama .....	70	103,838	21,357	58	175,749	27,145	14	85,671	11,818
Alaska .....	-	-	-	1	(D)	(D)	-	-	-
Arizona .....	145	215,654	145,605	153	447,620	324,667	141	3,420,981	206,772
Arkansas .....	1,019	1,470,648	1,225,136	813	2,408,982	1,853,313	177	1,369,242	799,335
California .....	2,096	2,778,312	1,268,017	731	2,171,466	1,464,346	810	6,997,872	1,640,554
Colorado .....	1,168	1,677,301	512,693	1,052	3,273,253	761,770	433	4,144,893	642,855
Connecticut .....	1	(D)	(D)	-	-	-	-	-	-
Delaware .....	54	71,628	33,187	40	115,538	33,335	2	(D)	(D)
Florida .....	213	311,997	125,168	156	496,028	221,271	70	1,215,224	598,856
Georgia .....	588	841,754	285,050	305	860,804	336,663	60	486,518	117,116
Hawaii .....	1	(D)	(D)	8	23,587	9,726	5	169,442	80,796
Idaho .....	693	935,101	572,966	503	1,431,501	746,555	214	2,385,643	748,066
Illinois .....	332	466,534	162,525	158	448,547	147,930	20	145,914	48,192
Indiana .....	261	361,449	111,087	218	614,119	167,765	19	165,021	38,718
Iowa .....	158	222,504	52,433	78	213,215	55,073	3	20,726	8,001
Kansas .....	1,027	1,468,208	448,072	1,413	4,373,002	1,071,049	487	4,332,048	721,846
Kentucky .....	41	54,572	5,982	30	79,107	9,813	4	37,485	2,455
Louisiana .....	354	502,478	246,495	294	827,577	369,323	58	423,300	145,194
Maine .....	2	(D)	(D)	7	(D)	(D)	6	66,572	11,871
Maryland .....	39	56,112	16,524	40	98,410	27,547	1	(D)	(D)
Massachusetts .....	6	8,785	3,185	-	-	-	-	-	-
Michigan .....	258	358,189	130,372	153	446,736	156,848	35	262,904	104,848
Minnesota .....	340	448,713	137,118	138	400,353	138,568	21	160,054	68,296
Mississippi .....	343	483,687	247,963	364	1,115,246	659,672	104	729,420	435,688
Missouri .....	466	674,265	344,478	302	882,478	494,456	52	354,490	208,281
Montana .....	614	782,674	269,463	697	2,129,168	396,701	1,149	15,746,989	736,068
Nebraska .....	3,784	5,239,769	2,970,388	1,840	5,235,394	2,114,280	684	7,223,215	838,157
Nevada .....	110	163,253	69,599	125	369,079	134,468	127	4,832,917	330,276
New Hampshire .....	-	-	-	-	-	-	-	-	-
New Jersey .....	27	35,464	10,565	5	(D)	7,300	-	-	-
New Mexico .....	425	576,897	126,740	644	1,732,957	145,363	302	9,958,153	284,153
New York .....	6	8,912	88	12	29,292	2,123	5	44,249	2,880
North Carolina .....	124	173,596	24,942	92	307,178	28,946	14	193,191	23,890
North Dakota .....	120	177,181	42,837	220	696,869	99,421	85	751,455	65,340
Ohio .....	23	33,688	3,388	6	15,845	(D)	5	25,000	(D)
Oklahoma .....	315	424,490	104,951	323	994,884	173,207	82	765,880	124,613
Oregon .....	453	644,167	235,630	367	1,203,703	287,828	261	3,772,280	503,587
Pennsylvania .....	12	15,658	1,682	11	30,637	2,350	-	-	-
Rhode Island .....	-	-	-	1	(D)	(D)	-	-	-
South Carolina .....	82	115,391	26,905	51	141,298	29,344	12	95,350	21,815
South Dakota .....	206	297,907	77,794	248	721,510	110,682	130	1,547,799	87,794
Tennessee .....	45	71,937	11,615	46	135,187	24,687	17	145,822	26,957
Texas .....	1,956	2,723,759	1,579,594	1,863	5,306,741	1,864,862	644	6,921,470	1,152,450
Utah .....	277	369,374	158,058	182	575,620	159,573	181	3,347,337	127,245
Vermont .....	2	(D)	(D)	-	-	-	-	-	-
Virginia .....	45	59,588	10,423	32	94,780	14,137	9	55,386	4,795
Washington .....	404	558,830	299,253	279	888,337	296,467	142	5,552,222	337,277
West Virginia .....	3	(D)	(D)	-	-	-	-	-	-
Wisconsin .....	201	280,637	84,062	109	310,518	99,723	26	201,039	110,758
Wyoming .....	469	656,531	232,229	502	1,582,654	286,139	572	12,556,211	563,596
<b>Water Resources Regions</b>									
Region 01 New England .....	11	15,635	4,359	8	24,801	2,619	6	66,572	11,871
Region 02 Mid-Atlantic .....	164	218,596	70,374	112	310,489	80,014	7	50,401	10,621
Region 03 South Atlantic-Gulf .....	1,147	1,634,931	484,291	660	1,962,532	642,965	166	2,041,917	765,398
Region 04 Great Lakes .....	371	522,270	180,368	205	593,749	202,226	45	353,311	130,062
Region 05 Ohio .....	211	287,587	66,318	223	627,703	134,528	25	209,572	41,484
Region 06 Tennessee .....	27	(D)	(D)	29	(D)	(D)	14	89,755	12,042
Region 07 Upper Mississippi .....	977	1,341,898	405,020	399	1,123,110	384,281	69	483,652	199,265
Region 08 Lower Mississippi .....	1,874	2,708,518	1,866,168	1,609	4,760,086	3,073,575	348	2,504,464	1,494,451
Region 09 Souris-Red-Rainy .....	96	136,531	34,552	102	315,017	52,636	22	172,830	40,519
Region 10 Missouri .....	5,754	8,039,580	3,826,281	4,372	13,048,299	3,484,553	2,850	38,934,773	2,641,733
Region 11 Arkansas-White-Red .....	2,109	2,951,257	1,055,778	2,216	6,706,179	2,082,778	807	13,177,321	1,532,024
Region 12 Texas-Gulf .....	1,542	2,108,292	1,219,788	1,207	3,447,108	1,173,555	372	3,293,408	534,974
Region 13 Rio Grande .....	400	555,898	271,956	578	1,587,789	250,637	242	5,287,031	173,946
Region 14 Upper Colorado .....	363	484,809	172,412	568	1,696,934	327,197	222	2,666,624	345,590
Region 15 Lower Colorado .....	230	340,341	153,917	165	487,372	355,911	146	3,508,588	227,359
Region 16 Great Basin .....	301	430,244	198,832	278	821,544	287,486	281	7,338,325	404,920
Region 17 Pacific Northwest .....	1,683	2,304,324	1,131,084	1,172	3,574,141	1,322,913	729	13,220,305	1,682,778
Region 18 California .....	2,117	2,809,435	1,287,043	758	2,238,888	1,482,753	827	7,161,109	1,661,457
Region 19 Alaska .....	-	-	-	1	(D)	(D)	-	-	-
Region 20 Hawaii .....	1	(D)	(D)	8	23,587	9,726	5	169,442	80,796

**Table 33. Irrigated Farms by North American Industrial Classification System: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Total		Oilseed and grain farming (1111)		Other crop farming (1119)							
	Farms	Acres irrigated	Farms	Acres irrigated	Total		Tobacco farming (11191)		Cotton farming (11192)		Sugarcane farming, hay farming, and all other crop farming (11193, 11194, 11199)	
					Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States .....2008 ..	206,834	54,929,915	36,333	23,131,333	40,982	12,458,071	536	18,977	4,084	3,935,982	36,362	8,503,112
.....2003 ..	210,106	52,492,687	34,567	18,783,189	37,179	12,909,092	1,195	39,605	5,767	4,583,003	30,217	8,286,484
<b>2008 DATA</b>												
Alabama .....	665	75,023	56	19,081	131	38,120	-	-	34	13,133	97	24,987
Alaska .....	23	1,589	-	-	6	1,247	-	-	-	-	6	1,247
Arizona .....	2,997	861,496	55	56,478	706	566,688	-	-	156	165,862	550	400,826
Arkansas .....	4,119	4,493,435	3,127	3,786,193	479	640,684	-	-	413	631,384	66	9,300
California .....	45,136	7,329,245	1,877	580,440	2,077	1,666,534	-	-	213	351,854	1,864	1,314,680
Colorado .....	12,778	2,865,840	1,511	827,955	4,717	648,139	-	-	-	-	4,717	648,139
Connecticut .....	147	2,337	-	-	42	1,004	27	957	-	-	15	47
Delaware .....	309	104,620	135	54,494	12	746	-	-	-	-	12	746
Florida .....	5,250	1,222,797	19	11,270	265	377,221	-	-	1	(D)	264	(D)
Georgia .....	3,584	1,007,763	439	123,823	1,243	551,085	-	-	284	172,642	959	378,443
Hawaii .....	1,077	99,577	3	440	99	76,942	-	-	-	-	99	76,942
Idaho .....	13,834	3,319,827	1,041	391,663	4,998	1,218,312	-	-	-	-	4,998	1,218,312
Illinois .....	1,091	457,078	918	416,816	1	(D)	-	-	-	-	1	(D)
Indiana .....	1,089	404,399	723	335,099	16	2,327	-	-	-	-	16	2,327
Iowa .....	527	162,838	409	149,883	4	(D)	-	-	-	-	4	(D)
Kansas .....	4,508	2,570,003	3,514	2,122,952	241	201,741	-	-	-	-	241	201,741
Kentucky .....	822	32,380	101	20,491	294	8,371	230	6,524	-	-	64	1,847
Louisiana .....	1,692	932,712	1,197	808,660	124	93,258	-	-	82	80,675	42	12,583
Maine .....	196	18,151	-	-	-	-	-	-	-	-	-	-
Maryland .....	597	85,552	140	49,152	62	4,069	-	-	-	-	62	4,069
Massachusetts .....	677	17,421	-	-	7	385	7	385	-	-	-	-
Michigan .....	2,121	531,927	649	281,057	193	25,775	-	-	-	-	193	25,775
Minnesota .....	1,546	504,330	787	327,690	40	7,345	-	-	-	-	40	7,345
Mississippi .....	1,277	1,451,652	802	1,100,602	248	338,322	-	-	217	325,295	31	13,027
Missouri .....	1,877	1,232,354	1,161	956,053	220	225,002	-	-	202	222,333	18	2,669
Montana .....	8,507	1,947,159	790	315,881	2,812	413,299	-	-	-	-	2,812	413,299
Nebraska .....	14,812	8,365,545	11,014	6,985,034	943	220,646	-	-	-	-	943	220,646
Nevada .....	1,734	685,261	2	(D)	746	270,133	-	-	-	-	746	270,133
New Hampshire .....	86	720	-	-	11	106	-	-	-	-	11	106
New Jersey .....	608	59,412	34	7,854	36	1,001	-	-	-	-	36	1,001
New Mexico .....	8,878	835,639	141	133,728	3,234	313,812	-	-	85	23,683	3,149	290,129
New York .....	596	20,158	37	754	70	(D)	-	-	-	-	70	(D)
North Carolina .....	1,975	148,999	51	11,484	362	42,580	176	(D)	14	(D)	172	30,310
North Dakota .....	601	248,070	350	140,910	86	49,769	-	-	-	-	86	49,769
Ohio .....	379	18,548	49	8,540	40	1,952	-	-	-	-	40	1,952
Oklahoma .....	1,454	461,235	394	224,749	252	100,212	-	-	82	50,623	170	49,589
Oregon .....	12,156	1,758,602	164	74,599	3,120	640,392	-	-	-	-	3,120	640,392
Pennsylvania .....	1,090	17,359	32	499	74	1,009	26	116	-	-	48	893
Rhode Island .....	61	681	-	-	-	-	-	-	-	-	-	-
South Carolina .....	712	104,091	86	36,801	112	22,005	2	(D)	3	(D)	107	21,699
South Dakota .....	1,165	360,071	553	218,492	210	34,369	-	-	-	-	210	34,369
Tennessee .....	582	72,862	70	35,198	116	22,372	45	(D)	33	20,488	38	(D)
Texas .....	12,673	5,356,876	2,516	2,083,714	3,846	2,428,281	-	-	2,262	1,870,770	1,584	557,511
Utah .....	10,876	1,068,929	363	56,344	4,756	319,313	-	-	-	-	4,756	319,313
Vermont .....	66	488	-	-	4	8	-	-	-	-	4	8
Virginia .....	657	44,818	85	17,883	129	4,980	23	1,635	3	360	103	2,985
Washington .....	12,712	1,675,898	330	170,433	1,890	518,752	-	-	-	-	1,890	518,752
West Virginia .....	90	906	1	(D)	6	46	-	-	-	-	6	46
Wisconsin .....	1,261	396,123	252	109,371	45	7,198	-	-	-	-	45	7,198
Wyoming .....	5,164	1,497,119	355	73,073	1,857	350,390	-	-	-	-	1,857	350,390
<b>Water Resources Regions</b>												
Region 01 New England .....	1,188	39,468	-	-	64	1,503	34	1,342	-	-	30	161
Region 02 Mid-Atlantic .....	3,200	309,972	404	126,612	291	9,181	26	116	-	-	265	9,065
Region 03 South Atlantic-Gulf .....	12,428	2,554,462	656	195,861	2,196	1,030,952	201	9,831	330	186,412	1,665	834,709
Region 04 Great Lakes .....	3,152	721,586	907	372,704	245	28,815	-	-	-	-	245	28,815
Region 05 Ohio .....	2,056	304,963	620	263,583	314	10,674	204	5,995	-	-	110	4,679
Region 06 Tennessee .....	527	41,141	29	14,522	92	12,961	38	923	23	10,729	31	1,309
Region 07 Upper Mississippi .....	3,863	1,339,287	2,164	886,272	60	13,266	-	-	60	13,266	60	13,266
Region 08 Lower Mississippi .....	7,341	7,346,743	5,353	5,925,942	1,038	1,290,349	33	770	920	1,265,675	85	23,904
Region 09 Souris-Red-Rainy .....	400	158,617	252	107,515	15	7,365	-	-	-	-	15	7,365
Region 10 Missouri .....	32,727	13,825,255	15,769	9,087,787	6,586	1,272,031	-	-	-	-	6,586	1,272,031
Region 11 Arkansas-White-Red .....	10,336	5,412,670	4,561	3,835,749	2,083	805,073	-	-	339	274,963	1,744	530,110
Region 12 Texas-Gulf .....	10,224	3,499,153	1,444	892,771	3,001	2,013,128	-	-	1,970	1,593,419	1,031	419,709
Region 13 Rio Grande .....	8,031	1,079,145	160	44,024	3,067	408,766	-	-	131	85,368	2,936	323,398
Region 14 Upper Colorado .....	10,771	1,359,888	77	29,920	4,365	259,771	-	-	-	-	4,365	259,771
Region 15 Lower Colorado .....	3,551	936,248	55	56,478	854	609,984	-	-	162	176,362	692	433,622
Region 16 Great Basin .....	10,157	1,599,757	457	81,995	4,123	591,846	-	-	-	-	4,123	591,846
Region 17 Pacific Northwest .....	40,017	6,855,656	1,542	626,768	10,145	2,303,063	-	-	-	-	10,145	2,303,063
Region 18 California .....	45,765	7,444,738	1,880	582,390	2,338	1,711,154	-	-	209	343,054	2,129	1,368,100
Region 19 Alaska .....	23	1,589	-	-	6	1,247	-	-	-	-	6	1,247
Region 20 Hawaii .....	1,077	99,577	3	440	99	76,942	-	-	-	-	99	76,942

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Table 33. Irrigated Farms by North American Industrial Classification System: 2008 and 2003 - Con.

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Vegetable and melon farming (1112)		Fruit and tree nut farming (1113)		Beef cattle ranching and farming (112111)		Cattle feedlots (112112)		Dairy cattle and milk production (11212)		All other animal specialties (1122, 1123, 1124, 1125, 1129)	
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States .....	11,204	4,380,147	56,102	4,148,071	36,520	7,125,661	3,419	934,093	4,514	1,704,817	17,760	1,047,722
2008 ..	11,028	4,577,012	63,070	4,776,906	36,851	7,669,461	5,387	1,451,473	5,393	1,387,219	16,631	938,335
2003 ..												
<b>2008 DATA</b>												
Alabama .....	153	6,369	175	2,005	78	4,186	4	176	6	1,600	62	3,486
Alaska .....	17	342	-	-	-	-	-	-	-	-	-	-
Arizona .....	197	138,013	625	35,616	727	40,952	-	-	6	13,288	681	10,461
Arkansas .....	227	28,115	180	420	19	741	-	-	-	-	87	37,282
California .....	871	1,138,260	31,939	2,724,575	3,160	(D)	-	-	1,281	689,260	3,931	(D)
Colorado .....	375	199,044	965	3,667	3,610	913,293	489	127,360	32	28,238	1,079	118,144
Connecticut .....	61	929	34	394	-	-	-	-	-	-	10	10
Delaware .....	53	18,898	4	40	3	165	3	1,302	11	3,486	88	25,509
Florida .....	216	187,071	4,256	554,898	459	75,272	-	-	28	14,930	7	2,135
Georgia .....	433	108,214	775	117,140	311	40,777	-	-	96	29,018	287	37,706
Hawaii .....	322	5,944	610	15,205	10	839	-	-	-	-	33	207
Idaho .....	499	754,589	86	7,157	4,532	597,936	661	47,193	703	266,442	1,314	36,535
Illinois .....	88	22,326	34	(D)	5	950	18	10,200	-	-	27	(D)
Indiana .....	80	20,895	65	929	36	5,193	3	960	97	19,470	69	19,526
Iowa .....	25	1,695	10	30	4	(D)	25	2,776	8	(D)	42	7,785
Kansas .....	127	8,128	30	300	446	163,788	69	46,831	66	18,808	15	7,455
Kentucky .....	189	1,193	87	311	126	1,514	-	-	14	38	11	462
Louisiana .....	123	14,533	179	1,677	41	4,944	-	-	-	-	28	9,640
Maine .....	53	4,868	140	13,238	-	-	-	-	-	-	3	45
Maryland .....	195	11,925	49	737	27	560	-	-	39	3,865	85	15,244
Massachusetts .....	121	2,690	549	14,346	-	-	-	-	-	-	-	-
Michigan .....	461	142,667	607	28,932	3	1,326	14	4,636	106	30,133	88	19,401
Minnesota .....	91	58,904	181	2,518	70	10,002	73	19,864	225	44,123	79	33,884
Mississippi .....	70	3,598	65	2,405	75	1,185	-	-	-	-	17	5,540
Missouri .....	238	24,063	-	-	61	6,670	15	6,520	85	4,178	97	9,868
Montana .....	55	36,978	145	290	3,542	1,069,073	16	11,324	13	6,876	1,134	93,438
Nebraska .....	80	147,828	-	-	1,690	440,300	794	411,784	119	53,784	172	106,169
Nevada .....	4	18,739	49	(D)	775	369,749	65	2,580	16	8,924	77	9,487
New Hampshire .....	35	374	33	206	-	-	-	-	3	30	4	4
New Jersey .....	279	33,238	184	16,246	-	-	-	-	2	(D)	73	(D)
New Mexico .....	380	56,567	2,335	67,334	1,787	167,831	82	15,863	49	62,373	870	18,131
New York .....	260	12,643	222	5,922	-	-	-	-	5	234	2	(D)
North Carolina .....	240	16,765	388	11,076	59	4,499	-	-	25	1,910	850	60,685
North Dakota .....	29	36,289	14	(D)	98	15,352	6	3,330	2	(D)	16	1,795
Ohio .....	201	6,401	59	657	-	-	2	(D)	11	(D)	17	641
Oklahoma .....	44	13,830	128	2,063	534	107,643	21	2,959	7	6,419	74	3,360
Oregon .....	841	292,986	1,368	54,118	3,788	613,425	577	7,848	235	49,220	2,063	26,014
Pennsylvania .....	401	8,858	316	3,756	32	114	25	309	93	1,263	117	1,551
Rhode Island .....	31	388	30	293	-	-	-	-	-	-	-	-
South Carolina .....	271	17,740	123	5,553	28	3,629	-	-	44	8,697	48	9,666
South Dakota .....	5	5	-	-	293	65,372	41	(D)	1	(D)	62	28,969
Tennessee .....	171	7,481	81	(D)	68	2,506	1	(D)	18	2,137	57	2,342
Texas .....	902	131,966	2,107	102,442	1,829	441,941	156	78,840	171	78,289	1,146	11,403
Utah .....	222	14,250	521	4,182	2,904	476,685	213	31,022	335	111,898	1,562	55,235
Vermont .....	18	112	40	364	4	4	-	-	-	-	-	-
Virginia .....	85	10,194	256	1,585	9	108	-	-	56	5,093	37	4,975
Washington .....	1,004	401,402	5,607	323,307	2,942	146,810	4	17,804	338	92,624	597	4,766
West Virginia .....	44	333	26	(D)	11	175	-	-	2	(D)	-	-
Wisconsin .....	310	205,662	425	22,944	29	5,969	10	3,553	150	35,718	40	5,708
Wyoming .....	7	5,845	-	-	2,295	901,806	32	65,940	16	10,340	602	89,725
<b>Water Resources Regions</b>												
Region 01 New England .....	309	9,265	795	28,611	-	-	-	-	3	30	17	59
Region 02 Mid-Atlantic .....	1,058	87,541	795	24,167	34	905	28	1,611	201	14,387	389	45,568
Region 03 South Atlantic-Gulf .....	1,351	335,058	5,841	691,784	936	129,028	-	-	199	56,155	1,249	115,624
Region 04 Great Lakes .....	742	198,552	835	31,499	36	6,597	20	5,449	224	48,068	143	29,902
Region 05 Ohio .....	546	15,072	262	2,003	190	1,983	-	-	56	2,306	68	9,342
Region 06 Tennessee .....	176	4,896	99	2,047	67	(D)	4	(D)	14	1,493	46	(D)
Region 07 Upper Mississippi .....	444	242,890	579	25,389	80	14,195	97	36,119	289	75,830	150	45,326
Region 08 Lower Mississippi .....	420	62,459	242	1,827	108	5,099	11	4,570	-	-	169	56,497
Region 09 Souris-Red-Rainy .....	20	24,472	7	14	33	4,132	10	750	51	6,451	12	7,918
Region 10 Missouri .....	340	245,324	235	1,004	7,203	2,186,201	997	620,742	312	100,550	1,285	311,616
Region 11 Arkansas-White-Red .....	223	76,031	769	4,447	2,429	559,892	109	98,792	17	22,819	145	9,867
Region 12 Texas-Gulf .....	888	93,036	2,035	81,432	1,361	256,410	143	25,911	207	125,462	1,145	11,003
Region 13 Rio Grande .....	187	209,134	2,079	87,032	1,576	266,510	40	1,600	13	15,200	909	46,879
Region 14 Upper Colorado .....	523	11,892	583	3,116	3,381	931,777	536	38,526	17	10,210	1,289	74,676
Region 15 Lower Colorado .....	198	147,145	621	34,816	1,114	61,766	-	-	6	13,288	703	12,771
Region 16 Great Basin .....	234	55,029	570	4,231	2,488	642,825	182	27,002	362	130,247	1,741	66,582
Region 17 Pacific Northwest .....	2,315	1,416,057	7,206	384,872	11,981	1,576,435	1,240	72,171	1,255	386,037	4,333	90,253
Region 18 California .....	891	1,140,008	31,939	2,724,575	3,493	(D)	2	(D)	1,288	696,284	3,934	(D)
Region 19 Alaska .....	17	342	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	322	5,944	610	15,205	10	839	-	-	-	-	33	207

**Table 34. Irrigated Farms by Market Value of Agricultural Products Sold: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All farms									
	Farms with irrigation				Water source			Quantity of water applied <sup>1</sup>		
	Farms	Land in farms (acres)	Acres irrigated	Irrigated cropland harvested (acres)	Ground-water (acres)	Surface water		Ground-water (acre-feet)	Surface water	
On-farm (acres)						Off-farm (acres)	On-farm (acre-feet)		Off-farm (acre-feet)	
United States .....	206,834	198,160,896	54,929,915	50,970,320	36,181,006	8,813,848	13,069,453	48,491,704	13,773,706	28,969,626
2003 .....	210,106	195,969,172	52,492,687	48,540,852	32,316,182	7,241,081	13,839,769	43,453,757	11,737,520	31,566,388
<b>2008 DATA</b>										
Alabama .....	665	442,487	75,023	73,145	22,070	44,833	8,120	12,802	24,189	5,521
Alaska .....	23	5,785	1,589	(D)	1,550	39	-	323	4	-
Arizona .....	2,997	4,446,165	861,496	801,314	327,251	127,845	553,273	1,306,425	638,978	2,676,906
Arkansas .....	4,119	6,162,119	4,493,435	4,470,573	3,909,914	985,911	37,897	6,864,792	1,720,577	46,412
California .....	45,136	15,866,424	7,329,245	6,949,095	4,344,670	1,425,715	3,220,628	10,719,609	2,651,880	9,228,170
Colorado .....	12,778	10,647,744	2,865,840	2,400,152	1,251,730	722,231	1,089,231	1,795,203	1,199,188	1,546,884
Connecticut .....	147	10,403	2,337	2,337	440	1,646	251	185	1,276	75
Delaware .....	309	273,149	104,620	104,504	91,541	12,685	394	63,275	10,686	419
Florida .....	5,250	2,535,664	1,222,797	1,143,610	656,773	268,153	352,644	900,851	317,610	482,659
Georgia .....	3,584	2,999,922	1,007,763	978,196	770,421	239,624	8,024	693,986	175,831	7,068
Hawaii .....	1,077	213,387	99,577	57,468	51,975	12,707	80,943	108,855	38,154	306,538
Idaho .....	13,834	6,421,820	3,319,827	2,937,001	1,203,147	606,693	1,548,956	2,142,149	980,301	3,105,952
Illinois .....	1,091	1,309,942	457,078	455,158	446,078	8,388	3,844	225,523	3,069	2,799
Indiana .....	1,089	1,360,556	404,399	401,626	345,164	52,618	7,969	169,810	26,320	2,751
Iowa .....	527	590,047	162,838	161,847	155,878	4,800	2,160	74,969	2,661	1,309
Kansas .....	4,508	10,912,364	2,570,003	2,537,589	2,490,789	49,330	37,354	3,074,409	33,003	39,194
Kentucky .....	822	329,198	32,380	31,786	18,274	12,454	1,939	9,586	4,958	1,154
Louisiana .....	1,692	2,074,497	932,712	919,256	739,674	179,850	25,760	741,536	191,579	39,050
Maine .....	196	118,107	18,151	(D)	8,329	16,277	761	(D)	(D)	200
Maryland .....	597	278,277	85,552	85,304	58,284	26,205	1,063	38,407	16,159	693
Massachusetts .....	677	52,718	17,421	(D)	933	14,620	2,065	(D)	(D)	653
Michigan .....	2,121	1,503,006	531,927	528,036	371,726	162,048	5,045	218,225	78,109	2,106
Minnesota .....	1,546	1,397,018	504,330	503,256	466,109	32,482	8,891	294,428	24,584	14,656
Mississippi .....	1,277	2,512,434	1,451,652	1,451,231	1,401,988	67,607	2,023	1,327,911	72,430	1,758
Missouri .....	1,877	2,285,747	1,232,354	1,230,455	1,177,805	56,061	1,000	969,642	26,733	500
Montana .....	8,507	19,637,380	1,947,159	1,549,574	56,079	830,781	1,071,787	63,171	1,125,801	1,471,704
Nebraska .....	14,812	21,853,534	8,365,545	8,306,117	7,842,363	254,738	435,425	6,005,834	192,740	500,971
Nevada .....	1,734	5,600,944	685,261	530,401	275,142	271,419	161,230	689,506	409,889	337,537
New Hampshire .....	86	9,043	720	720	138	522	60	21	154	18
New Jersey .....	608	136,352	59,412	58,967	40,617	18,369	(D)	31,411	(D)	(D)
New Mexico .....	8,878	12,816,722	835,639	711,777	548,401	98,068	291,053	1,066,753	175,381	654,215
New York .....	596	144,640	20,158	19,708	17,708	7,402	1,662	5,862	7,746	1,193
North Carolina .....	1,975	990,106	148,999	137,209	22,073	123,696	6,005	14,470	62,249	7,129
North Dakota .....	601	1,706,080	248,070	244,343	164,688	22,246	61,146	128,749	21,847	73,866
Ohio .....	379	124,294	18,548	18,483	5,386	9,105	4,494	3,578	3,442	2,378
Oklahoma .....	1,454	2,382,239	461,235	415,556	382,445	36,197	45,553	434,935	33,807	55,896
Oregon .....	12,156	6,952,252	1,758,602	1,418,435	421,888	542,767	810,529	713,268	944,840	1,618,572
Pennsylvania .....	1,090	149,947	17,359	17,042	4,947	11,815	597	2,898	(D)	(D)
Rhode Island .....	61	5,501	681	677	90	383	208	69	564	42
South Carolina .....	712	443,293	104,091	101,231	74,252	30,668	(D)	58,233	27,847	156
South Dakota .....	1,165	2,807,203	360,071	357,955	207,600	23,022	130,619	123,009	21,763	126,502
Tennessee .....	582	424,980	72,862	(D)	60,466	11,082	1,362	34,140	6,472	1,659
Texas .....	12,673	16,634,484	5,356,876	4,881,811	4,686,872	156,965	605,515	5,552,255	1,41,072	1,126,457
Utah .....	10,876	5,512,452	1,068,929	812,783	158,439	236,592	691,879	455,480	503,240	1,471,428
Vermont .....	66	8,186	488	488	100	388	-	30	205	-
Virginia .....	657	323,778	44,818	44,568	3,652	38,022	3,144	1,240	21,414	2,141
Washington .....	12,712	8,085,090	1,675,898	1,538,597	435,997	309,106	935,038	937,019	675,006	2,169,347
West Virginia .....	90	13,493	906	890	185	742	-	96	878	-
Wisconsin .....	1,261	1,065,575	396,123	390,108	357,744	40,035	2,437	255,101	64,126	3,151
Wyoming .....	5,164	15,584,598	1,497,119	1,086,113	111,527	605,120	808,284	156,633	1,051,516	1,831,332
<b>Water Resources Regions</b>										
Region 01 New England .....	1,188	199,464	39,468	(D)	9,942	33,594	3,345	5,318	21,982	987
Region 02 Mid-Atlantic .....	3,200	1,052,547	309,972	308,150	205,393	99,489	5,360	142,699	65,108	3,522
Region 03 South Atlantic-Gulf .....	12,428	7,495,555	2,554,462	2,429,420	1,545,696	705,037	373,003	1,681,447	607,791	500,258
Region 04 Great Lakes .....	3,152	2,098,815	721,586	716,060	519,101	199,242	11,221	311,046	98,968	4,496
Region 05 Ohio .....	2,056	1,461,874	304,963	303,318	257,400	42,886	8,946	119,998	21,082	5,132
Region 06 Tennessee .....	527	283,315	41,141	(D)	10,459	27,075	3,942	5,087	16,543	3,986
Region 07 Upper Mississippi .....	3,863	3,827,858	1,339,287	1,329,957	1,238,826	96,432	9,747	737,127	86,164	7,625
Region 08 Lower Mississippi .....	7,341	11,412,924	7,346,743	7,330,922	6,657,405	1,042,945	51,748	9,049,885	1,662,940	73,295
Region 09 Souris-Red-Rainy .....	400	714,430	158,617	157,271	130,428	20,730	9,173	89,395	19,667	14,163
Region 10 Missouri .....	32,727	66,817,228	13,825,255	13,114,752	9,868,085	1,626,506	2,596,910	8,183,108	2,081,846	4,121,131
Region 11 Arkansas-White-Red .....	10,336	24,462,413	5,412,670	5,059,712	4,909,361	368,524	288,607	6,525,974	591,367	352,298
Region 12 Texas-Gulf .....	10,224	10,145,409	3,499,153	3,208,458	2,951,242	124,114	490,039	3,172,724	132,254	877,329
Region 13 Rio Grande .....	8,031	8,037,090	1,079,145	918,958	612,632	229,547	401,760	1,346,281	359,827	785,993
Region 14 Upper Colorado .....	10,771	5,822,461	1,359,888	846,994	27,363	550,383	804,790	24,167	1,020,630	1,416,040
Region 15 Lower Colorado .....	3,551	4,727,545	936,248	864,631	351,848	132,647	603,294	1,372,134	648,856	2,884,166
Region 16 Great Basin .....	10,157	9,893,297	1,599,757	1,299,779	500,021	441,888	698,953	1,212,823	838,532	1,509,544
Region 17 Pacific Northwest .....	40,017	23,242,402	6,855,656	5,941,698	1,959,888	1,603,578	3,352,542	3,633,106	2,831,203	6,868,089
Region 18 California .....	45,765	16,247,097	7,444,738	7,006,877	4,372,391	1,456,485	3,275,130	10,770,207	2,630,781	9,234,406
Region 19 Alaska .....	23	5,785	1,589	(D)	1,550	39	-	323	4	-
Region 20 Hawaii .....	1,077	213,387	99,577	57,468	51,975	12,707	80,943	108,855	38,154	306,538

See footnote(s) at end of table.

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**Table 34. Irrigated Farms by Market Value of Agricultural Products Sold: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area		Less than \$25,000									
		Farms with irrigation				Water source			Quantity of water applied		
		Farms	Land in farms (acres)	Acres irrigated	Irrigated cropland harvested (acres)	Ground-water (acres)	Surface water		Ground-water (acre-feet)	Surface water	
							On-farm (acres)	Off-farm (acres)		On-farm (acre-feet)	Off-farm (acre-feet)
United States .....	2008 ..	100,371	19,858,301	2,911,875	1,993,322	647,455	862,792	1,466,477	913,653	1,339,114	2,438,975
	2003 ..	96,850	14,946,746	2,651,893	1,715,702	638,528	670,242	1,353,059	844,798	844,685	2,400,074
<b>2008 DATA</b>											
Alabama .....		372	34,169	3,442	2,769	995	2,196	251	771	1,022	65
Alaska .....		6	255	15	15	15	-	-	4	-	-
Arizona .....		1,941	1,609,071	42,510	17,463	13,860	13,388	15,902	47,968	28,741	60,488
Arkansas .....		463	61,364	33,063	31,413	14,823	13,800	4,440	15,106	20,850	5,820
California .....		22,017	2,381,118	321,277	258,603	123,881	28,526	180,180	243,673	98,904	329,745
Colorado .....		8,056	1,550,935	413,047	242,061	21,368	131,367	271,472	18,736	215,925	333,430
Connecticut .....		64	1,210	95	(D)	(D)	(D)	-	40	38	-
Delaware .....		24	1,474	690	638	690	-	-	547	-	-
Florida .....		2,555	123,963	29,104	22,676	20,062	7,502	2,840	16,530	9,938	(D)
Georgia .....		1,062	146,186	17,491	17,071	7,043	10,448	-	7,200	11,249	-
Hawaii .....		780	7,958	2,961	2,360	276	(D)	1,859	332	1,309	2,851
Idaho .....		9,372	626,063	354,741	219,058	85,543	66,451	202,747	129,929	79,826	334,199
Illinois .....		106	5,290	1,359	1,359	1,359	-	-	800	-	-
Indiana .....		124	19,653	4,398	3,592	4,320	78	-	1,551	8	-
Iowa .....		46	3,628	1,072	877	868	4	200	255	1	(D)
Kansas .....		183	47,988	17,779	5,459	17,779	-	-	21,218	-	-
Kentucky .....		331	42,253	2,509	1,925	207	1,844	458	171	910	116
Louisiana .....		420	41,437	15,170	11,718	10,417	4,484	269	6,262	3,688	161
Maine .....		88	2,301	281	(D)	(D)	(D)	-	(D)	12	-
Maryland .....		201	10,145	1,319	1,231	560	605	154	348	357	123
Massachusetts .....		224	3,108	787	(D)	185	602	-	(D)	443	-
Michigan .....		557	28,767	7,172	5,882	2,870	5,142	-	779	1,450	-
Minnesota .....		249	30,411	12,207	12,041	10,783	990	434	5,389	243	320
Mississippi .....		186	20,251	5,748	5,748	2,385	3,298	65	788	1,821	20
Missouri .....		275	30,029	7,874	6,730	6,846	1,028	-	5,081	611	-
Montana .....		5,269	2,682,242	298,112	214,334	-	137,136	161,476	-	155,018	260,408
Nebraska .....		804	65,881	38,905	35,433	38,457	448	-	32,533	302	-
Nevada .....		962	181,828	54,738	39,002	8,929	27,275	19,014	30,745	57,395	52,133
New Hampshire .....		44	5,044	107	107	78	29	-	19	10	-
New Jersey .....		299	18,156	2,185	1,856	1,254	1,005	-	775	1,118	-
New Mexico .....		7,219	2,559,268	162,263	97,700	40,550	42,850	92,877	90,437	64,473	154,264
New York .....		209	6,377	1,036	1,036	668	182	186	427	302	19
North Carolina .....		837	121,613	16,196	13,045	(D)	(D)	3,345	2,332	4,855	5,499
North Dakota .....		61	49,320	3,178	3,178	687	(D)	(D)	599	(D)	1,845
Ohio .....		182	18,974	875	875	262	613	-	132	457	-
Oklahoma .....		389	115,910	20,554	15,489	14,661	5,703	190	15,786	5,136	(D)
Oregon .....		8,221	1,014,198	194,487	122,117	24,865	92,105	80,597	42,208	133,196	122,404
Pennsylvania .....		487	21,960	1,385	1,224	515	665	205	(D)	618	95
Rhode Island .....		32	509	61	(D)	(D)	(D)	-	(D)	1	-
South Carolina .....		413	38,856	3,570	2,970	1,682	1,873	15	1,112	1,198	5
South Dakota .....		273	134,057	20,677	19,989	8,932	704	11,041	5,812	774	9,743
Tennessee .....		293	26,057	2,998	2,014	598	1,344	(D)	321	773	1,496
Texas .....		5,091	1,093,308	166,093	131,821	87,283	18,216	60,594	69,578	37,661	40,303
Utah .....		8,467	806,514	254,023	183,742	23,030	61,115	175,016	49,136	123,126	344,398
Vermont .....		22	1,777	65	(D)	22	43	-	20	6	-
Virginia .....		361	61,456	2,620	2,620	753	1,379	488	222	911	604
Washington .....		7,542	804,645	125,064	69,198	30,690	59,166	35,208	36,337	112,754	68,457
West Virginia .....		57	3,124	258	(D)	(D)	(D)	-	23	(D)	-
Wisconsin .....		257	24,011	5,652	5,552	4,226	1,426	-	1,394	790	-
Wyoming .....		2,878	3,174,189	240,662	157,960	9,512	105,046	142,094	9,592	160,267	302,571
<b>Water Resources Regions</b>											
Region 01 New England .....		460	12,844	1,359	(D)	(D)	(D)	-	(D)	509	-
Region 02 Mid-Atlantic .....		1,232	74,651	7,143	6,517	3,711	(D)	847	2,438	2,197	823
Region 03 South Atlantic-Gulf .....		5,409	507,180	72,752	61,720	32,132	35,748	6,427	27,995	30,218	12,225
Region 04 Great Lakes .....		873	51,705	10,671	8,475	5,489	5,836	186	1,567	2,142	19
Region 05 Ohio .....		764	79,624	6,315	5,666	3,339	2,437	544	1,662	1,264	(D)
Region 06 Tennessee .....		261	24,049	3,122	(D)	(D)	(D)	985	124	949	(D)
Region 07 Upper Mississippi .....		524	43,246	13,118	13,118	10,675	2,259	184	4,072	904	(D)
Region 08 Lower Mississippi .....		910	101,829	52,882	48,503	33,667	17,384	1,831	26,584	20,938	3,035
Region 09 Souris-Red-Rainy .....		49	26,433	6,232	6,066	5,762	-	470	3,675	-	401
Region 10 Missouri .....		8,084	5,517,074	500,037	358,278	58,841	196,811	260,375	49,140	241,841	505,747
Region 11 Arkansas-White-Red .....		3,159	1,609,174	152,627	106,707	64,966	20,970	73,251	72,898	37,744	97,894
Region 12 Texas-Gulf .....		4,363	952,328	125,298	91,026	77,178	19,976	29,904	65,151	41,181	30,538
Region 13 Rio Grande .....		6,118	1,703,933	176,279	126,115	25,507	39,302	116,296	65,892	38,696	140,111
Region 14 Upper Colorado .....		8,693	1,175,808	389,391	202,048	15,613	146,129	240,657	(D)	272,347	320,737
Region 15 Lower Colorado .....		2,446	1,744,993	56,707	24,719	16,893	15,210	26,112	58,288	32,119	91,702
Region 16 Great Basin .....		7,322	782,227	235,574	175,861	29,928	63,220	146,196	74,579	131,612	313,881
Region 17 Pacific Northwest .....		26,467	2,999,947	768,470	492,206	137,967	257,746	378,337	201,230	375,006	580,793
Region 18 California .....		22,451	2,443,043	330,922	260,753	124,555	33,661	184,016	245,021	108,139	336,539
Region 19 Alaska .....		6	255	15	15	15	-	-	4	-	-
Region 20 Hawaii .....		780	7,958	2,961	2,360	276	(D)	1,859	332	1,309	2,851

See footnote(s) at end of table.

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**Table 34. Irrigated Farms by Market Value of Agricultural Products Sold: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area		\$25,000 to \$49,999									
		Farms with irrigation				Water source			Quantity of water applied		
		Farms	Land in farms (acres)	Acres irrigated	Irrigated cropland harvested (acres)	Ground-water (acres)	Surface water		Ground-water (acre-feet)	Surface water	
							On-farm (acres)	Off-farm (acres)		On-farm (acre-feet)	Off-farm (acre-feet)
United States .....	2008 ..	16,554	5,552,985	1,214,046	1,003,589	439,877	292,985	520,440	551,445	435,889	889,458
	2003 ..	20,196	12,145,037	1,973,241	1,610,428	725,987	385,414	865,154	827,568	511,656	2,219,051
<b>2008 DATA</b>											
Alabama .....		45	16,899	1,813	1,699	377	1,304	132	190	578	78
Alaska .....		-	-	-	-	-	-	-	-	-	-
Arizona .....		168	241,084	16,260	8,544	10,020	2,220	7,170	29,880	12,186	34,005
Arkansas .....		111	46,815	18,685	17,830	18,685	-	-	25,075	-	-
California .....		6,373	192,049	136,551	132,351	81,692	44,120	27,489	180,163	62,884	49,266
Colorado .....		1,074	853,345	189,482	167,328	27,130	72,558	95,874	18,763	123,248	82,123
Connecticut .....		14	(D)	88	88	-	88	-	-	50	-
Delaware .....		21	3,575	1,755	1,755	(D)	(D)	(D)	693	210	(D)
Florida .....		589	47,636	23,720	16,985	19,445	(D)	(D)	12,449	3,438	(D)
Georgia .....		467	133,625	25,969	19,047	16,363	9,606	-	17,275	6,013	-
Hawaii .....		82	2,018	1,099	489	47	755	318	30	269	505
Idaho .....		481	153,205	76,399	58,534	2,315	8,436	65,648	4,435	6,753	105,462
Illinois .....		34	13,567	3,063	3,063	3,063	-	-	967	-	-
Indiana .....		27	14,732	3,367	3,367	2,926	441	-	1,503	88	-
Iowa .....		19	7,318	4,419	4,419	4,419	-	-	3,096	-	-
Kansas .....		233	126,199	30,494	30,494	26,614	1,548	2,332	35,777	1,548	7,462
Kentucky .....		76	16,586	804	804	181	609	14	108	(D)	7
Louisiana .....		98	19,186	8,812	8,812	8,812	1,200	-	6,990	360	-
Maine .....		29	2,185	202	202	-	202	-	-	20	-
Maryland .....		50	5,090	1,372	1,282	803	547	22	391	318	15
Massachusetts .....		156	3,929	865	865	-	(D)	(D)	-	640	(D)
Michigan .....		135	18,502	3,318	3,158	1,687	1,631	-	323	1,096	-
Minnesota .....		103	40,938	9,611	9,611	8,611	1,000	-	6,117	(D)	-
Mississippi .....		5	5,467	2,750	2,750	2,750	-	-	2,351	-	-
Missouri .....		80	12,325	6,478	6,478	3,793	2,685	-	2,356	2,442	-
Montana .....		446	570,307	88,707	74,683	4,125	29,775	54,807	4,950	33,810	97,383
Nebraska .....		328	954,542	43,720	43,720	43,720	-	-	37,210	-	-
Nevada .....		173	63,351	20,027	14,726	8,174	6,922	7,141	13,537	10,483	15,779
New Hampshire .....		20	(D)	(D)	95	(D)	(D)	(D)	27	(D)	(D)
New Jersey .....		22	2,966	1,096	1,096	570	526	-	123	(D)	-
New Mexico .....		429	193,059	29,891	23,160	20,860	3,000	6,031	23,228	6,840	7,624
New York .....		135	10,961	1,237	1,117	818	388	31	483	206	3
North Carolina .....		32	1,328	368	368	-	368	-	-	152	-
North Dakota .....		23	19,395	3,117	3,051	1,537	960	620	1,294	880	969
Ohio .....		31	2,625	393	393	253	140	-	118	29	-
Oklahoma .....		293	244,659	26,364	23,591	(D)	-	(D)	19,240	-	(D)
Oregon .....		1,115	192,832	78,351	58,834	18,293	20,124	40,142	27,911	39,658	83,512
Pennsylvania .....		126	(D)	956	956	(D)	575	(D)	162	(D)	(D)
Rhode Island .....		-	-	-	-	-	-	-	-	-	-
South Carolina .....		24	16,477	1,036	1,036	846	24	166	279	19	51
South Dakota .....		61	137,230	6,857	6,857	621	1,090	5,146	62	1,180	4,188
Tennessee .....		62	9,962	889	809	(D)	476	(D)	217	182	(D)
Texas .....		624	170,291	72,851	50,388	65,237	7,056	7,614	62,184	1,411	6,538
Utah .....		724	319,633	122,033	75,197	(D)	24,043	95,552	3,064	40,142	190,712
Vermont .....		12	2,630	(D)	52	(D)	(D)	-	1	34	-
Virginia .....		29	7,701	497	497	45	452	-	14	483	-
Washington .....		841	44,754	36,679	32,404	-	4,988	31,691	-	10,429	41,193
West Virginia .....		5	(D)	5	5	-	5	-	-	(D)	-
Wisconsin .....		69	9,324	2,059	2,059	1,354	705	-	1,708	213	-
Wyoming .....		460	593,284	109,390	88,540	3,770	37,017	70,703	6,728	65,908	161,065
<b>Water Resources Regions</b>											
Region 01 New England .....		225	9,139	1,282	1,282	11	1,186	85	1	738	83
Region 02 Mid-Atlantic .....		280	27,862	6,143	5,933	3,950	1,982	211	1,796	1,275	(D)
Region 03 South Atlantic-Gulf .....		1,173	222,889	53,342	39,571	37,031	16,021	725	30,193	10,679	908
Region 04 Great Lakes .....		262	27,829	6,158	5,998	3,624	2,503	31	2,514	1,349	3
Region 05 Ohio .....		146	41,763	4,112	4,112	3,196	822	94	1,417	360	(D)
Region 06 Tennessee .....		48	8,195	325	285	(D)	264	(D)	27	(D)	8
Region 07 Upper Mississippi .....		151	42,916	12,665	12,665	11,025	1,640	-	8,174	928	-
Region 08 Lower Mississippi .....		246	75,834	33,253	32,358	33,183	1,270	-	36,192	374	-
Region 09 Souris-Red-Rainy .....		40	24,500	3,188	3,188	(D)	560	(D)	1,229	280	(D)
Region 10 Missouri .....		1,621	2,307,857	288,969	266,092	65,374	64,090	167,135	58,765	124,380	266,941
Region 11 Arkansas-White-Red .....		784	747,291	95,967	91,634	80,157	6,068	9,742	72,683	10,972	14,203
Region 12 Texas-Gulf .....		638	210,638	69,029	43,623	61,415	7,056	7,614	47,806	(D)	6,538
Region 13 Rio Grande .....		397	76,870	48,155	35,127	7,476	28,140	13,089	20,841	39,295	22,649
Region 14 Upper Colorado .....		828	584,291	147,034	95,591	3,572	50,153	93,309	5,358	72,738	151,569
Region 15 Lower Colorado .....		182	245,644	17,180	9,464	10,940	2,220	7,170	31,224	12,186	34,005
Region 16 Great Basin .....		538	262,426	77,705	61,234	9,938	15,352	54,671	15,737	17,344	110,588
Region 17 Pacific Northwest .....		2,522	424,642	204,697	161,292	22,939	48,039	133,927	33,924	77,197	218,010
Region 18 California .....		6,391	210,381	143,743	133,651	83,486	44,864	32,143	183,534	64,000	63,228
Region 19 Alaska .....		-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....		82	2,018	1,099	489	47	755	318	30	269	505

See footnote(s) at end of table.

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**Table 34. Irrigated Farms by Market Value of Agricultural Products Sold: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$50,000 to \$99,999									
	Farms with irrigation				Water source			Quantity of water applied		
	Farms	Land in farms (acres)	Acres irrigated	Irrigated cropland harvested (acres)	Ground-water (acres)	Surface water		Ground-water (acre-feet)	Surface water	
					On-farm (acres)	Off-farm (acres)		On-farm (acre-feet)	Off-farm (acre-feet)	
United States .....	2008 .. 13,774	13,738,171	2,174,311	1,791,294	950,202	610,779	654,500	1,152,382	1,037,945	1,193,945
	2003 .. 23,520	18,268,767	3,825,340	3,324,227	1,982,150	689,937	1,182,640	2,298,820	1,023,832	2,016,513
<b>2008 DATA</b>										
Alabama .....	38	14,406	2,690	2,576	727	1,963	-	267	961	-
Alaska .....	9	3,342	(D)	369	(D)	39	-	(D)	4	-
Arizona .....	183	56,399	14,316	10,656	4,476	6,780	5,300	13,539	27,536	31,956
Arkansas .....	303	159,807	96,216	96,216	91,416	4,800	-	146,873	2,400	-
California .....	1,195	556,755	128,034	88,790	84,130	33,774	17,620	193,512	155,689	40,236
Colorado .....	825	889,379	254,651	197,479	58,698	63,186	142,132	92,513	88,281	196,587
Connecticut .....	26	2,286	268	(D)	30	(D)	(D)	(D)	60	(D)
Delaware .....	45	9,370	4,742	4,742	4,702	40	-	3,066	40	-
Florida .....	590	164,927	34,152	32,752	30,836	(D)	(D)	33,651	6,480	(D)
Georgia .....	190	77,903	29,236	25,686	17,326	8,910	3,000	16,072	3,336	1,968
Hawaii .....	78	10,392	1,154	1,112	324	52	778	74	83	639
Idaho .....	926	534,726	186,455	128,300	16,356	88,644	81,455	25,998	107,243	171,484
Illinois .....	90	38,216	(D)	8,608	8,555	(D)	(D)	4,385	23	(D)
Indiana .....	65	22,987	6,395	6,395	5,269	(D)	(D)	2,248	254	(D)
Iowa .....	53	33,417	7,045	7,045	6,510	535	-	2,365	269	-
Kansas .....	453	593,321	56,088	50,463	50,268	5,820	-	62,311	1,746	-
Kentucky .....	119	33,315	1,665	1,665	208	1,457	-	73	450	-
Louisiana .....	134	70,340	28,259	27,419	22,233	4,618	1,408	19,233	8,322	3,208
Maine .....	12	2,016	168	117	48	45	75	24	23	(D)
Maryland .....	46	8,474	3,467	3,467	2,428	1,039	-	1,688	552	-
Massachusetts .....	62	2,845	980	980	-	903	77	-	1,218	100
Michigan .....	301	48,359	14,611	14,061	7,144	7,467	-	3,101	2,185	-
Minnesota .....	158	54,474	14,864	14,749	13,666	1,548	-	7,124	863	-
Mississippi .....	61	39,177	21,932	21,932	20,132	2,700	-	23,815	2,775	-
Missouri .....	161	46,970	21,541	21,541	20,653	888	-	11,456	178	-
Montana .....	684	1,459,559	181,550	147,957	-	78,226	103,324	-	98,053	123,141
Nebraska .....	1,508	1,025,592	240,468	240,468	220,287	20,181	-	155,907	9,960	-
Nevada .....	156	191,279	50,710	34,376	15,348	29,384	10,858	40,211	42,887	16,863
New Hampshire .....	7	168	21	21	12	9	-	(D)	15	-
New Jersey .....	19	4,884	1,799	1,799	1,230	569	-	586	615	-
New Mexico .....	381	1,082,432	37,325	31,114	20,565	10,564	11,056	35,895	26,900	22,729
New York .....	33	3,552	640	640	330	214	96	178	59	20
North Carolina .....	186	33,562	6,620	5,516	448	6,172	-	179	1,961	-
North Dakota .....	47	57,970	10,650	10,405	3,033	(D)	(D)	2,488	(D)	5,397
Ohio .....	50	8,472	875	875	358	517	-	160	307	-
Oklahoma .....	140	240,535	26,916	23,704	(D)	(D)	(D)	25,537	2,903	(D)
Oregon .....	631	778,523	108,357	79,680	8,580	65,503	34,274	16,548	131,888	56,417
Pennsylvania .....	242	17,333	2,742	2,742	968	1,762	12	352	1,596	1
Rhode Island .....	10	925	70	70	-	(D)	(D)	-	35	2
South Carolina .....	44	19,316	4,330	4,285	3,496	1,874	-	1,675	788	-
South Dakota .....	104	139,835	23,727	23,232	4,308	1,753	17,666	1,922	1,793	19,232
Tennessee .....	32	5,397	620	(D)	200	420	-	114	273	-
Texas .....	1,137	1,477,035	150,545	137,774	130,090	4,060	20,455	112,316	1,450	22,954
Utah .....	558	547,811	128,902	92,210	19,780	40,967	71,260	46,138	96,918	189,602
Vermont .....	13	1,551	103	103	4	99	-	(Z)	112	-
Virginia .....	37	7,782	972	972	(D)	(D)	-	54	238	-
Washington .....	1,062	1,843,323	86,211	71,981	11,880	26,588	50,623	32,132	56,428	97,889
West Virginia .....	20	5,145	(D)	(D)	(D)	(D)	-	(D)	(D)	-
Wisconsin .....	68	18,648	5,962	5,762	4,731	1,231	-	2,815	1,068	-
Wyoming .....	482	1,293,939	165,776	107,461	14,224	75,000	76,552	13,606	150,248	192,977
<b>Water Resources Regions</b>										
Region 01 New England .....	121	8,632	1,515	1,464	94	1,137	284	36	1,352	192
Region 02 Mid-Atlantic .....	365	44,366	13,551	13,551	9,910	3,641	-	5,913	2,397	-
Region 03 South Atlantic-Gulf .....	1,049	315,190	78,916	72,703	52,833	24,047	3,076	51,843	16,200	2,097
Region 04 Great Lakes .....	382	66,881	18,502	17,952	10,012	8,394	96	4,784	2,798	20
Region 05 Ohio .....	228	63,415	6,272	6,272	3,685	2,561	26	1,806	1,677	(D)
Region 06 Tennessee .....	38	1,742	(D)	503	(D)	(D)	-	(D)	(D)	-
Region 07 Upper Mississippi .....	348	128,174	34,271	33,956	31,275	2,796	(D)	15,243	1,747	(D)
Region 08 Lower Mississippi .....	450	257,227	131,434	130,594	125,368	5,558	1,408	183,454	8,407	3,208
Region 09 Souris-Red-Rainy .....	24	20,452	4,568	4,568	2,268	2,300	-	1,593	448	-
Region 10 Missouri .....	3,310	4,446,566	652,994	592,541	287,075	155,213	210,706	223,123	206,270	339,436
Region 11 Arkansas-White-Red .....	910	1,092,229	185,980	163,310	143,630	16,139	28,036	139,405	14,243	34,030
Region 12 Texas-Gulf .....	862	437,530	82,208	79,085	71,903	(D)	(D)	65,372	(D)	20,344
Region 13 Rio Grande .....	542	1,753,948	122,185	81,977	45,450	44,534	46,921	89,275	63,845	70,994
Region 14 Upper Colorado .....	417	714,860	141,448	88,917	(D)	61,055	76,863	2,180	127,672	132,473
Region 15 Lower Colorado .....	183	56,399	14,316	10,656	4,476	6,780	5,300	13,539	27,536	31,956
Region 16 Great Basin .....	706	600,803	168,487	130,613	43,308	56,987	76,177	101,507	103,066	188,895
Region 17 Pacific Northwest .....	2,535	3,143,508	376,405	271,965	25,996	176,965	176,324	55,320	287,322	329,298
Region 18 California .....	1,217	572,515	138,858	89,186	86,770	41,928	17,650	197,712	172,711	40,356
Region 19 Alaska .....	9	3,342	(D)	369	(D)	39	-	(D)	4	-
Region 20 Hawaii .....	78	10,392	1,154	1,112	324	52	778	74	83	639

See footnote(s) at end of table.

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**Table 34. Irrigated Farms by Market Value of Agricultural Products Sold: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$100,000 to \$249,999									
	Farms with irrigation				Water source			Quantity of water applied		
	Farms	Land in farms (acres)	Acres irrigated	Irrigated cropland harvested (acres)	Ground-water (acres)	Surface water		Ground-water (acre-feet)	Surface water	
On-farm (acres)						Off-farm (acres)	On-farm (acre-feet)		Off-farm (acre-feet)	
United States .....	24,979	29,307,976	5,890,912	5,212,683	3,258,968	1,170,802	1,725,879	3,960,293	1,797,628	3,259,502
.....2008 ..										
.....2003 ..	29,410	41,290,907	9,275,214	8,529,248	5,712,797	1,406,760	2,235,666	6,703,650	1,983,894	4,516,273
<b>2008 DATA</b>										
Alabama .....	59	37,625	4,642	4,167	1,255	3,067	320	482	1,742	284
Alaska .....	4	845	178	178	178	-	-	32	-	-
Arizona .....	181	112,782	49,974	44,754	24,928	7,409	31,902	93,101	35,873	163,015
Arkansas .....	641	599,670	213,686	213,686	159,263	54,423	-	310,208	80,564	245
California .....	5,660	1,506,983	508,414	452,304	320,912	147,235	173,685	767,443	285,187	423,588
Colorado .....	1,341	3,016,978	575,778	459,255	207,562	170,686	237,108	279,484	281,484	423,669
Connecticut .....	32	2,508	289	289	(D)	258	(D)	9	67	(D)
Delaware .....	61	23,706	9,860	9,860	8,912	948	-	5,591	694	-
Florida .....	547	156,596	67,236	56,698	58,322	12,034	(D)	72,337	20,843	5,700
Georgia .....	402	348,648	84,589	78,741	57,932	24,887	3,754	45,752	10,059	3,614
Hawaii .....	74	2,787	1,135	1,043	140	112	883	364	(D)	2,578
Idaho .....	1,304	1,046,072	418,417	364,721	83,767	78,989	257,191	155,569	129,348	443,551
Illinois .....	159	95,047	34,079	34,009	31,339	2,250	490	15,639	297	245
Indiana .....	176	91,453	27,460	27,200	22,076	4,828	556	11,109	2,056	(D)
Iowa .....	84	50,718	17,231	17,231	17,231	129	-	7,589	21	-
Kansas .....	1,067	1,537,573	205,611	204,291	199,369	3,346	2,896	221,262	2,342	3,081
Kentucky .....	148	47,075	3,979	3,979	1,698	2,322	246	747	994	92
Louisiana .....	267	236,090	99,307	98,207	70,457	20,746	8,246	88,365	31,249	10,685
Maine .....	34	9,053	1,178	1,178	-	1,028	150	-	181	47
Maryland .....	98	35,232	10,714	10,644	(D)	3,162	(D)	4,611	1,782	(D)
Massachusetts .....	115	11,984	3,014	3,014	210	2,584	290	25	1,537	24
Michigan .....	215	93,563	27,633	27,612	11,203	14,350	2,080	6,776	5,340	1,040
Minnesota .....	319	179,733	66,377	66,365	58,943	8,356	980	33,508	4,075	827
Mississippi .....	198	168,487	57,587	57,587	55,558	3,339	(D)	52,032	1,726	(D)
Missouri .....	299	171,421	87,533	87,348	79,882	7,651	-	61,513	5,018	-
Montana .....	1,085	3,878,063	474,094	381,475	7,958	186,114	281,622	8,303	241,078	322,537
Nebraska .....	3,863	3,004,090	1,072,326	1,050,666	988,440	33,430	74,777	647,682	27,866	149,698
Nevada .....	177	574,972	93,538	68,209	30,195	36,393	31,937	91,285	39,423	61,981
New Hampshire .....	8	1,691	286	286	-	(D)	(D)	-	(D)	(D)
New Jersey .....	72	17,515	5,733	5,733	2,732	3,001	-	1,880	1,945	-
New Mexico .....	331	4,197,556	70,799	61,376	47,058	7,735	21,576	83,387	16,104	56,425
New York .....	93	13,769	2,932	2,932	1,116	1,428	388	988	2,491	737
North Carolina .....	297	76,188	15,780	10,392	1,076	14,704	-	194	11,414	-
North Dakota .....	131	304,292	32,768	32,220	17,085	2,507	13,176	13,873	2,248	13,206
Ohio .....	48	9,422	1,399	1,399	732	633	184	561	421	56
Oklahoma .....	195	375,492	57,924	52,733	51,093	2,840	4,531	70,287	3,098	6,633
Oregon .....	610	1,325,191	250,614	156,646	49,021	69,900	132,703	88,672	115,884	265,503
Pennsylvania .....	114	26,089	2,225	2,069	(D)	1,476	(D)	466	863	(D)
Rhode Island .....	13	1,067	235	235	-	214	-	12	(D)	-
South Carolina .....	61	35,622	6,497	6,477	3,822	2,565	(D)	2,955	2,332	(D)
South Dakota .....	244	316,960	50,954	50,095	24,668	5,377	20,909	12,484	5,887	21,559
Tennessee .....	41	19,263	1,233	1,193	(D)	917	(D)	94	392	(D)
Texas .....	1,702	1,678,868	543,217	519,914	480,107	24,657	57,950	555,823	8,494	105,972
Utah .....	483	1,103,996	183,463	132,541	23,071	52,097	110,640	73,502	115,519	230,702
Vermont .....	14	1,224	164	164	(D)	(D)	-	4	(D)	-
Virginia .....	50	17,616	2,296	2,296	279	2,017	-	79	1,277	-
Washington .....	961	219,215	99,492	91,862	19,750	10,070	69,672	45,886	24,222	136,295
West Virginia .....	3	1,820	270	270	-	-	-	-	(D)	-
Wisconsin .....	196	81,906	23,982	23,157	20,834	3,617	-	12,814	6,089	-
Wyoming .....	702	2,443,460	322,790	233,982	10,734	134,313	181,985	15,518	267,694	405,416
<b>Water Resources Regions</b>										
Region 01 New England .....	205	26,903	5,092	5,092	242	4,440	480	45	1,956	77
Region 02 Mid-Atlantic .....	457	118,788	32,181	31,955	20,710	10,897	574	13,597	7,834	479
Region 03 South Atlantic-Gulf .....	1,424	749,836	181,044	158,775	124,692	57,272	6,544	123,584	45,713	9,655
Region 04 Great Lakes .....	329	140,456	43,652	43,621	24,025	17,316	2,780	14,349	7,453	1,207
Region 05 Ohio .....	264	116,344	20,530	20,270	14,970	4,688	1,022	7,787	2,300	1,043
Region 06 Tennessee .....	69	12,082	1,940	1,900	(D)	(D)	(D)	264	1,468	(D)
Region 07 Upper Mississippi .....	677	351,963	122,376	121,479	109,726	13,304	(D)	58,817	9,431	109
Region 08 Lower Mississippi .....	1,130	718,027	370,722	369,622	320,193	43,735	8,286	442,820	70,285	10,741
Region 09 Souris-Red-Rainy .....	47	57,801	12,904	12,734	(D)	1,670	(D)	7,788	(D)	(D)
Region 10 Missouri .....	7,110	11,378,855	2,039,458	1,899,163	1,259,722	277,603	552,061	962,426	349,465	938,931
Region 11 Arkansas-White-Red .....	1,274	6,264,459	482,976	464,004	388,791	75,890	38,545	464,751	105,845	38,725
Region 12 Texas-Gulf .....	1,446	1,362,518	428,583	405,830	376,618	(D)	(D)	435,902	1,821	82,032
Region 13 Rio Grande .....	372	346,014	110,093	88,097	54,683	34,378	31,602	111,500	50,563	72,616
Region 14 Upper Colorado .....	544	1,335,973	349,417	211,188	-	157,414	198,503	-	297,701	358,690
Region 15 Lower Colorado .....	195	127,482	55,619	46,799	29,828	7,409	32,647	117,173	35,873	164,579
Region 16 Great Basin .....	663	1,623,518	270,486	209,053	63,259	97,355	117,146	157,726	222,837	247,669
Region 17 Pacific Northwest .....	2,967	2,933,185	812,453	648,574	128,683	211,255	475,113	251,315	357,138	836,727
Region 18 California .....	5,728	1,640,140	550,073	473,306	330,414	146,399	206,678	790,053	228,841	492,862
Region 19 Alaska .....	4	845	178	178	178	-	-	32	-	-
Region 20 Hawaii .....	74	2,787	1,135	1,043	140	112	883	364	(D)	2,578

See footnote(s) at end of table.

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**Table 34. Irrigated Farms by Market Value of Agricultural Products Sold: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$250,000 to \$499,999									
	Farms with irrigation				Water source			Quantity of water applied		
	Farms	Land in farms (acres)	Acres irrigated	Irrigated cropland harvested (acres)	Ground-water (acres)	Surface water		Ground-water (acre-feet)	Surface water	
						On-farm (acres)	Off-farm (acres)		On-farm (acre-feet)	Off-farm (acre-feet)
United States ..... 2008 ..	18,856	32,968,236	8,051,610	7,474,773	5,594,976	1,300,152	1,510,003	6,675,330	2,128,416	3,011,752
..... 2003 ..	18,644	32,633,629	9,500,557	9,045,139	6,691,963	1,034,317	1,868,015	8,322,139	1,597,339	4,192,454
<b>2008 DATA</b>										
Alabama .....	30	34,343	7,979	7,567	2,070	4,661	1,248	860	2,251	708
Alaska .....	3	(D)	472	(D)	472	-	-	85	-	-
Arizona .....	126	180,940	60,745	57,120	31,495	6,000	31,813	103,983	27,194	124,705
Arkansas .....	816	950,368	689,529	670,329	579,736	178,789	7,558	1,027,370	377,488	10,255
California .....	3,326	1,212,487	568,875	503,275	335,707	142,637	212,841	856,429	399,843	656,794
Colorado .....	573	1,393,581	373,288	340,969	199,925	82,778	135,070	293,267	169,166	208,933
Connecticut .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Delaware .....	73	65,431	(D)	18,937	(D)	(D)	(D)	10,670	1,303	(D)
Florida .....	294	144,096	83,305	62,675	60,121	11,310	12,572	62,017	13,466	32,937
Georgia .....	465	461,511	139,304	130,309	94,446	47,931	-	64,600	36,573	-
Hawaii .....	22	(D)	234	234	-	(D)	(D)	-	(D)	262
Idaho .....	695	732,552	369,128	331,827	108,519	115,728	153,015	213,970	216,906	358,038
Illinois .....	219	189,833	72,205	71,765	69,825	2,812	800	33,697	1,254	200
Indiana .....	195	143,612	50,740	50,288	38,026	9,013	3,701	20,444	3,548	1,616
Iowa .....	107	95,127	28,477	27,681	26,297	(D)	(D)	10,466	606	437
Kansas .....	1,025	2,250,536	480,084	479,184	449,378	20,076	10,630	500,151	11,021	9,374
Kentucky .....	86	56,526	5,439	5,429	2,416	1,982	1,041	1,001	946	903
Louisiana .....	300	456,804	187,349	184,760	146,976	35,647	9,344	154,104	47,798	17,286
Maine .....	6	3,560	319	319	(D)	(D)	(D)	(D)	12	64
Maryland .....	112	70,701	23,791	23,791	16,006	7,698	87	12,145	4,247	35
Massachusetts .....	55	8,620	2,647	2,647	(D)	2,101	(D)	5	(D)	(D)
Michigan .....	241	154,170	49,412	48,589	32,069	(D)	(D)	16,822	7,577	(D)
Minnesota .....	268	226,687	78,624	78,378	73,151	4,645	1,448	45,478	3,548	1,328
Mississippi .....	198	282,938	135,966	135,966	126,339	11,247	-	124,112	10,686	-
Missouri .....	368	422,070	168,655	168,655	155,531	13,124	-	115,267	4,806	-
Montana .....	616	4,963,869	369,909	318,540	12,804	151,790	212,115	13,941	210,456	265,316
Nebraska .....	3,667	7,376,575	1,643,726	1,638,559	1,510,442	105,462	68,303	1,208,114	97,409	69,343
Nevada .....	117	807,220	100,731	89,103	45,141	39,703	20,262	100,179	51,706	47,806
New Hampshire .....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Jersey .....	48	11,589	4,930	4,930	3,679	1,251	-	2,150	677	-
New Mexico .....	161	1,057,540	97,716	91,062	84,563	7,496	15,487	127,142	14,514	39,888
New York .....	44	14,784	1,958	1,958	488	1,391	83	(D)	650	25
North Carolina .....	178	68,906	11,751	10,968	(D)	(D)	-	259	4,669	-
North Dakota .....	87	232,324	33,154	32,438	19,130	(D)	(D)	14,426	1,911	12,608
Ohio .....	12	5,184	384	(D)	184	200	-	113	416	-
Oklahoma .....	244	474,446	93,489	82,578	73,424	8,300	11,765	92,426	7,921	14,311
Oregon .....	496	941,720	250,851	197,021	63,491	54,518	133,812	122,715	94,343	273,227
Pennsylvania .....	64	18,774	3,154	3,154	241	2,589	324	38	654	69
Rhode Island .....	4	(D)	(D)	116	(D)	(D)	(D)	(D)	(D)	(D)
South Carolina .....	32	39,987	8,752	8,752	5,855	2,887	(D)	3,680	1,539	(D)
South Dakota .....	195	403,411	65,724	65,724	43,316	4,200	19,378	31,470	5,490	17,818
Tennessee .....	42	33,045	6,398	6,378	4,592	1,706	100	3,351	917	55
Texas .....	1,502	3,034,603	1,161,374	1,018,634	1,046,861	12,250	116,253	1,116,280	6,226	129,524
Utah .....	390	1,270,834	140,806	120,774	(D)	29,014	99,798	46,956	49,902	217,393
Vermont .....	5	1,004	(D)	(D)	(D)	(D)	(D)	5	(D)	-
Virginia .....	95	69,384	8,091	8,091	-	8,091	-	-	3,484	-
Washington .....	820	616,904	186,450	160,663	49,933	8,908	127,609	87,443	23,662	303,857
West Virginia .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Wisconsin .....	194	124,262	40,787	40,075	36,166	4,691	-	25,464	5,051	-
Wyoming .....	233	1,861,857	225,210	173,120	13,360	121,975	89,875	11,592	203,867	196,371
<b>Water Resources Regions</b>										
Region 01 New England .....	71	13,500	3,583	3,583	(D)	(D)	809	(D)	2,919	142
Region 02 Mid-Atlantic .....	386	199,758	57,563	57,563	36,737	(D)	(D)	25,593	9,626	86
Region 03 South Atlantic-Gulf .....	1,022	788,861	251,249	220,429	161,517	79,673	13,920	130,812	58,955	33,665
Region 04 Great Lakes .....	373	237,845	76,051	75,148	50,737	24,010	1,308	29,741	11,385	521
Region 05 Ohio .....	226	171,943	39,518	39,066	30,783	5,453	3,282	14,934	2,518	2,024
Region 06 Tennessee .....	30	28,465	4,988	(D)	2,308	2,598	82	(D)	1,737	31
Region 07 Upper Mississippi .....	712	572,799	196,118	194,064	176,127	18,325	2,968	100,388	10,285	1,734
Region 08 Lower Mississippi .....	1,414	1,778,050	1,023,497	1,020,898	902,909	175,660	16,920	1,255,379	314,821	27,565
Region 09 Souris-Red-Rainy .....	75	116,418	26,153	26,027	22,622	3,529	622	15,565	(D)	400
Region 10 Missouri .....	5,667	16,408,716	2,671,180	2,582,136	1,891,367	403,136	439,833	1,588,352	509,734	632,646
Region 11 Arkansas-White-Red .....	1,478	3,201,160	1,007,940	913,129	915,816	74,014	43,320	1,171,680	151,939	63,324
Region 12 Texas-Gulf .....	1,051	2,161,256	781,371	695,957	670,858	8,970	112,253	652,265	6,206	115,524
Region 13 Rio Grande .....	187	963,160	105,570	96,155	78,292	20,941	33,377	152,523	54,218	64,963
Region 14 Upper Colorado .....	156	434,941	111,797	76,065	(D)	55,319	2,448	102,674	96,918	-
Region 15 Lower Colorado .....	129	184,079	63,324	58,819	32,895	6,880	32,112	104,068	31,594	126,051
Region 16 Great Basin .....	485	2,041,747	225,777	203,573	64,083	62,184	107,503	156,626	93,338	236,912
Region 17 Pacific Northwest .....	1,975	2,339,618	788,539	666,986	206,274	185,029	406,340	384,240	357,227	913,665
Region 18 California .....	3,394	1,324,469	616,686	539,481	349,406	151,128	238,462	889,547	406,515	695,320
Region 19 Alaska .....	3	(D)	472	(D)	472	(D)	(D)	85	(D)	(D)
Region 20 Hawaii .....	2	(D)	234	234	(D)	(D)	(D)	(D)	(D)	262

See footnote(s) at end of table.

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**Table 34. Irrigated Farms by Market Value of Agricultural Products Sold: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$500,000 to \$999,999									
	Farms with irrigation				Water source			Quantity of water applied		
	Farms	Land in farms (acres)	Acres irrigated	Irrigated cropland harvested (acres)	Ground-water (acres)	Surface water		Ground-water (acre-feet)	Surface water	
						On-farm (acres)	Off-farm (acres)		On-farm (acre-feet)	Off-farm (acre-feet)
United States .....2008 ..	16,518	40,096,061	11,411,910	10,980,082	8,807,619	1,451,728	1,751,217	10,307,238	2,206,756	3,757,191
.....2003 ..	11,875	31,483,878	10,062,682	9,660,544	7,554,819	1,002,757	1,673,528	9,880,712	1,683,805	4,076,996
<b>2008 DATA</b>										
Alabama .....	57	91,131	15,843	15,753	4,199	9,464	2,180	3,033	4,983	677
Alaska .....	1	(D)	(D)	(D)	(D)	-	-	(D)	-	-
Arizona .....	129	139,394	95,467	92,969	35,819	12,243	72,770	139,001	71,393	341,691
Arkansas .....	927	1,504,734	1,219,074	1,218,972	1,069,050	290,271	4,044	1,899,016	593,215	4,776
California .....	2,588	3,516,991	881,895	850,392	534,664	149,786	463,538	1,322,343	183,029	1,178,053
Colorado .....	389	1,252,183	414,796	386,938	232,022	89,748	129,486	330,822	120,349	201,338
Connecticut .....	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Delaware .....	42	71,385	(D)	30,104	(D)	(D)	(D)	21,577	3,664	(D)
Florida .....	260	243,798	88,356	83,713	69,420	19,935	7,493	89,028	27,512	9,645
Georgia .....	443	699,641	254,395	253,460	205,116	50,407	120	180,561	41,004	48
Hawaii .....	18	(D)	739	739	268	(D)	(D)	185	(D)	1,256
Idaho .....	484	701,216	438,532	420,104	190,370	87,903	172,059	286,478	137,311	385,396
Illinois .....	264	372,137	139,913	138,783	135,201	(D)	(D)	69,012	1,163	(D)
Indiana .....	220	322,606	93,858	93,272	81,375	(D)	(D)	42,692	7,195	(D)
Iowa .....	135	215,250	45,952	45,952	44,600	(D)	(D)	21,986	749	(D)
Kansas .....	1,026	3,416,902	822,515	815,039	801,423	12,290	8,802	984,994	13,221	8,203
Kentucky .....	39	60,027	8,206	8,206	5,465	2,561	180	2,542	841	36
Louisiana .....	265	490,015	220,768	220,768	187,938	31,976	4,430	185,221	34,790	5,215
Maine .....	10	5,092	612	612	(D)	612	(D)	(D)	(D)	(D)
Maryland .....	43	54,334	13,447	13,447	(D)	3,203	(D)	6,521	2,312	(D)
Massachusetts .....	44	9,075	3,778	3,778	(D)	(D)	855	(D)	6,543	182
Michigan .....	271	309,895	104,211	103,266	73,317	29,436	1,458	40,793	15,801	(D)
Minnesota .....	300	386,023	111,219	111,139	102,616	7,088	1,789	59,223	1,838	1,497
Mississippi .....	282	560,515	324,305	324,305	316,533	12,743	(D)	294,676	10,751	(D)
Missouri .....	406	585,610	329,553	329,143	315,751	12,802	1,000	252,339	5,466	500
Montana .....	279	3,617,120	268,140	208,996	12,532	114,125	141,503	12,166	172,443	215,370
Nebraska .....	2,841	4,877,749	2,538,015	2,517,858	2,370,253	47,830	172,871	1,700,151	31,096	167,919
Nevada .....	80	2,173,523	128,377	77,899	44,895	71,288	13,769	122,275	114,262	24,812
New Hampshire .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Jersey .....	71	24,087	13,674	13,588	9,981	3,693	(D)	6,859	2,067	(D)
New Mexico .....	184	2,154,522	101,584	98,980	99,364	7,785	7,090	208,456	12,903	13,098
New York .....	39	19,885	2,940	2,940	926	1,530	484	1,127	660	295
North Carolina .....	211	160,193	34,838	34,838	11,278	24,520	(D)	3,991	11,148	(D)
North Dakota .....	142	442,696	58,580	58,580	29,582	8,739	20,259	21,636	10,567	31,825
Ohio .....	32	27,321	4,993	4,988	1,162	1,918	1,940	387	786	1,144
Oklahoma .....	114	442,836	87,645	79,463	75,415	(D)	10,288	75,662	5,694	11,209
Oregon .....	714	1,351,687	336,271	297,743	89,052	132,549	115,850	141,859	247,350	251,746
Pennsylvania .....	26	15,170	2,244	2,244	462	1,782	(D)	669	597	(D)
Rhode Island .....	-	-	-	-	-	-	-	-	-	-
South Carolina .....	70	109,966	25,946	25,886	20,752	5,194	(D)	15,639	3,703	(D)
South Dakota .....	143	850,240	86,975	86,975	64,951	3,098	18,926	24,463	1,982	16,074
Tennessee .....	46	78,718	9,715	9,711	7,149	2,566	(D)	3,382	1,930	(D)
Texas .....	1,583	3,624,718	1,465,433	1,373,234	1,340,015	39,930	102,513	1,392,617	62,568	275,660
Utah .....	137	885,625	99,397	87,888	40,857	14,629	44,020	122,245	42,559	90,621
Vermont .....	-	-	-	-	-	-	-	-	-	-
Virginia .....	47	51,788	8,997	8,747	(D)	(D)	2,656	(D)	3,031	1,537
Washington .....	615	2,166,738	215,687	207,306	55,281	45,133	115,273	108,915	95,464	261,752
West Virginia .....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Wisconsin .....	196	195,499	58,756	58,756	51,736	6,322	698	43,518	11,313	216
Wyoming .....	295	1,814,417	205,291	162,334	38,677	64,892	107,202	68,870	90,372	251,148
<b>Water Resources Regions</b>										
Region 01 New England .....	62	16,060	4,920	4,920	(D)	3,970	855	(D)	6,873	182
Region 02 Mid-Atlantic .....	236	204,401	67,700	67,304	49,102	15,782	2,816	36,828	11,593	1,709
Region 03 South Atlantic-Gulf .....	1,039	1,285,115	419,149	413,421	309,689	109,927	11,393	291,342	88,290	11,198
Region 04 Great Lakes .....	403	432,426	145,859	144,335	106,349	37,455	2,082	64,910	20,574	581
Region 05 Ohio .....	200	299,250	63,809	63,805	52,801	8,930	2,598	27,119	4,346	1,335
Region 06 Tennessee .....	26	47,818	(D)	(D)	(D)	(D)	(D)	(D)	2,604	(D)
Region 07 Upper Mississippi .....	786	1,037,851	317,119	315,897	291,392	22,729	2,998	161,840	16,644	2,516
Region 08 Lower Mississippi .....	1,628	2,820,573	1,907,055	1,906,943	1,736,443	293,208	5,440	2,435,886	549,046	7,105
Region 09 Souris-Red-Rainy .....	111	210,221	34,411	34,111	28,088	3,708	2,889	20,517	(D)	1,772
Region 10 Missouri .....	4,273	12,228,791	3,583,888	3,471,338	2,888,103	230,803	525,621	2,209,275	256,318	734,385
Region 11 Arkansas-White-Red .....	1,527	4,805,720	1,327,339	1,283,327	1,268,202	68,877	28,860	1,649,998	140,395	39,527
Region 12 Texas-Gulf .....	1,193	2,484,382	1,098,423	1,032,270	987,676	40,930	87,342	958,358	62,768	228,394
Region 13 Rio Grande .....	193	2,038,484	118,508	112,626	93,852	17,190	40,681	203,894	26,903	94,624
Region 14 Upper Colorado .....	74	1,029,295	103,855	74,514	61,513	(D)	(D)	(D)	108,407	111,891
Region 15 Lower Colorado .....	133	199,694	98,967	96,455	39,319	12,243	74,470	141,972	71,393	342,541
Region 16 Great Basin .....	259	2,745,899	236,171	188,706	119,432	71,609	49,314	269,645	141,529	95,649
Region 17 Pacific Northwest .....	1,750	4,628,044	978,711	898,897	295,823	300,783	395,085	502,225	528,489	880,853
Region 18 California .....	2,606	3,580,485	899,188	864,375	538,064	148,366	476,351	1,330,123	168,484	1,201,676
Region 19 Alaska .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Region 20 Hawaii .....	18	(D)	739	739	268	(D)	(D)	185	(D)	1,256

See footnote(s) at end of table.

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**Table 34. Irrigated Farms by Market Value of Agricultural Products Sold: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$1,000,000 or more									
	Farms with irrigation				Water source			Quantity of water applied		
	Farms	Land in farms (acres)	Acres irrigated	Irrigated cropland harvested (acres)	Ground-water (acres)	Surface water		Ground-water (acre-feet)	Surface water	
						On-farm (acres)	Off-farm (acres)		On-farm (acre-feet)	Off-farm (acre-feet)
United States ..... 2008 ..	15,782	56,639,166	23,275,251	22,514,577	16,481,909	3,124,610	5,440,937	24,931,364	4,827,958	14,418,803
..... 2003 ..	9,611	45,200,208	15,203,760	14,655,564	9,009,938	2,051,654	4,661,707	14,576,069	4,092,309	12,145,027
<b>2008 DATA</b>										
Alabama .....	64	213,914	38,614	38,614	12,447	22,178	3,989	7,198	12,652	3,709
Alaska .....	-	-	-	-	-	-	-	-	-	-
Arizona .....	269	2,106,495	582,224	569,808	206,653	79,805	388,416	878,952	436,056	1,921,046
Arkansas .....	858	2,839,361	2,223,182	2,222,127	1,976,941	443,828	21,855	3,441,145	646,060	25,561
California .....	3,977	6,500,041	4,784,199	4,663,380	2,863,684	879,637	2,145,275	7,156,047	1,466,345	6,550,489
Colorado .....	520	1,691,343	644,798	606,122	505,025	111,908	78,089	761,619	200,736	100,804
Connecticut .....	3	2,225	(D)	727	(D)	(D)	(D)	(D)	(D)	(D)
Delaware .....	43	98,208	38,472	38,468	32,037	6,435	-	21,130	4,775	-
Florida .....	415	1,654,648	896,924	868,111	398,567	209,857	326,948	614,840	235,934	426,799
Georgia .....	555	1,132,408	456,779	453,882	372,195	87,435	1,150	362,528	67,597	1,438
Hawaii .....	23	188,572	92,255	51,491	50,920	10,757	76,578	107,870	36,045	298,447
Idaho .....	572	2,627,986	1,476,155	1,414,457	716,277	160,542	616,841	1,325,770	302,915	1,307,824
Illinois .....	219	595,852	(D)	197,571	196,736	(D)	(D)	101,022	332	(D)
Indiana .....	282	745,513	218,181	217,512	191,172	25,297	2,544	90,264	13,171	698
Iowa .....	83	184,589	58,642	58,642	56,082	1,460	1,100	29,213	1,015	494
Kansas .....	521	2,939,845	957,432	952,659	945,958	6,250	12,694	1,248,697	3,125	11,074
Kentucky .....	23	73,416	9,778	9,778	8,099	1,679	-	4,944	(D)	(D)
Louisiana .....	208	760,625	373,047	367,572	292,841	81,179	2,063	281,361	65,372	2,495
Maine .....	17	93,900	15,391	10,991	(D)	14,236	(D)	(D)	(D)	(D)
Maryland .....	47	94,301	31,442	31,442	21,491	9,951	-	12,704	6,591	-
Massachusetts .....	21	13,157	5,350	5,340	(D)	4,711	(D)	(D)	5,511	(D)
Michigan .....	401	849,750	325,570	325,468	243,436	(D)	(D)	149,632	44,661	783
Minnesota .....	149	478,752	211,428	210,973	198,339	8,855	4,240	137,589	(D)	10,685
Mississippi .....	347	1,435,599	903,364	902,943	878,291	34,280	1,640	830,139	44,670	1,257
Missouri .....	288	1,017,322	610,720	610,560	595,349	17,883	-	521,630	8,212	-
Montana .....	128	2,466,220	266,647	203,589	18,660	133,615	116,940	23,811	214,942	187,550
Nebraska .....	1,801	4,549,105	2,788,385	2,779,413	2,670,764	47,387	119,474	2,224,237	26,466	114,011
Nevada .....	69	1,608,521	237,140	207,086	122,460	60,454	58,249	291,273	93,733	118,162
New Hampshire .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Jersey .....	77	57,155	29,995	29,965	21,171	8,324	(D)	19,037	6,923	(D)
New Mexico .....	173	1,572,345	336,061	308,385	235,441	18,638	136,936	498,209	33,648	360,187
New York .....	43	75,312	9,415	9,085	3,056	6,045	394	(D)	3,378	94
North Carolina .....	234	528,316	63,446	62,082	(D)	55,887	(D)	7,515	28,050	(D)
North Dakota .....	110	600,083	106,623	105,011	93,634	4,885	8,114	74,434	5,242	8,017
Ohio .....	24	52,296	9,629	(D)	2,435	5,084	2,370	2,108	1,027	1,178
Oklahoma .....	79	488,361	148,343	137,998	119,305	11,949	17,489	135,998	9,055	22,487
Oregon .....	369	1,348,101	539,671	506,394	168,586	108,068	273,151	273,356	182,519	565,763
Pennsylvania .....	31	(D)	4,653	4,653	1,687	2,966	(D)	(D)	5,227	(D)
Rhode Island .....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
South Carolina .....	68	183,069	53,960	51,825	37,799	16,251	120	32,895	18,267	24
South Dakota .....	145	825,470	105,157	105,083	60,804	6,800	37,553	46,797	4,656	37,889
Tennessee .....	66	252,538	51,009	50,934	47,356	3,653	-	26,661	2,005	-
Texas .....	1,034	5,555,661	1,797,363	1,650,046	1,537,279	50,796	240,136	2,243,458	23,262	545,507
Utah .....	117	578,039	140,305	120,431	33,605	14,727	95,593	114,440	35,074	208,000
Vermont .....	-	-	-	-	-	-	-	-	-	-
Virginia .....	38	108,051	21,345	21,345	1,905	19,440	-	(D)	11,990	-
Washington .....	871	2,389,511	926,315	905,183	268,463	154,253	504,962	626,306	352,046	1,259,905
West Virginia .....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Wisconsin .....	281	611,925	258,925	254,747	238,697	22,043	1,739	167,387	39,602	2,935
Wyoming .....	114	4,403,452	228,000	162,716	21,250	66,877	139,873	30,728	113,160	321,785
<b>Water Resources Regions</b>										
Region 01 New England .....	44	112,386	21,717	17,307	(D)	19,415	832	(D)	7,635	311
Region 02 Mid-Atlantic .....	244	382,721	125,691	125,327	81,273	44,010	(D)	56,534	30,186	(D)
Region 03 South Atlantic-Gulf .....	1,312	3,626,484	1,498,010	1,462,801	827,802	382,349	330,918	1,025,678	357,736	430,511
Region 04 Great Lakes .....	530	1,141,673	420,693	420,531	318,865	103,728	4,738	193,180	53,266	2,145
Region 05 Ohio .....	228	689,535	164,407	164,127	148,626	17,995	1,380	65,274	8,618	(D)
Region 06 Tennessee .....	55	160,964	24,344	24,269	4,777	16,778	2,789	(D)	9,505	2,509
Region 07 Upper Mississippi .....	665	1,650,909	643,620	638,778	608,606	35,379	2,619	388,593	46,225	3,171
Region 08 Lower Mississippi .....	1,563	5,661,384	3,827,900	3,822,004	3,505,642	506,130	17,863	4,669,571	699,068	22,271
Region 09 Souris-Red-Rainy .....	54	258,605	71,161	70,577	57,718	8,963	4,480	39,027	13,456	10,825
Region 10 Missouri .....	2,662	14,529,369	4,088,729	3,945,204	3,417,603	298,850	441,179	3,092,028	393,839	703,046
Region 11 Arkansas-White-Red .....	1,204	6,742,380	2,159,841	2,037,601	2,047,799	106,566	66,853	2,954,560	130,229	64,595
Region 12 Texas-Gulf .....	671	2,536,757	914,241	860,667	705,594	38,842	190,656	947,870	18,863	393,959
Region 13 Rio Grande .....	222	1,154,681	398,355	378,861	307,372	45,062	119,794	702,357	86,307	320,037
Region 14 Upper Colorado .....	59	547,293	116,946	98,671	(D)	18,800	(D)	(D)	39,100	243,762
Region 15 Lower Colorado .....	283	2,169,254	630,135	617,719	217,497	81,905	425,483	905,870	438,156	2,093,332
Region 16 Great Basin .....	184	1,836,677	385,557	330,739	170,073	75,181	147,946	437,002	128,808	315,950
Region 17 Pacific Northwest .....	1,801	6,773,458	2,926,381	2,801,778	1,142,206	423,761	1,389,416	2,204,853	848,823	3,108,744
Region 18 California .....	3,978	6,476,064	4,765,268	4,646,125	2,859,696	890,139	2,119,830	7,134,217	1,482,092	6,404,427
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	23	188,572	92,255	51,491	50,920	10,757	76,578	107,870	36,045	298,447

<sup>1</sup> May not add to total due to rounding.

**Table 35. Irrigated Farms by Percent of Total Sales from Irrigated Crops and Livestock: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms by percent of total sales from -									
	Irrigated crop					Non-irrigated crop or livestock				
	None	1 to 24 percent	25 to 49 percent	50 to 74 percent	75 to 99 percent	100 percent	None	1 to 49 percent	50 to 99 percent	100 percent
United States .....	9,345	13,780	11,141	15,611	37,903	119,054	119,054	46,220	32,215	9,345
2008 .....							(NA)	(NA)	(NA)	(NA)
2003 .....	17,018	19,309	14,535	16,944	37,260	105,040				
<b>2008 DATA</b>										
Alabama .....	8	109	107	72	88	281	281	122	254	8
Alaska .....	1	-	1	1	3	17	17	4	1	1
Arizona .....	788	96	2	126	261	1,724	1,724	265	220	788
Arkansas .....	19	176	205	261	1,278	2,180	2,180	1,471	449	19
California .....	1,335	213	616	506	3,210	39,256	39,256	3,653	892	1,335
Colorado .....	584	1,178	379	1,034	2,807	6,796	6,796	3,057	2,341	584
Connecticut .....	-	17	11	49	26	44	44	41	62	-
Delaware .....	-	20	75	67	89	58	58	128	123	-
Florida .....	63	278	178	626	273	3,832	3,832	338	1,017	63
Georgia .....	51	363	319	707	921	1,223	1,223	1,476	834	51
Hawaii .....	4	15	38	84	90	846	846	125	102	4
Idaho .....	1,545	366	254	1,336	1,792	8,541	8,541	2,625	1,123	1,545
Illinois .....	-	232	258	214	226	161	161	342	588	-
Indiana .....	13	263	275	211	202	125	125	326	625	13
Iowa .....	-	186	113	86	74	68	68	127	332	-
Kansas .....	-	872	819	783	1,391	643	643	1,949	1,916	-
Kentucky .....	14	125	113	175	172	223	223	273	312	14
Louisiana .....	2	142	130	255	364	799	799	540	351	2
Maine .....	3	4	41	10	66	72	72	74	47	3
Maryland .....	5	116	104	120	142	110	110	235	247	5
Massachusetts .....	37	14	14	14	42	556	556	49	35	37
Michigan .....	86	391	300	286	426	632	632	545	858	86
Minnesota .....	-	340	230	237	319	420	420	494	632	-
Mississippi .....	-	69	152	216	458	382	382	636	259	-
Missouri .....	9	259	195	360	552	502	502	769	597	9
Montana .....	4	816	588	350	2,166	4,583	4,583	2,296	1,624	4
Nebraska .....	734	1,083	1,798	2,840	5,874	2,483	2,483	7,697	3,898	734
Nevada .....	140	79	72	53	265	1,125	1,125	299	170	140
New Hampshire .....	-	9	12	13	14	38	38	26	26	-
New Jersey .....	41	56	24	73	85	329	329	124	114	41
New Mexico .....	508	276	97	327	1,521	6,149	6,149	1,601	620	508
New York .....	-	117	29	35	142	273	273	166	157	-
North Carolina .....	90	480	168	106	297	834	834	338	713	90
North Dakota .....	-	244	98	49	55	155	155	83	363	-
Ohio .....	-	82	67	56	69	105	105	101	173	-
Oklahoma .....	36	177	209	170	359	503	503	460	455	36
Oregon .....	1,754	1,093	594	527	1,946	6,242	6,242	2,018	2,142	1,754
Pennsylvania .....	3	313	192	200	65	317	317	166	604	3
Rhode Island .....	4	11	8	5	9	24	24	9	24	4
South Carolina .....	3	75	66	98	127	343	343	154	212	3
South Dakota .....	-	266	228	165	261	245	245	359	561	-
Tennessee .....	15	119	49	58	135	206	206	178	183	15
Texas .....	27	1,110	424	1,309	3,039	6,764	6,764	3,724	2,158	27
Utah .....	437	531	364	315	2,529	6,700	6,700	2,620	1,119	437
Vermont .....	-	6	-	27	9	24	24	12	30	-
Virginia .....	-	97	37	118	41	364	364	73	220	-
Washington .....	700	215	878	245	2,106	8,568	8,568	2,303	1,141	700
West Virginia .....	-	2	9	20	11	48	48	23	19	-
Wisconsin .....	13	206	148	182	248	464	464	376	408	13
Wyoming .....	269	473	53	434	1,258	2,677	2,677	1,350	868	269
<b>Water Resources Regions</b>										
Region 01 New England .....	44	57	86	110	157	734	734	199	211	44
Region 02 Mid-Atlantic .....	49	568	430	547	442	1,164	1,164	720	1,267	49
Region 03 South Atlantic-Gulf .....	215	1,299	830	1,629	1,711	6,744	6,744	2,446	3,023	215
Region 04 Great Lakes .....	112	598	457	475	682	828	828	918	1,294	112
Region 05 Ohio .....	23	447	349	357	353	527	527	574	932	23
Region 06 Tennessee .....	6	89	48	41	137	206	206	156	159	6
Region 07 Upper Mississippi .....	-	858	650	619	770	966	966	1,195	1,702	-
Region 08 Lower Mississippi .....	21	487	596	901	2,293	3,043	3,043	2,957	1,320	21
Region 09 Souris-Red-Rainy .....	-	116	92	44	58	90	90	82	228	-
Region 10 Missouri .....	1,301	3,341	3,259	4,461	9,643	10,722	10,722	12,144	8,560	1,301
Region 11 Arkansas-White-Red .....	111	812	955	1,413	3,424	3,621	3,621	4,185	2,419	111
Region 12 Texas-Gulf .....	25	1,008	244	997	2,014	5,936	5,936	2,523	1,740	25
Region 13 Rio Grande .....	435	266	70	321	1,040	5,899	5,899	1,119	578	435
Region 14 Upper Colorado .....	369	966	250	389	2,898	5,899	5,899	2,967	1,536	369
Region 15 Lower Colorado .....	769	169	10	212	408	1,983	1,983	412	387	769
Region 16 Great Basin .....	525	385	488	330	1,888	6,541	6,541	1,998	1,093	525
Region 17 Pacific Northwest .....	3,978	2,085	1,664	2,154	6,172	23,964	23,964	7,330	4,745	3,978
Region 18 California .....	1,357	214	624	526	3,720	39,324	39,324	4,166	918	1,357
Region 19 Alaska .....	1	-	1	1	3	17	17	4	1	1
Region 20 Hawaii .....	4	15	38	84	90	846	846	125	102	4

**Table 36. Methods Used in Deciding When to Irrigate: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All farms	Farms reporting method used <sup>1</sup>											Other
		Any method	Condition of crop	Feel of soil	Soil moisture sensing device	Plant moisture sensing device	Commercial or government scheduling service	Reports on daily crop-water evapo-transpiration (ET)	Scheduled by water delivery organization	Personal calendar schedule	Computer simulation models	When neighbors begin to irrigate	
United States ..... 2008 ..	206,834	206,834	160,636	88,080	17,874	3,553	16,625	18,862	24,322	51,986	2,859	14,213	18,033
..... 2003 ..	210,106	210,106	166,858	73,154	14,233	3,078	13,461	15,177	26,200	40,644	1,201	14,048	18,802
<b>2008 DATA</b>													
Alabama .....	665	665	563	244	57	8	23	25	7	135	9	24	79
Alaska .....	23	23	20	21	3	2	-	1	7	3	3	3	3
Arizona .....	2,997	2,997	2,023	901	68	7	110	54	523	1,279	4	124	186
Arkansas .....	4,119	4,119	3,863	1,632	273	103	269	305	20	853	41	196	369
California .....	45,136	45,136	29,829	20,432	6,400	1,419	4,367	5,566	4,727	14,427	1,225	2,767	2,474
Colorado .....	12,778	12,778	9,574	4,923	335	39	1,236	862	3,518	3,334	42	1,493	1,018
Connecticut .....	147	147	119	73	1	1	-	-	21	-	11	15	15
Delaware .....	309	309	263	149	78	7	41	23	1	59	1	19	24
Florida .....	5,250	5,250	4,551	2,077	552	23	246	247	53	898	38	300	588
Georgia .....	3,584	3,584	3,099	1,436	382	146	132	247	9	540	104	205	369
Hawaii .....	1,077	1,077	926	454	25	2	31	23	21	228	17	-	194
Idaho .....	13,834	13,834	10,779	5,056	680	323	744	723	2,481	4,171	297	797	1,823
Illinois .....	1,091	1,091	994	610	108	1	22	88	21	163	1	100	89
Indiana .....	1,089	1,089	981	533	101	12	27	90	6	187	12	105	70
Iowa .....	527	527	487	270	32	3	8	61	7	93	7	70	38
Kansas .....	4,508	4,508	3,959	1,888	558	121	1,116	660	118	495	101	232	664
Kentucky .....	822	822	740	395	70	-	18	32	-	134	1	70	65
Louisiana .....	1,692	1,692	1,544	450	53	29	49	61	18	372	8	33	107
Maine .....	196	196	191	146	53	28	3	4	2	13	1	1	7
Maryland .....	597	597	562	301	95	1	11	12	-	83	5	21	36
Massachusetts .....	677	677	556	518	136	5	47	63	-	171	2	27	99
Michigan .....	2,121	2,121	1,881	1,114	164	29	88	273	-	602	20	86	151
Minnesota .....	1,546	1,546	1,384	930	135	16	126	315	24	205	5	119	104
Mississippi .....	1,277	1,277	1,117	565	108	1	32	228	2	186	5	52	72
Missouri .....	1,877	1,877	1,763	863	74	34	132	120	14	257	19	81	81
Montana .....	8,507	8,507	6,982	3,449	198	46	409	193	1,452	2,450	34	1,023	929
Nebraska .....	14,812	14,812	13,207	8,920	2,109	323	2,962	4,413	901	1,717	170	1,370	1,296
Nevada .....	1,734	1,734	1,280	562	16	9	37	27	441	398	13	225	216
New Hampshire .....	86	86	72	65	8	-	3	1	-	12	-	-	3
New Jersey .....	608	608	536	344	114	6	24	36	6	93	8	19	49
New Mexico .....	8,878	8,878	6,577	3,231	206	8	410	31	2,184	3,099	21	739	1,242
New York .....	596	596	533	358	61	2	5	23	32	64	2	12	59
North Carolina .....	1,975	1,975	1,790	891	71	42	75	79	16	313	-	27	290
North Dakota .....	601	601	471	358	61	7	53	111	26	142	11	55	40
Ohio .....	379	379	334	180	44	-	2	9	-	75	-	12	36
Oklahoma .....	1,454	1,454	1,247	579	114	4	46	73	17	261	5	20	155
Oregon .....	12,156	12,156	8,588	4,331	1,158	250	1,137	951	2,005	4,208	169	975	1,332
Pennsylvania .....	1,090	1,090	1,043	553	88	3	26	36	-	159	1	27	106
Rhode Island .....	61	61	60	39	13	-	-	2	-	10	-	-	-
South Carolina .....	712	712	681	314	81	5	11	26	-	144	1	17	51
South Dakota .....	1,165	1,165	992	620	96	3	20	73	50	137	7	105	96
Tennessee .....	582	582	483	304	22	3	10	36	3	128	7	20	39
Texas .....	12,673	12,673	11,325	5,003	653	98	426	1,149	78	2,125	38	470	1,133
Utah .....	10,876	10,876	7,249	2,372	232	157	941	188	3,706	1,942	139	473	468
Vermont .....	66	66	57	60	1	-	-	-	-	6	-	4	16
Virginia .....	657	657	518	281	82	9	61	10	-	53	1	7	13
Washington .....	12,712	12,712	9,568	6,746	1,714	193	557	991	960	4,126	243	866	1,124
West Virginia .....	90	90	73	34	2	-	-	-	-	16	-	-	5
Wisconsin .....	1,261	1,261	1,139	835	153	23	78	217	2	168	21	54	84
Wyoming .....	5,164	5,164	4,063	1,670	36	2	454	104	869	1,227	-	757	526
<b>Water Resources Regions</b>													
Region 01 New England .....	1,188	1,188	1,019	862	211	34	53	70	2	227	3	39	128
Region 02 Mid-Atlantic .....	3,200	3,200	2,857	1,576	434	28	149	127	39	422	18	105	150
Region 03 South Atlantic-Gulf .....	12,428	12,428	10,951	5,143	1,209	224	501	688	85	2,007	152	572	1,390
Region 04 Great Lakes .....	3,152	3,152	2,768	1,717	275	38	132	390	5	748	37	142	243
Region 05 Ohio .....	2,056	2,056	1,868	1,022	209	5	22	89	9	378	4	115	228
Region 06 Tennessee .....	527	527	422	219	13	1	8	16	1	131	-	13	41
Region 07 Upper Mississippi .....	3,863	3,863	3,485	2,285	379	41	213	550	26	549	23	308	270
Region 08 Lower Mississippi .....	7,341	7,341	6,779	2,854	434	157	395	547	56	1,549	76	329	486
Region 09 Souris-Red-Rainy .....	400	400	316	222	42	2	43	107	17	58	8	25	24
Region 10 Missouri .....	32,727	32,727	28,626	16,573	2,951	456	4,650	5,558	3,929	5,945	284	3,792	3,033
Region 11 Arkansas-White-Red ..	10,336	10,336	8,176	3,464	807	117	1,301	916	1,067	973	83	406	1,120
Region 12 Texas-Gulf .....	10,224	10,224	9,096	4,406	437	64	250	884	69	1,499	23	422	875
Region 13 Rio Grande .....	8,031	8,031	5,993	2,689	89	19	277	228	1,793	3,103	38	225	819
Region 14 Upper Colorado .....	10,771	10,771	7,843	3,993	45	5	556	101	2,660	3,300	-	1,309	1,296
Region 15 Lower Colorado .....	3,551	3,551	2,348	914	135	8	121	64	680	1,341	16	125	244
Region 16 Great Basin .....	10,157	10,157	7,131	2,316	226	170	852	215	3,380	2,015	140	669	518
Region 17 Pacific Northwest .....	40,017	40,017	30,027	16,758	3,544	762	2,533	2,708	5,341	13,030	709	2,695	4,485
Region 18 California .....	45,765	45,765	29,985	20,592	6,406	1,418	4,538	5,580	5,142	14,476	1,225	2,919	2,486
Region 19 Alaska .....	23	23	20	21	3	2	-	-	-	7	3	3	3
Region 20 Hawaii .....	1,077	1,077	926	454	25	2	31	23	21	228	17	-	194

<sup>1</sup> Respondents could choose more than one method.

**Table 37. Water Management Practices Used by Operators with Gravity Systems: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All farms	Acres irrigated	Conservation technique used <sup>1</sup>					
			Farms	Acres irrigated	Tailwater pits		Restricting run-off by diking end of field	
					Farms	Acres irrigated	Farms	Acres irrigated
United States .....2008 ..	89,646	22,017,757	45,458	12,863,645	7,619	1,561,839	13,237	2,719,793
.....2003 ..	100,626	23,106,280	52,910	12,905,822	7,074	1,502,671	15,563	2,636,369
<b>2008 DATA</b>								
Alabama .....	91	2,542	7	1,426	-	-	-	-
Alaska .....	1	(D)	1	(D)	-	-	-	-
Arizona .....	2,064	764,655	1,167	621,190	147	59,545	397	155,510
Arkansas .....	3,714	3,747,542	1,681	2,005,017	716	316,665	540	250,399
California .....	15,530	4,189,852	8,467	2,857,809	1,901	637,908	3,806	989,253
Colorado .....	10,252	1,547,072	4,765	737,779	821	88,267	1,174	77,674
Connecticut .....	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-
Florida .....	907	473,527	117	389,759	13	14,958	55	23,184
Georgia .....	447	52,599	61	5,703	-	-	57	1,707
Hawaii .....	248	3,635	115	772	-	-	26	128
Idaho .....	7,853	797,221	4,328	462,961	409	32,492	439	80,488
Illinois .....	32	3,602	4	1,272	2	(D)	2	(D)
Indiana .....	22	6,779	-	-	-	-	-	-
Iowa .....	57	4,744	13	1,620	-	-	9	715
Kansas .....	1,475	184,624	984	126,233	128	23,658	474	51,283
Kentucky .....	110	2,564	28	657	2	(D)	9	(D)
Louisiana .....	1,391	823,257	552	357,726	7	1,790	133	85,554
Maine .....	-	-	-	-	-	-	-	-
Maryland .....	69	236	-	-	-	-	-	-
Massachusetts .....	52	648	-	-	-	-	-	-
Michigan .....	51	1,124	51	1,124	24	840	24	840
Minnesota .....	51	19,487	16	12,851	-	-	12	6,711
Mississippi .....	957	1,070,945	425	522,108	50	12,986	136	103,163
Missouri .....	867	755,671	398	347,142	1	(D)	46	16,112
Montana .....	6,064	1,102,878	2,650	528,289	117	18,612	588	52,211
Nebraska .....	6,506	1,669,351	5,261	1,411,198	1,644	117,685	1,790	323,574
Nevada .....	1,308	459,182	722	243,603	76	5,204	223	31,548
New Hampshire .....	11	54	-	-	-	-	-	-
New Jersey .....	52	3,069	20	326	2	(D)	6	256
New Mexico .....	6,742	460,112	3,985	190,167	408	14,993	904	47,153
New York .....	56	926	30	120	-	-	-	-
North Carolina .....	70	2,710	-	-	-	-	-	-
North Dakota .....	141	51,001	99	37,349	2	(D)	16	1,765
Ohio .....	53	899	11	200	2	(D)	9	18
Oklahoma .....	329	67,707	114	26,729	7	1,279	47	8,683
Oregon .....	4,096	668,883	1,554	319,293	252	61,356	63	39,481
Pennsylvania .....	84	384	22	66	-	-	-	-
Rhode Island .....	4	4	-	-	-	-	-	-
South Carolina .....	79	3,995	2	(D)	-	-	-	-
South Dakota .....	437	66,857	227	30,935	-	-	38	3,102
Tennessee .....	89	4,550	24	1,939	-	-	9	286
Texas .....	4,567	1,032,043	1,741	564,560	414	77,513	587	238,631
Utah .....	6,278	605,133	3,003	275,610	305	36,704	1,157	55,367
Vermont .....	5	15	-	-	-	-	-	-
Virginia .....	67	1,076	41	123	-	-	-	-
Washington .....	2,042	199,917	1,059	139,151	101	5,021	212	13,967
West Virginia .....	13	(D)	1	(D)	-	-	-	-
Wisconsin .....	115	7,683	29	2,133	-	-	8	1,548
Wyoming .....	4,197	1,156,819	1,683	638,493	68	32,893	241	58,615
<b>Water Resources Regions</b>								
Region 01 New England .....	67	706	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	302	5,650	114	637	2	(D)	6	256
Region 03 South Atlantic-Gulf .....	1,599	536,569	188	397,128	13	14,958	112	24,891
Region 04 Great Lakes .....	163	5,158	73	1,369	24	840	33	(D)
Region 05 Ohio .....	184	7,857	30	677	4	40	9	17
Region 06 Tennessee .....	67	(D)	12	(D)	-	-	4	26
Region 07 Upper Mississippi .....	211	31,229	40	8,604	2	(D)	22	5,478
Region 08 Lower Mississippi .....	6,180	5,799,090	2,723	2,939,033	708	311,981	737	422,721
Region 09 Souris-Red-Rainy .....	12	14,163	5	9,851	-	-	1	(D)
Region 10 Missouri .....	18,564	4,117,142	11,419	2,807,066	2,338	194,657	3,438	462,897
Region 11 Arkansas-White-Red .....	4,775	1,232,853	2,163	611,124	403	75,943	611	103,972
Region 12 Texas-Gulf .....	3,377	820,850	1,247	432,329	188	46,448	424	191,475
Region 13 Rio Grande .....	6,429	660,575	3,768	314,384	180	19,863	1,026	103,890
Region 14 Upper Colorado .....	7,854	1,036,243	2,874	377,922	602	60,548	349	31,320
Region 15 Lower Colorado .....	2,613	826,066	1,503	662,762	169	59,875	468	184,685
Region 16 Great Basin .....	6,254	932,543	3,174	486,443	342	45,689	1,309	85,999
Region 17 Pacific Northwest .....	14,700	1,767,379	7,232	953,040	731	90,409	842	129,711
Region 18 California .....	16,046	4,219,623	8,777	2,860,304	1,913	639,708	3,820	967,758
Region 19 Alaska .....	1	(D)	1	(D)	-	-	-	-
Region 20 Hawaii .....	248	3,635	115	772	-	-	26	128

See footnote(s) at end of table.

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**Table 37. Water Management Practices Used by Operators with Gravity Systems: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Conservation technique used <sup>1</sup> - con.							
	Surge flow or cablegation		Shortening of furrow length		Reducing set time or number of irrigations		Alternate row irrigation	
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States .....	2,784	337,641	1,921	337,827	14,089	2,537,699	11,103	2,224,802
2003 ..	1,796	374,147	1,682	434,168	20,851	2,784,078	11,826	2,572,135
<b>2008 DATA</b>								
Alabama .....	-	-	-	-	4	16	-	-
Alaska .....	1	(D)	-	-	-	-	-	-
Arizona .....	10	9,724	30	27,125	469	97,039	87	46,096
Arkansas .....	29	10,066	68	48,376	121	68,794	455	375,795
California .....	48	28,455	210	141,362	2,139	674,896	1,214	232,873
Colorado .....	57	9,214	523	15,173	1,602	196,669	1,462	91,235
Connecticut .....	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-
Florida .....	-	-	-	-	36	9,729	27	4,094
Georgia .....	-	-	-	-	-	-	-	-
Hawaii .....	-	-	11	11	52	128	11	11
Idaho .....	367	13,875	44	1,330	1,667	118,478	1,324	87,013
Illinois .....	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-
Iowa .....	-	-	-	-	5	(D)	6	440
Kansas .....	33	3,735	120	10,172	365	44,143	361	45,725
Kentucky .....	-	-	-	-	2	(D)	6	30
Louisiana .....	2	(D)	7	3,448	119	91,397	161	104,665
Maine .....	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-
Michigan .....	24	840	24	840	26	860	24	840
Minnesota .....	-	-	-	-	-	-	-	-
Mississippi .....	-	-	14	7,320	59	64,430	184	137,318
Missouri .....	69	28,967	10	654	79	39,122	256	171,991
Montana .....	15	1,605	12	2,080	1,645	199,294	98	13,037
Nebraska .....	807	159,001	201	25,108	1,681	352,115	2,888	636,779
Nevada .....	6	390	21	951	228	44,154	4	1,840
New Hampshire .....	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-
New Mexico .....	341	4,631	165	4,200	631	27,083	740	16,528
New York .....	-	-	-	-	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-
North Dakota .....	4	470	-	-	42	9,111	17	5,394
Ohio .....	-	-	-	-	-	-	-	-
Oklahoma .....	2	(D)	11	2,105	15	6,497	52	11,768
Oregon .....	52	6,980	9	1,891	1,038	85,682	53	16,807
Pennsylvania .....	-	-	-	-	-	-	22	66
Rhode Island .....	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-
South Dakota .....	17	740	19	418	133	16,450	31	4,120
Tennessee .....	1	(D)	-	-	11	188	4	380
Texas .....	450	42,622	85	25,796	189	37,493	543	122,682
Utah .....	325	4,529	160	3,590	618	53,884	158	8,732
Vermont .....	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-
Washington .....	46	3,461	55	3,687	429	47,742	507	49,696
West Virginia .....	-	-	-	-	1	(D)	-	-
Wisconsin .....	2	(D)	-	-	-	-	-	-
Wyoming .....	76	5,856	122	12,190	683	251,803	408	38,847
<b>Water Resources Regions</b>								
Region 01 New England .....	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	-	-	1	(D)	22	66
Region 03 South Atlantic-Gulf .....	-	-	-	-	40	9,745	28	4,124
Region 04 Great Lakes .....	24	840	24	840	26	860	24	840
Region 05 Ohio .....	-	-	-	-	2	(D)	6	30
Region 06 Tennessee .....	-	-	-	-	8	8	-	-
Region 07 Upper Mississippi .....	2	(D)	-	-	3	1,100	3	1,100
Region 08 Lower Mississippi .....	101	40,913	91	58,558	366	253,997	984	746,655
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-
Region 10 Missouri .....	961	171,562	555	47,447	4,338	846,328	4,073	776,484
Region 11 Arkansas-White-Red .....	56	7,685	335	21,531	261	68,603	825	126,832
Region 12 Texas-Gulf .....	433	39,016	80	25,696	184	37,393	394	81,187
Region 13 Rio Grande .....	342	4,711	41	1,410	585	47,470	420	25,330
Region 14 Upper Colorado .....	148	6,104	195	1,538	1,131	118,291	994	23,053
Region 15 Lower Colorado .....	10	9,724	96	29,165	479	114,119	173	48,888
Region 16 Great Basin .....	193	3,815	179	4,161	742	84,372	109	4,545
Region 17 Pacific Northwest .....	465	24,316	108	6,908	3,444	276,824	1,823	152,784
Region 18 California .....	48	28,455	206	140,562	2,427	678,359	1,214	232,873
Region 19 Alaska .....	1	(D)	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	11	11	52	128	11	11

See footnote(s) at end of table.

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**Table 37. Water Management Practices Used by Operators with Gravity Systems: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Conservation technique used <sup>1</sup> - con.							
	Polyacrylamide (PAM)		Mulch or other type of row covers		Laser leveling		Special furrowing	
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States .....	2,169	380,424	1,811	229,300	11,590	3,985,596	6,458	1,019,828
2003 ..	1,817	385,231	1,920	227,397	13,176	3,711,987	6,189	1,277,211
<b>2008 DATA</b>								
Alabama .....	-	-	-	-	1	(D)	2	(D)
Alaska .....	-	-	-	-	-	-	-	-
Arizona .....	22	21,095	14	7,487	579	391,499	82	20,925
Arkansas .....	15	6,750	-	-	868	607,437	359	179,698
California .....	106	59,874	734	98,079	3,696	1,195,521	2,336	219,135
Colorado .....	204	33,546	230	9,384	258	31,925	581	77,288
Connecticut .....	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-
Florida .....	-	-	14	5,780	45	319,191	15	7,511
Georgia .....	-	-	4	200	-	-	-	-
Hawaii .....	-	-	26	49	-	-	14	206
Idaho .....	946	100,579	65	14,314	546	68,433	440	15,269
Illinois .....	-	-	-	-	4	1,272	-	-
Indiana .....	-	-	-	-	-	-	-	-
Iowa .....	-	-	-	-	1	(D)	-	-
Kansas .....	-	-	37	4,049	98	9,866	197	16,050
Kentucky .....	7	7	13	13	-	-	-	-
Louisiana .....	-	-	5	4,500	340	172,760	19	16,661
Maine .....	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-
Michigan .....	-	-	27	284	-	-	-	-
Minnesota .....	-	-	-	-	4	7,068	1	(D)
Mississippi .....	-	-	3	1,050	206	212,215	28	22,711
Missouri .....	1	(D)	3	3,156	264	233,052	36	29,054
Montana .....	90	9,340	117	15,596	715	127,747	497	73,160
Nebraska .....	27	12,000	53	21,890	187	77,048	104	24,880
Nevada .....	60	538	-	-	488	105,206	10	690
New Hampshire .....	-	-	-	-	-	-	-	-
New Jersey .....	-	-	14	42	2	(D)	-	-
New Mexico .....	62	(D)	15	2,910	1,919	109,243	89	8,110
New York .....	-	-	30	30	-	-	-	-
North Carolina .....	-	-	-	-	-	-	-	-
North Dakota .....	-	-	8	684	50	24,025	21	5,482
Ohio .....	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	2	(D)	13	3,312	40	8,220
Oregon .....	68	19,028	128	8,976	57	25,760	74	18,693
Pennsylvania .....	-	-	22	66	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	2	(D)
South Dakota .....	2	(D)	-	-	36	3,962	53	4,982
Tennessee .....	-	-	8	8	4	1,190	4	210
Texas .....	18	17,315	72	12,133	321	170,675	332	66,159
Utah .....	13	1,820	12	3,150	824	79,347	311	24,475
Vermont .....	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	41	123	-	-
Washington .....	314	62,789	120	6,559	8	719	370	27,736
West Virginia .....	-	-	1	(D)	-	-	-	-
Wisconsin .....	-	-	13	65	8	520	-	-
Wyoming .....	214	34,557	21	8,300	7	5,250	441	151,501
<b>Water Resources Regions</b>								
Region 01 New England .....	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	-	-	67	140	43	223	-	-
Region 03 South Atlantic-Gulf .....	-	-	18	5,980	46	320,241	19	(D)
Region 04 Great Lakes .....	-	-	40	349	-	-	-	-
Region 05 Ohio .....	7	7	13	13	-	-	-	-
Region 06 Tennessee .....	-	-	8	8	-	-	-	-
Region 07 Upper Mississippi .....	-	-	-	-	22	6,056	-	-
Region 08 Lower Mississippi .....	15	6,750	11	8,706	1,423	1,044,957	337	216,182
Region 09 Souris-Red-Rainy .....	-	-	-	-	3	5,068	1	(D)
Region 10 Missouri .....	490	79,301	217	48,090	1,028	243,392	1,266	247,050
Region 11 Arkansas-White-Red .....	32	13,251	290	8,613	363	210,405	479	77,477
Region 12 Texas-Gulf .....	13	10,400	9	3,370	236	130,965	146	43,685
Region 13 Rio Grande .....	62	186	20	8,425	1,963	152,493	132	20,186
Region 14 Upper Colorado .....	21	4,806	19	6,992	194	1,391	362	57,373
Region 15 Lower Colorado .....	22	21,095	14	7,487	651	414,339	234	25,585
Region 16 Great Basin .....	73	2,358	12	3,150	1,309	184,193	183	27,988
Region 17 Pacific Northwest .....	1,328	182,396	313	29,849	613	95,923	948	73,428
Region 18 California .....	106	59,874	734	98,079	3,696	1,175,950	2,337	222,135
Region 19 Alaska .....	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	26	49	-	-	14	206

<sup>1</sup> More than one technique can be used on an irrigated acre during the survey year.

**Table 38. Farms Using Recycled or Reclaimed Water: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Recycled water		Reclaimed water										
	Farms	Acres irrigated	Total			Source of reclaimed water <sup>1</sup>					Purchased reclaimed water		
			Farms	Acres irrigated	Acre-feet applied	Municipal	Industrial	On-farm livestock operation	Off-farm livestock operation	Other	Farms	Acre-feet purchased	Average price per acre-foot (dollars)
United States ..... 2008 ..	9,843	1,806,984	3,205	705,197	629,202	527	164	1,289	204	1,107	152	94,472	28.48
..... 2003 ..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>2008 DATA</b>													
Alabama .....	-	-	11	1,020	647	3	-	8	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	147	59,805	42	17,312	71,404	32	-	3	6	3	17	46,023	38.45
Arkansas .....	839	358,746	160	81,105	43,217	14	17	58	-	77	-	-	-
California .....	2,888	704,444	839	287,908	308,464	114	12	504	23	214	18	16,724	15.86
Colorado .....	954	120,817	83	5,720	3,996	-	-	-	-	83	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	2	(D)	(D)	1	-	-	-	1	-	-	-
Florida .....	71	33,162	25	13,919	5,354	7	-	17	-	1	-	-	-
Georgia .....	71	7,220	44	3,149	3,337	-	-	44	-	-	-	-	-
Hawaii .....	-	-	15	2,047	2,430	2	13	-	-	1	-	-	-
Idaho .....	447	51,782	392	23,597	19,067	4	4	48	9	327	7	2,340	(D)
Illinois .....	2	(D)	-	-	-	-	-	-	-	-	-	-	-
Indiana .....	10	1,518	24	5,633	1,599	3	-	15	5	3	-	-	-
Iowa .....	-	-	17	2,130	582	-	2	13	-	2	-	-	-
Kansas .....	129	24,080	63	5,549	6,952	1	1	-	62	-	-	-	-
Kentucky .....	2	(D)	2	(D)	(D)	-	-	-	2	-	-	-	-
Louisiana .....	7	1,790	-	-	-	-	-	-	-	-	-	-	-
Maine .....	1	(D)	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	6	1,780	282	4	-	2	-	2	-	-	-
Massachusetts .....	27	(D)	7	310	62	-	-	-	-	7	-	-	-
Michigan .....	35	1,820	27	7,990	2,385	-	-	27	-	-	-	-	-
Minnesota .....	2	(D)	19	811	760	17	-	2	-	-	-	-	-
Mississippi .....	50	12,986	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	1	(D)	54	7,352	863	8	-	46	-	-	4	500	8.00
Montana .....	180	21,456	223	16,743	8,782	3	-	23	-	197	-	-	-
Nebraska .....	1,644	118,615	134	42,895	16,769	-	-	80	54	-	-	-	-
Nevada .....	76	5,604	11	6,846	18,934	11	2	-	-	-	5	15,306	6.18
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	25	1,706	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	412	17,087	14	6,830	2,850	2	-	9	1	2	2	(D)	(D)
New York .....	30	150	30	150	3	-	-	-	30	-	-	-	-
North Carolina .....	272	9,498	197	8,077	3,426	-	4	193	-	-	-	-	-
North Dakota .....	2	(D)	9	1,720	1,551	9	-	-	-	-	2	(D)	(D)
Ohio .....	20	128	4	504	49	2	-	-	2	-	-	-	-
Oklahoma .....	77	5,163	40	3,775	2,372	-	3	36	1	-	3	90	33.00
Oregon .....	317	77,049	176	70,920	34,217	26	21	88	3	54	-	-	-
Pennsylvania .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island .....	1	(D)	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	15	1,210	7	419	69	-	-	7	-	-	-	-	-
South Dakota .....	-	-	22	4,301	1,314	3	-	-	16	3	-	-	-
Tennessee .....	19	149	3	(D)	(D)	-	1	-	2	-	-	-	-
Texas .....	414	77,513	149	26,875	13,864	67	58	-	-	24	61	2,553	30.01
Utah .....	336	42,725	240	17,089	30,787	188	16	36	-	24	10	2,730	34.95
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	2	(D)	16	2,819	2,202	2	2	14	-	-	-	-	-
Washington .....	111	5,991	21	15,361	7,941	4	7	2	-	8	9	4,785	(D)
West Virginia .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	139	9,462	30	2,636	6,233	-	1	8	-	21	-	-	-
Wyoming .....	68	32,893	47	8,792	5,795	-	-	6	18	23	14	700	1.00
<b>Water Resources Regions</b>													
Region 01 New England .....	29	255	7	310	62	-	-	-	-	7	-	-	-
Region 02 Mid-Atlantic .....	27	1,716	15	3,010	1,163	7	2	7	-	3	-	-	-
Region 03 South Atlantic-Gulf .....	429	51,090	293	28,548	14,657	10	4	278	-	1	-	-	-
Region 04 Great Lakes .....	88	2,645	57	8,140	2,388	-	-	27	-	30	-	-	-
Region 05 Ohio .....	31	(D)	34	8,869	1,760	5	-	19	9	3	-	-	-
Region 06 Tennessee .....	9	(D)	1	(D)	(D)	-	1	-	-	-	-	-	-
Region 07 Upper Mississippi .....	129	10,430	36	3,442	6,315	2	1	12	-	21	-	-	-
Region 08 Lower Mississippi .....	820	347,080	128	75,923	39,289	10	17	22	2	77	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	17	(D)	(D)	17	-	-	-	-	-	-	-
Region 10 Missouri .....	2,468	220,775	484	76,306	36,165	19	2	158	146	159	20	2,121	14.37
Region 11 Arkansas-White-Red .....	487	87,249	82	14,984	12,971	8	4	72	1	4	3	(D)	(D)
Region 12 Texas-Gulf .....	190	47,088	98	19,445	9,876	66	-	8	-	24	61	2,553	30.01
Region 13 Rio Grande .....	182	21,317	64	13,760	6,238	2	58	1	1	2	2	(D)	(D)
Region 14 Upper Colorado .....	618	72,868	92	6,339	6,912	85	-	3	4	-	-	-	-
Region 15 Lower Colorado .....	169	60,135	42	17,312	71,404	32	-	3	6	3	17	46,023	38.45
Region 16 Great Basin .....	361	49,872	166	20,396	43,746	114	18	36	-	24	15	18,036	10.53
Region 17 Pacific Northwest .....	900	125,231	682	108,909	62,827	31	32	134	12	489	16	7,125	48.17
Region 18 California .....	2,906	707,499	892	295,952	310,122	117	12	509	23	259	18	16,724	15.86
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	-	-	15	2,047	2,430	2	13	-	-	1	-	-	-

<sup>1</sup> Respondents could report more than one source of reclaimed water.

**Table 39. Irrigators Participating in Government Programs: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Received direct payments, counter-cyclical payments, loan deficiency payments or marketing loans, or participated in a quota program or buy-out program				
	Farms	Land in farms (acres)	Total cropland acres	Acres irrigated	Acre-feet of water applied
United States .....	70,787	119,130,826	81,447,025	40,082,526	61,172,650
2008 ..	77,565	126,128,749	78,061,938	37,084,739	57,348,459
2003 ..					
<b>2008 DATA</b>					
Alabama .....	257	376,230	314,448	64,135	36,559
Alaska .....	1	(D)	(D)	(D)	(D)
Arizona .....	767	962,810	787,251	712,564	4,035,768
Arkansas .....	3,503	5,319,807	5,076,830	4,065,991	7,756,532
California .....	5,081	4,478,356	3,783,180	3,197,568	11,051,043
Colorado .....	3,334	6,256,830	3,864,430	1,643,771	2,656,601
Connecticut .....	20	1,678	1,582	655	(D)
Delaware .....	220	244,551	225,292	91,537	64,201
Florida .....	380	513,552	314,129	146,539	161,697
Georgia .....	2,162	2,517,393	1,767,041	879,604	739,733
Hawaii .....	27	(D)	7,625	4,734	5,571
Idaho .....	5,255	4,275,891	3,249,306	2,499,910	4,860,159
Illinois .....	921	1,239,041	1,179,401	431,346	221,888
Indiana .....	850	1,254,014	1,202,374	362,941	178,969
Iowa .....	465	554,844	534,105	152,522	62,208
Kansas .....	4,273	10,713,968	9,451,878	2,469,940	3,005,629
Kentucky .....	464	288,632	234,576	28,816	13,501
Louisiana .....	1,238	1,851,907	1,671,927	816,413	884,192
Maine .....	17	29,943	20,266	2,332	318
Maryland .....	276	243,125	215,913	75,368	49,714
Massachusetts .....	115	7,529	3,665	3,315	2,614
Michigan .....	1,051	1,273,669	1,151,693	458,544	260,406
Minnesota .....	1,196	1,260,864	1,150,255	441,498	286,131
Mississippi .....	1,011	2,320,048	2,231,687	1,405,390	1,361,586
Missouri .....	1,510	2,188,633	2,079,936	1,184,845	965,936
Montana .....	2,496	11,213,724	3,678,620	1,124,480	1,471,350
Nebraska .....	13,663	16,124,619	13,276,189	7,975,529	6,317,363
Nevada .....	262	1,152,022	255,165	192,182	441,843
New Hampshire .....	11	2,297	784	179	(D)
New Jersey .....	80	49,539	41,229	20,278	14,128
New Mexico .....	1,536	4,985,763	1,679,761	407,946	842,638
New York .....	111	68,394	51,902	8,226	4,667
North Carolina .....	697	737,327	556,602	90,467	55,924
North Dakota .....	521	1,569,498	1,242,556	225,134	203,960
Ohio .....	104	83,112	79,387	8,759	5,469
Oklahoma .....	1,006	2,066,737	1,345,839	394,478	452,444
Oregon .....	1,686	2,073,067	1,538,446	768,699	1,416,654
Pennsylvania .....	147	67,138	56,127	6,684	6,833
Rhode Island .....	10	653	356	67	6
South Carolina .....	305	368,126	280,917	77,362	49,196
South Dakota .....	893	2,456,349	1,488,038	309,652	224,302
Tennessee .....	239	352,341	318,393	52,401	33,598
Texas .....	6,472	13,039,176	10,346,549	5,013,525	6,356,628
Utah .....	1,678	2,630,201	816,635	445,492	1,023,894
Vermont .....	3	528	228	18	2
Virginia .....	177	213,991	161,002	35,321	19,484
Washington .....	2,264	4,131,658	1,633,900	905,344	2,037,850
West Virginia .....	14	6,664	(D)	(D)	(D)
Wisconsin .....	650	745,453	653,517	272,730	195,513
Wyoming .....	1,368	6,787,814	1,421,380	606,724	1,336,970
<b>Water Resources Regions</b>					
Region 01 New England .....	173	42,100	26,653	6,548	3,856
Region 02 Mid-Atlantic .....	864	761,797	666,836	223,993	147,843
Region 03 South Atlantic-Gulf .....	3,807	4,443,953	3,140,296	1,250,147	1,037,740
Region 04 Great Lakes .....	1,544	1,745,145	1,585,481	613,733	360,414
Region 05 Ohio .....	1,049	1,316,435	1,201,823	279,789	133,830
Region 06 Tennessee .....	214	240,709	(D)	(D)	(D)
Region 07 Upper Mississippi .....	2,864	3,302,890	3,070,745	1,135,336	659,607
Region 08 Lower Mississippi .....	6,264	10,540,256	10,053,045	6,788,450	9,892,751
Region 09 Souris-Red-Rainy .....	343	654,563	593,435	132,165	99,889
Region 10 Missouri .....	22,683	45,452,394	26,726,249	11,842,302	11,483,555
Region 11 Arkansas-White-Red .....	7,002	16,413,650	13,205,791	4,998,674	6,900,807
Region 12 Texas-Gulf .....	4,747	8,450,232	6,620,243	3,226,019	3,850,526
Region 13 Rio Grande .....	1,416	4,547,597	1,648,464	493,241	1,193,534
Region 14 Upper Colorado .....	644	1,162,253	454,383	242,251	473,016
Region 15 Lower Colorado .....	852	1,114,161	840,814	754,203	4,192,378
Region 16 Great Basin .....	2,547	3,825,880	1,196,014	669,720	1,512,890
Region 17 Pacific Northwest .....	8,581	10,494,430	6,356,531	4,130,125	8,133,995
Region 18 California .....	5,165	4,591,061	3,836,984	3,257,449	11,068,760
Region 19 Alaska .....	1	(D)	(D)	(D)	(D)
Region 20 Hawaii .....	27	(D)	7,625	4,734	5,571

See footnote(s) at end of table.

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**Table 39. Irrigators Participating in Government Programs: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Received payments for irrigation and/or drainage improvements from any of the following organizations <sup>1</sup>											
	USDA programs			Non-USDA Federal programs			State, local, or district programs			Other programs		
	Farms	Land in farms (acres)	Acres irrigated	Farms	Land in farms (acres)	Acres irrigated	Farms	Land in farms (acres)	Acres irrigated	Farms	Land in farms (acres)	Acres irrigated
United States ..... 2008 .. ..... 2003 ..	33,684 (NA)	65,280,052 (NA)	19,140,464 (NA)	954 (NA)	2,608,230 (NA)	397,474 (NA)	3,939 (NA)	5,788,053 (NA)	2,065,492 (NA)	2,206 (NA)	5,080,668 (NA)	1,123,135 (NA)
<b>2008 DATA</b>												
Alabama .....	145	191,068	28,806	-	-	-	5	9,516	1,286	10	4,768	784
Alaska .....	1	(D)	(D)	-	-	-	-	-	-	-	-	-
Arizona .....	568	2,133,507	388,825	12	17,740	16,940	26	44,330	24,820	20	33,616	23,185
Arkansas .....	1,089	1,995,983	1,544,386	1	(D)	(D)	130	153,628	131,801	56	113,804	92,834
California .....	3,313	3,550,701	2,004,367	51	129,003	119,773	187	213,426	184,028	108	184,911	150,826
Colorado .....	2,702	4,936,489	1,205,600	9	115,252	31,170	85	199,367	61,498	38	119,712	45,427
Connecticut .....	41	2,248	937	-	-	-	-	-	-	2	(D)	(D)
Delaware .....	136	167,148	66,230	-	-	-	19	31,392	11,021	4	4,298	2,640
Florida .....	598	669,912	245,895	3	2,312	1,130	115	144,190	65,456	5	40,798	26,416
Georgia .....	760	1,122,469	403,307	52	13,000	3,640	121	154,288	62,487	159	79,966	17,479
Hawaii .....	83	(D)	1,948	1	(D)	(D)	3	(D)	(D)	17	2,486	716
Idaho .....	1,665	1,531,563	781,364	85	52,096	25,392	137	89,685	73,486	58	163,480	73,850
Illinois .....	269	349,466	122,718	-	-	-	21	30,093	10,405	12	15,162	9,330
Indiana .....	243	426,314	118,797	-	-	-	11	31,620	17,853	-	-	-
Iowa .....	144	193,487	53,180	-	-	-	1	(D)	(D)	14	12,400	1,902
Kansas .....	1,624	4,357,096	1,035,800	44	59,840	7,832	122	836,737	61,268	48	209,585	39,755
Kentucky .....	113	70,720	7,289	-	-	-	47	14,345	756	40	4,579	414
Louisiana .....	511	850,019	379,680	1	(D)	(D)	29	51,344	26,428	14	23,838	11,520
Maine .....	14	27,793	2,182	-	-	-	10	(D)	(D)	2	(D)	(D)
Maryland .....	134	120,634	42,620	3	1,554	90	56	49,989	15,957	1	(D)	(D)
Massachusetts .....	253	29,067	10,605	-	-	-	1	(D)	(D)	13	2,202	649
Michigan .....	396	519,575	186,290	2	(D)	(D)	53	47,252	11,546	19	28,916	8,628
Minnesota .....	442	505,226	201,173	10	4,400	2,710	31	34,173	14,080	19	6,064	2,425
Mississippi .....	459	1,158,479	690,917	2	(D)	(D)	9	21,816	10,650	11	27,296	5,766
Missouri .....	736	1,259,706	680,531	7	3,730	3,350	104	186,061	69,644	28	34,928	23,241
Montana .....	1,385	6,233,001	501,309	32	103,048	18,816	53	184,960	21,424	154	139,600	9,155
Nebraska .....	3,736	5,595,612	2,575,988	188	125,728	54,445	921	972,136	543,628	368	608,357	226,744
Nevada .....	359	1,460,306	214,958	2	(D)	(D)	-	-	-	13	42,530	22,194
New Hampshire .....	25	3,022	248	-	-	-	-	-	-	-	-	-
New Jersey .....	176	61,143	25,593	1	(D)	(D)	25	12,347	7,403	8	2,211	1,253
New Mexico .....	1,215	3,337,193	355,494	-	-	-	4	17,690	3,226	68	924,644	9,054
New York .....	56	34,565	6,954	1	(D)	(D)	4	8,509	2,658	4	260	120
North Carolina .....	235	362,454	34,109	-	-	-	64	41,372	5,836	68	28,944	3,056
North Dakota .....	188	703,294	83,919	3	7,245	873	6	23,716	4,484	8	22,806	3,926
Ohio .....	27	29,410	4,941	-	-	-	10	13,922	1,775	2	(D)	(D)
Oklahoma .....	434	806,662	169,551	2	(D)	(D)	20	161,347	17,717	18	19,821	2,982
Oregon .....	1,066	1,978,970	562,308	9	27,890	13,246	554	245,782	62,557	216	174,723	34,975
Pennsylvania .....	71	40,070	4,299	-	-	-	16	(D)	1,516	9	3,725	362
Rhode Island .....	29	1,496	267	-	-	-	-	-	-	4	396	32
South Carolina .....	201	205,043	35,082	3	9,120	150	7	16,164	746	6	14,224	2,953
South Dakota .....	338	1,257,478	153,378	7	11,543	2,758	7	23,500	4,200	29	62,557	19,692
Tennessee .....	95	187,705	28,052	-	-	-	31	18,806	(D)	10	(D)	(D)
Texas .....	3,250	5,755,584	2,723,836	4	11,920	11,780	491	636,223	406,446	177	229,772	125,532
Utah .....	1,173	1,617,053	355,702	95	342,445	13,749	56	369,793	32,044	210	108,164	62,367
Vermont .....	10	730	52	-	-	-	-	-	-	-	-	-
Virginia .....	57	83,390	14,822	-	-	-	14	11,686	2,912	-	-	-
Washington .....	1,588	4,360,577	504,703	278	1,435,293	37,126	305	490,485	59,177	44	1,420,346	23,309
West Virginia .....	21	6,892	(D)	-	-	-	-	-	-	5	1,330	15
Wisconsin .....	292	386,126	126,252	1	(D)	(D)	17	25,900	3,567	23	12,019	4,537
Wyoming .....	1,218	4,597,923	454,481	45	61,970	10,270	11	97,670	14,928	64	139,582	31,304
<b>Water Resources Regions</b>												
Region 01 New England .....	366	63,654	14,247	-	-	-	11	36,201	10,262	21	3,898	941
Region 02 Mid-Atlantic .....	598	461,108	154,522	5	2,160	315	132	115,056	39,547	31	14,124	5,025
Region 03 South Atlantic-Gulf .....	1,928	2,515,339	745,763	58	24,432	4,920	312	364,204	136,581	245	180,100	51,308
Region 04 Great Lakes .....	544	688,934	247,363	2	(D)	(D)	65	76,922	16,711	19	28,916	8,628
Region 05 Ohio .....	355	499,054	92,699	-	-	-	66	44,656	6,118	45	9,839	2,912
Region 06 Tennessee .....	66	112,039	(D)	-	-	-	19	(D)	(D)	15	(D)	(D)
Region 07 Upper Mississippi .....	973	1,220,954	432,955	11	(D)	2,910	74	114,259	44,559	57	30,737	13,424
Region 08 Lower Mississippi .....	2,312	4,588,038	2,950,049	6	18,896	9,831	203	326,738	207,245	94	173,916	122,736
Region 09 Souris-Red-Rainy .....	144	267,059	49,992	-	-	-	12	14,236	2,734	2	(D)	(D)
Region 10 Missouri .....	8,351	21,647,074	4,617,758	321	375,844	119,814	1,101	1,515,506	648,446	667	1,210,227	335,581
Region 11 Arkansas-White-Red .....	3,397	7,465,592	2,361,916	6	35,000	4,100	224	1,032,451	114,527	124	130,949	58,313
Region 12 Texas-Gulf .....	2,480	4,179,377	1,887,770	-	-	-	406	589,613	380,356	87	150,619	91,986
Region 13 Rio Grande .....	1,202	2,934,267	369,275	4	11,920	11,780	6	20,680	7,136	67	922,544	6,954
Region 14 Upper Colorado .....	1,031	1,617,161	400,786	92	48,445	13,734	32	19,160	9,344	86	124,857	44,869
Region 15 Lower Colorado .....	647	2,186,976	417,856	12	17,740	16,940	39	67,559	40,470	21	35,716	25,285
Region 16 Great Basin .....	1,314	2,893,419	507,497	5	301,184	4,553	34	344,848	22,222	186	120,392	75,614
Region 17 Pacific Northwest .....	4,500	8,268,723	1,818,411	377	1,595,391	75,014	1,014	856,012	195,750	312	1,711,369	120,554
Region 18 California .....	3,392	3,665,601	2,056,333	54	139,403	127,523	186	213,402	179,878	110	219,291	156,406
Region 19 Alaska .....	1	(D)	(D)	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	83	(D)	1,948	1	(D)	(D)	3	(D)	(D)	17	2,486	716

<sup>1</sup> Respondents could choose more than one program.

**Table 40. Energy and Water Conservation Improvements: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Implemented improvements in the last five years				Effect of improvements <sup>1</sup>					
					Improved crop yield or quality			Reduced energy cost		
	Farms	Land in farms (acres)	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>
United States .....2008 ..	74,846	91,125,142	30,810,026	51,981,131	45,084	22,290,831	37,815,806	34,134	20,182,951	31,647,081
.....2003 ..	67,245	89,909,616	26,363,943	45,855,907	38,645	18,677,524	31,510,354	27,077	15,311,259	24,669,321
<b>2008 DATA</b>										
Alabama .....	154	171,806	33,225	19,819	96	20,223	13,885	67	23,645	14,308
Alaska .....	1	842	234	44	10	54	8	-	-	-
Arizona .....	1,130	2,296,088	472,278	2,660,894	739	358,950	1,854,725	533	217,327	1,127,188
Arkansas .....	1,693	3,090,673	2,405,249	4,457,145	1,364	1,995,797	3,609,142	1,103	1,724,035	3,243,553
California .....	16,559	7,312,720	4,353,417	13,377,825	7,121	3,136,448	9,603,546	7,805	2,782,362	7,966,826
Colorado .....	4,353	4,615,025	1,417,674	2,401,679	2,604	975,146	1,666,094	1,289	672,461	1,088,738
Connecticut .....	23	2,123	677	155	23	677	155	10	493	126
Delaware .....	104	130,242	58,847	41,099	73	39,528	28,403	75	41,460	29,838
Florida .....	1,380	1,539,902	722,216	1,050,672	789	515,541	758,716	571	588,786	800,354
Georgia .....	1,358	1,586,492	601,911	536,942	888	378,824	360,465	777	449,323	397,547
Hawaii .....	353	135,388	83,699	410,809	220	83,101	410,048	95	75,449	390,038
Idaho .....	4,511	3,570,030	1,938,272	3,653,964	2,540	1,497,677	2,731,995	1,686	1,245,785	2,394,933
Illinois .....	348	503,644	233,190	123,211	189	145,836	82,052	269	195,494	105,734
Indiana .....	268	419,193	161,141	82,099	146	84,111	44,911	200	120,420	59,644
Iowa .....	167	204,672	76,390	37,001	90	40,672	23,883	133	66,011	33,678
Kansas .....	2,019	5,799,308	1,448,805	1,819,069	1,247	988,613	1,217,703	1,405	1,142,551	1,407,564
Kentucky .....	217	84,207	9,165	4,713	180	7,458	4,170	56	4,170	(D)
Louisiana .....	656	1,102,073	505,783	552,334	409	322,073	364,783	434	357,833	428,692
Maine .....	55	71,398	13,169	6,075	24	12,643	(D)	22	3,633	776
Maryland .....	191	138,228	49,726	32,886	118	29,728	20,481	89	35,820	24,695
Massachusetts .....	264	26,870	9,782	14,275	234	6,630	12,819	107	6,752	11,141
Michigan .....	805	753,796	332,276	201,315	601	248,849	149,672	387	269,934	169,218
Minnesota .....	645	755,739	309,993	214,878	386	169,389	127,892	510	259,322	165,633
Mississippi .....	595	1,398,772	914,035	874,611	484	714,040	680,646	341	449,864	433,552
Missouri .....	710	1,135,516	683,738	539,088	503	549,361	430,108	465	468,068	360,339
Montana .....	3,118	8,754,480	965,202	1,386,831	1,888	670,235	987,635	1,087	468,230	622,774
Nebraska .....	7,236	8,918,730	4,783,920	3,678,295	4,718	3,206,222	2,501,268	4,901	3,828,189	2,947,721
Nevada .....	855	2,510,774	395,049	866,556	551	293,066	609,289	359	138,604	351,892
New Hampshire .....	19	2,808	286	64	15	271	49	6	256	45
New Jersey .....	228	64,018	31,136	24,374	117	20,268	15,521	132	23,187	18,552
New Mexico .....	1,953	3,544,612	414,545	1,096,531	994	307,001	762,058	366	184,770	531,486
New York .....	201	44,609	7,884	6,771	97	4,953	3,856	90	4,302	3,826
North Carolina .....	601	494,846	81,594	40,721	433	40,603	20,295	214	35,913	22,194
North Dakota .....	207	727,035	115,216	117,595	128	71,440	79,783	153	88,216	88,009
Ohio .....	112	48,331	6,219	4,096	88	4,043	1,887	46	(D)	2,336
Oklahoma .....	568	863,786	202,525	237,571	367	134,464	165,504	252	128,884	149,363
Oregon .....	4,982	3,619,922	1,039,649	1,962,412	3,871	770,688	1,454,218	2,086	605,724	1,102,975
Pennsylvania .....	259	47,160	6,356	3,304	201	4,284	1,605	131	3,829	2,345
Rhode Island .....	36	4,343	464	590	22	410	536	24	317	528
South Carolina .....	179	198,868	50,319	44,106	118	26,513	26,111	122	30,340	31,693
South Dakota .....	488	1,131,242	176,863	139,041	294	118,834	95,847	288	129,197	93,298
Tennessee .....	215	111,957	18,356	11,320	153	15,094	9,624	74	11,346	7,162
Texas .....	4,114	7,823,755	3,056,779	3,798,153	2,770	2,360,165	2,857,515	2,281	1,987,487	2,473,774
Utah .....	3,342	2,770,011	512,863	1,185,670	1,912	409,593	998,361	565	165,975	417,203
Vermont .....	20	1,036	128	60	8	20	(D)	7	98	37
Virginia .....	238	180,982	24,856	15,012	155	17,311	10,024	90	20,449	12,207
Washington .....	5,095	4,161,743	1,066,903	2,507,979	3,504	706,228	1,655,972	1,643	638,275	1,488,220
West Virginia .....	7	1,975	110	26	6	31	19	1	(D)	(D)
Wisconsin .....	545	609,384	293,057	245,668	343	237,475	195,945	359	261,775	220,157
Wyoming .....	1,659	7,643,988	724,855	1,495,784	1,253	550,250	1,160,898	428	223,738	403,069
<b>Water Resources Regions</b>										
Region 01 New England .....	408	108,438	24,484	21,198	322	20,639	19,556	176	11,549	12,652
Region 02 Mid-Atlantic .....	1,063	517,253	169,999	117,925	648	111,118	76,952	511	122,790	87,008
Region 03 South Atlantic-Gulf .....	3,706	3,986,106	1,482,074	1,687,587	2,373	977,843	1,176,448	1,807	1,123,065	1,261,819
Region 04 Great Lakes .....	1,119	976,722	432,009	262,006	822	331,878	203,674	563	361,167	225,829
Region 05 Ohio .....	556	414,361	103,499	53,731	378	62,755	33,585	252	73,503	38,297
Region 06 Tennessee .....	197	109,448	17,840	10,810	143	10,891	6,524	65	10,813	7,800
Region 07 Upper Mississippi .....	1,476	1,790,788	795,275	528,416	884	497,567	347,677	1,137	671,413	454,691
Region 08 Lower Mississippi .....	3,025	6,001,492	4,101,330	5,808,374	2,259	3,255,485	4,570,587	1,978	2,692,325	3,952,623
Region 09 Souris-Red-Rainy .....	167	274,058	80,490	72,154	101	44,894	46,175	124	55,868	39,431
Region 10 Missouri .....	14,210	30,650,543	7,763,700	7,982,640	9,318	5,258,855	5,538,099	7,822	5,426,255	4,973,903
Region 11 Arkansas-White-Red .....	4,143	9,734,171	2,876,670	4,076,467	2,677	2,148,232	3,082,525	1,988	2,117,244	2,967,081
Region 12 Texas-Gulf .....	2,888	4,316,196	1,974,008	2,209,003	1,953	1,541,859	1,662,633	1,611	1,219,779	1,369,383
Region 13 Rio Grande .....	1,687	3,182,303	529,423	1,390,959	729	330,241	831,598	430	289,832	831,509
Region 14 Upper Colorado .....	3,476	2,233,497	525,153	1,066,886	2,057	427,104	910,573	553	55,124	83,302
Region 15 Lower Colorado .....	1,291	2,517,613	520,077	2,833,633	830	393,754	1,988,232	616	236,987	1,201,641
Region 16 Great Basin .....	3,582	5,033,611	891,205	1,967,168	2,338	673,315	1,490,756	853	315,734	802,477
Region 17 Pacific Northwest .....	14,785	11,622,436	4,025,241	8,050,606	9,789	2,932,385	5,769,504	5,713	2,532,213	5,000,893
Region 18 California .....	16,703	7,519,876	4,413,616	13,430,717	7,233	3,188,861	9,650,653	7,840	2,791,841	7,946,704
Region 19 Alaska .....	11	842	234	44	10	54	8	-	-	-
Region 20 Hawaii .....	353	135,388	83,699	410,809	220	83,101	410,048	95	75,449	390,038

See footnote(s) at end of table.

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**Table 40. Energy and Water Conservation Improvements: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Effect of improvements <sup>1</sup> - con.								
	Reduced water applied			Reduced labor costs			Reduced fertilizer or pesticide losses		
	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>
United States .....	44,473	21,428,273	36,361,523	30,800	15,746,960	27,282,360	13,408	8,075,076	15,470,797
2008 .....	39,573	18,549,164	32,392,166	27,105	13,807,531	24,649,072	9,919	5,742,343	10,369,455
<b>2008 DATA</b>									
Alabama .....	73	19,187	10,683	50	8,442	5,607	14	(D)	(D)
Alaska .....	2	(D)	(D)	3	(D)	(D)	-	-	-
Arizona .....	883	366,068	2,087,556	610	356,401	1,995,411	366	218,172	1,168,259
Arkansas .....	1,056	1,559,798	2,648,153	805	1,349,693	2,433,908	261	441,532	896,222
California .....	9,552	3,125,873	9,689,204	7,177	2,398,395	6,934,978	3,908	1,826,067	5,715,016
Colorado .....	2,525	962,493	1,537,431	1,954	619,869	994,776	699	292,692	558,636
Connecticut .....	10	493	126	10	493	126	6	263	(D)
Delaware .....	68	41,963	28,852	31	16,955	10,884	11	6,405	4,162
Florida .....	839	585,186	801,888	361	208,634	288,369	277	150,292	205,285
Georgia .....	681	381,399	398,784	307	194,646	185,626	157	57,247	66,935
Hawaii .....	170	77,056	397,823	86	7,650	10,442	72	8,833	20,158
Idaho .....	2,537	1,389,470	2,706,319	2,161	1,161,164	2,191,554	426	429,273	879,369
Illinois .....	207	151,044	76,760	97	93,466	54,524	53	38,126	20,930
Indiana .....	142	85,700	42,320	88	51,327	25,541	24	16,416	9,138
Iowa .....	110	47,476	18,589	50	24,117	7,024	8	4,386	1,331
Kansas .....	1,285	1,051,207	1,312,748	851	698,993	860,297	234	291,569	359,476
Kentucky .....	76	3,774	1,627	35	1,940	647	36	1,361	557
Louisiana .....	378	300,345	331,723	258	220,714	300,920	120	124,562	104,281
Maine .....	13	1,294	299	21	11,738	(D)	3	24	30
Maryland .....	83	31,894	22,277	40	14,585	9,987	17	4,945	3,249
Massachusetts .....	226	7,921	12,301	56	4,687	7,862	117	3,065	5,243
Michigan .....	361	203,905	122,367	269	172,449	101,194	108	90,556	61,551
Minnesota .....	408	227,574	159,718	150	83,998	62,440	90	31,748	23,361
Mississippi .....	269	488,317	467,701	232	389,693	402,400	41	81,015	90,747
Missouri .....	405	435,563	321,407	359	316,634	240,672	138	136,936	101,328
Montana .....	1,902	604,078	919,974	1,286	503,590	784,008	231	174,497	296,764
Nebraska .....	5,396	3,843,891	2,953,999	3,424	2,439,400	1,837,398	2,030	1,455,767	1,217,950
Nevada .....	593	257,458	602,551	395	222,174	522,857	130	62,587	153,496
New Hampshire .....	13	277	61	6	256	45	5	202	27
New Jersey .....	123	21,859	17,645	88	16,920	14,360	8	11,330	9,447
New Mexico .....	1,265	301,237	728,737	884	188,712	584,837	554	150,033	414,929
New York .....	88	4,136	3,899	97	4,792	3,010	14	1,142	1,724
North Carolina .....	278	45,500	25,434	340	40,861	19,125	134	11,919	8,218
North Dakota .....	154	92,750	94,069	76	50,532	63,767	43	21,098	18,921
Ohio .....	54	2,896	1,069	40	3,274	1,309	15	1,344	454
Oklahoma .....	259	123,076	145,018	144	97,565	114,149	26	29,401	41,893
Oregon .....	3,137	728,326	1,396,189	2,243	583,055	1,023,990	555	322,914	574,066
Pennsylvania .....	142	3,327	2,534	57	2,582	1,593	79	493	210
Rhode Island .....	30	409	552	12	236	(D)	3	175	(D)
South Carolina .....	80	38,566	33,635	32	8,975	15,223	38	8,597	15,226
South Dakota .....	343	126,865	97,303	152	60,075	51,696	49	29,319	26,557
Tennessee .....	62	11,249	7,416	44	6,179	2,215	13	1,018	583
Texas .....	2,136	1,956,264	2,460,846	1,872	1,729,173	2,095,231	892	842,684	840,021
Utah .....	1,776	323,454	765,841	1,270	278,988	676,621	289	96,688	243,663
Vermont .....	8	100	48	7	98	37	4	8	1
Virginia .....	81	14,320	8,211	79	8,841	3,846	2	(D)	(D)
Washington .....	2,997	828,678	1,923,828	1,084	513,529	1,238,836	729	374,400	884,948
West Virginia .....	2	(D)	(D)	1	(D)	(D)	6	31	19
Wisconsin .....	269	123,173	111,434	213	143,258	122,278	122	65,684	63,829
Wyoming .....	926	439,139	924,513	893	437,187	974,418	200	155,005	359,689
<b>Water Resources Regions</b>									
Region 01 New England .....	295	10,484	13,375	112	17,508	14,374	141	3,737	5,852
Region 02 Mid-Atlantic .....	479	111,888	79,197	363	60,537	41,366	153	24,334	17,734
Region 03 South Atlantic-Gulf .....	1,936	1,064,827	1,206,875	1,063	457,588	510,777	619	228,405	296,032
Region 04 Great Lakes .....	541	249,513	148,255	414	238,188	145,574	164	110,348	77,676
Region 05 Ohio .....	238	56,856	30,872	88	30,909	19,030	79	(D)	(D)
Region 06 Tennessee .....	67	(D)	(D)	63	(D)	(D)	12	(D)	(D)
Region 07 Upper Mississippi .....	853	478,333	307,240	411	289,838	198,973	234	131,743	100,644
Region 08 Lower Mississippi .....	1,850	2,513,224	3,360,407	1,397	2,025,284	2,959,988	422	666,834	984,890
Region 09 Souris-Red-Rainy .....	108	62,701	60,045	54	24,406	24,335	53	15,384	12,373
Region 10 Missouri .....	9,591	5,862,804	5,870,912	6,455	3,874,211	4,113,515	2,806	2,049,862	2,256,540
Region 11 Arkansas-White-Red .....	2,566	1,893,923	2,609,489	1,482	1,402,430	1,962,328	748	533,120	787,803
Region 12 Texas-Gulf .....	1,492	1,270,276	1,454,300	1,310	1,209,909	1,318,719	783	721,492	673,130
Region 13 Rio Grande .....	1,067	396,718	969,363	969	279,854	828,412	240	101,551	259,228
Region 14 Upper Colorado .....	1,640	285,295	550,745	1,412	226,345	425,408	507	134,325	341,882
Region 15 Lower Colorado .....	973	408,204	2,246,338	696	380,661	2,101,979	389	248,624	1,296,679
Region 16 Great Basin .....	2,020	593,362	1,335,678	1,635	536,920	1,229,117	423	153,443	379,634
Region 17 Pacific Northwest .....	8,922	2,917,391	6,005,417	5,570	2,272,888	4,483,703	1,649	1,125,655	2,339,737
Region 18 California .....	9,663	3,166,681	9,708,692	7,217	2,405,997	6,890,388	3,914	1,808,169	5,614,565
Region 19 Alaska .....	2	(D)	(D)	3	(D)	(D)	-	-	-
Region 20 Hawaii .....	170	77,056	397,823	86	7,650	10,442	72	8,833	20,158

See footnote(s) at end of table.

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**Table 40. Energy and Water Conservation Improvements: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Effect of improvements <sup>1</sup> - con.								
	Reduced soil erosion			Reduced tailwater			Other		
	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>
United States .....2008 ..	21,782	12,119,994	20,839,498	16,076	9,100,478	18,108,819	5,073	1,233,067	2,261,961
.....2003 ..	21,373	9,972,000	17,463,670	15,919	8,709,088	17,220,968	5,656	831,261	1,469,581
<b>2008 DATA</b>									
Alabama .....	42	15,396	9,039	12	5,130	3,440	5	522	241
Alaska .....	1	(D)	(D)	1	(D)	(D)	-	-	-
Arizona .....	614	235,184	1,339,250	421	265,432	1,535,753	7	11,300	65,072
Arkansas .....	740	1,129,998	2,007,721	537	833,953	1,538,432	101	109,854	166,037
California .....	3,524	1,652,275	5,123,722	4,230	1,962,493	6,502,295	1,023	208,330	645,124
Colorado .....	2,028	648,103	1,018,199	1,708	419,170	746,008	512	84,436	136,403
Connecticut .....	6	263	87	-	-	-	1	(D)	(D)
Delaware .....	12	6,329	3,477	-	-	-	1	(D)	(D)
Florida .....	317	105,191	141,836	77	91,283	126,991	353	14,701	19,667
Georgia .....	245	173,392	145,961	71	47,470	68,406	150	24,291	20,448
Hawaii .....	86	6,784	5,418	5	(D)	(D)	29	139	257
Idaho .....	1,459	724,375	1,555,096	923	382,930	858,317	210	68,517	169,004
Illinois .....	59	51,246	30,052	10	15,820	9,707	15	12,048	6,559
Indiana .....	46	28,891	16,874	6	4,920	3,180	12	19,333	10,308
Iowa .....	17	5,194	1,798	4	1,934	582	7	1,593	332
Kansas .....	448	456,813	558,712	550	462,074	538,066	142	88,578	120,208
Kentucky .....	55	1,036	374	2	(D)	(D)	17	830	404
Louisiana .....	266	207,821	246,253	104	86,220	102,316	34	13,047	17,775
Maine .....	13	10,474	(D)	2	(D)	(D)	30	(D)	(D)
Maryland .....	39	18,469	13,771	7	3,518	3,277	29	2,187	1,133
Massachusetts .....	9	1,051	(D)	17	1,153	(D)	1	(D)	(D)
Michigan .....	223	167,132	107,239	5	10,020	(D)	34	7,126	4,594
Minnesota .....	144	76,764	57,813	43	24,065	23,280	27	4,937	3,515
Mississippi .....	131	221,249	228,351	114	189,751	196,474	27	23,448	32,813
Missouri .....	227	199,714	144,591	183	171,918	120,547	16	9,850	5,224
Montana .....	773	377,871	507,770	430	263,969	435,887	76	38,502	74,375
Nebraska .....	2,661	1,994,365	1,546,953	1,822	1,525,986	1,134,087	122	55,370	44,342
Nevada .....	221	164,460	328,781	301	154,871	394,184	88	24,369	41,515
New Hampshire .....	5	196	27	2	(D)	(D)	-	-	-
New Jersey .....	61	13,676	11,536	11	1,996	1,370	21	2,132	1,700
New Mexico .....	541	180,740	492,982	378	78,135	212,726	4	5,140	13,518
New York .....	32	1,653	1,969	6	162	308	41	621	1,196
North Carolina .....	146	18,427	12,558	107	6,963	2,476	48	1,664	222
North Dakota .....	72	43,794	50,626	27	11,265	12,183	13	4,531	4,820
Ohio .....	35	1,985	1,074	9	180	90	4	144	144
Oklahoma .....	122	73,873	93,690	130	64,887	83,799	54	22,700	29,221
Oregon .....	1,009	458,982	902,914	629	314,109	576,635	395	46,947	90,510
Pennsylvania .....	39	(D)	(D)	-	-	-	5	65	23
Rhode Island .....	16	220	(D)	6	(D)	(D)	1	(D)	(D)
South Carolina .....	33	17,378	21,773	5	1,403	995	22	5,279	13,399
South Dakota .....	168	67,935	58,616	62	18,433	17,710	22	12,769	12,167
Tennessee .....	12	2,801	1,279	5	4,997	1,899	26	1,461	1,100
Texas .....	1,512	1,346,565	1,399,586	996	949,807	1,200,815	202	162,091	165,546
Utah .....	1,233	253,989	558,519	726	166,556	399,139	395	31,322	89,261
Vermont .....	3	90	36	-	-	-	-	-	-
Virginia .....	61	5,645	4,115	5	790	986	2	(D)	(D)
Washington .....	1,536	526,290	1,218,291	846	302,008	664,189	573	66,774	173,411
West Virginia .....	1	(D)	(D)	-	-	-	-	-	-
Wisconsin .....	129	65,880	55,829	36	6,329	11,100	34	4,845	2,743
Wyoming .....	610	359,155	805,549	505	245,839	566,571	142	38,592	75,832
<b>Water Resources Regions</b>									
Region 01 New England .....	52	12,294	9,263	27	1,567	4,006	33	571	(D)
Region 02 Mid-Atlantic .....	225	45,430	33,607	27	6,424	5,933	99	7,116	5,322
Region 03 South Atlantic-Gulf .....	775	323,276	326,526	266	147,649	199,318	578	46,457	53,977
Region 04 Great Lakes .....	299	189,030	124,290	30	12,257	8,418	40	8,366	5,104
Region 05 Ohio .....	97	13,703	9,173	9	11,330	5,899	39	5,490	2,551
Region 06 Tennessee .....	14	(D)	(D)	8	4,670	(D)	9	(D)	33
Region 07 Upper Mississippi .....	342	187,611	124,822	89	40,884	32,813	68	34,003	19,851
Region 08 Lower Mississippi .....	1,096	1,517,028	2,235,527	787	1,089,680	1,639,577	163	134,491	200,847
Region 09 Souris-Red-Rainy .....	60	22,264	24,359	21	11,395	17,571	12	(D)	(D)
Region 10 Missouri .....	5,306	3,282,618	3,457,607	3,600	2,374,403	2,544,864	571	218,636	300,352
Region 11 Arkansas-White-Red .....	1,174	1,040,293	1,496,094	1,038	944,601	1,261,132	148	130,024	189,801
Region 12 Texas-Gulf .....	1,125	1,006,308	996,257	715	624,895	796,083	179	137,106	133,704
Region 13 Rio Grande .....	468	146,185	326,901	346	120,394	333,763	4	7,050	12,120
Region 14 Upper Colorado .....	1,292	289,933	638,287	1,180	152,389	331,698	544	38,388	57,103
Region 15 Lower Colorado .....	756	249,812	1,404,458	503	287,420	1,640,637	13	22,027	99,879
Region 16 Great Basin .....	1,048	368,526	796,024	817	292,821	726,503	338	52,158	116,807
Region 17 Pacific Northwest .....	3,950	1,723,529	3,663,322	2,331	987,086	2,042,208	1,182	187,234	440,567
Region 18 California .....	3,616	1,688,033	5,162,231	4,276	1,988,548	6,511,849	1,024	201,018	621,368
Region 19 Alaska .....	1	(D)	(D)	1	(D)	(D)	-	-	-
Region 20 Hawaii .....	86	6,784	5,418	5	(D)	(D)	29	139	257

<sup>1</sup> Respondents could choose more than one improvement project.

<sup>2</sup> Acres irrigated and acre-feet applied are totals for all irrigation on these farms and not the amounts conserved as a result of the conservation improvement.

**Table 41. Barriers to Making Improvements to Reduce Energy Use or Conserve Water: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Total <sup>1</sup>				Investigating improvements not a priority		
	Farms	Land in farms (acres)	Acres irrigated	Acre-feet applied	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>
United States ..... 2008 ..	131,988	107,035,754	24,119,889	39,253,905	46,825	7,275,728	12,058,774
..... 2003 ..	142,861	106,059,556	26,128,744	40,901,757	9,055	2,548,537	4,228,360
<b>2008 DATA</b>							
Alabama .....	511	270,681	41,798	22,693	185	10,117	5,523
Alaska .....	12	4,943	1,355	283	9	834	223
Arizona .....	1,867	2,150,077	389,218	1,961,414	846	126,478	617,356
Arkansas .....	2,426	3,071,446	2,088,186	4,174,636	795	568,483	1,057,520
California .....	28,577	8,553,704	2,975,828	9,221,834	11,508	840,947	2,784,571
Colorado .....	8,425	6,032,719	1,448,166	2,139,597	2,788	582,679	863,248
Connecticut .....	124	8,280	1,660	1,381	48	270	49
Delaware .....	205	142,907	45,773	33,280	83	18,307	14,331
Florida .....	3,870	995,762	500,581	650,448	1,032	125,042	172,915
Georgia .....	2,226	1,413,430	405,852	339,942	796	103,255	83,708
Hawaii .....	724	77,999	15,878	42,738	221	12,026	(D)
Idaho .....	9,323	2,851,790	1,381,555	2,574,439	2,634	310,048	579,687
Illinois .....	743	806,298	223,888	108,179	395	104,265	56,812
Indiana .....	821	941,363	243,258	116,781	369	110,648	52,633
Iowa .....	360	385,375	86,448	41,938	161	33,917	19,513
Kansas .....	2,489	5,113,056	1,121,198	1,327,538	721	281,771	384,809
Kentucky .....	605	244,991	23,215	10,985	265	9,825	4,283
Louisiana .....	1,036	972,424	426,929	419,830	465	159,471	153,182
Maine .....	141	46,709	4,982	871	65	611	159
Maryland .....	406	140,049	35,826	22,373	241	13,715	8,670
Massachusetts .....	413	25,848	7,639	4,619	170	4,253	2,481
Michigan .....	1,316	749,210	199,651	97,124	585	74,986	36,735
Minnesota .....	901	641,279	194,337	118,791	209	39,828	22,844
Mississippi .....	682	1,113,662	537,617	527,488	288	227,448	203,779
Missouri .....	1,167	1,150,231	548,616	457,786	520	164,571	132,709
Montana .....	5,389	10,882,900	981,957	1,273,846	1,451	311,890	496,370
Nebraska .....	7,576	12,934,804	3,581,625	3,021,250	2,545	741,139	689,165
Nevada .....	879	3,089,920	290,212	570,376	161	76,537	132,344
New Hampshire .....	67	6,235	434	129	28	73	26
New Jersey .....	380	72,334	28,276	20,931	137	10,513	7,557
New Mexico .....	6,925	9,272,110	421,094	799,818	2,932	170,620	319,912
New York .....	395	100,031	12,274	8,029	98	5,843	2,256
North Carolina .....	1,374	495,260	67,405	43,126	658	36,556	25,797
North Dakota .....	394	979,045	132,854	106,867	124	43,933	35,509
Ohio .....	267	75,963	12,329	5,302	182	10,252	4,187
Oklahoma .....	886	1,518,453	258,710	287,067	404	74,561	90,934
Oregon .....	7,174	3,332,330	718,953	1,314,267	1,836	186,459	350,911
Pennsylvania .....	831	102,787	11,003	9,696	490	6,619	7,408
Rhode Island .....	25	1,158	217	85	20	212	60
South Carolina .....	533	244,425	53,772	42,129	334	32,054	26,545
South Dakota .....	677	1,675,961	183,208	132,233	300	55,908	39,652
Tennessee .....	367	313,023	54,506	30,951	202	32,912	19,631
Texas .....	8,559	8,810,729	2,300,097	3,021,630	3,185	829,796	1,085,918
Utah .....	7,534	2,742,441	556,066	1,244,478	2,888	192,159	437,377
Vermont .....	46	7,150	360	175	20	89	9
Virginia .....	419	142,796	19,962	9,783	155	9,618	4,792
Washington .....	7,617	3,923,347	608,995	1,273,392	1,481	181,179	355,518
West Virginia .....	83	11,518	796	948	30	371	(D)
Wisconsin .....	716	456,191	103,066	76,710	298	49,359	29,957
Wyoming .....	3,505	7,940,610	772,264	1,543,697	1,467	293,281	603,643
<b>Water Resources Regions</b>							
Region 01 New England .....	780	91,026	14,984	7,089	335	5,439	2,776
Region 02 Mid-Atlantic .....	2,137	535,294	139,973	93,403	1,060	57,056	38,300
Region 03 South Atlantic-Gulf .....	8,722	3,509,449	1,072,388	1,101,909	3,084	313,300	319,983
Region 04 Great Lakes .....	2,033	1,122,093	289,577	152,503	860	114,148	58,397
Region 05 Ohio .....	1,500	1,047,513	201,464	92,480	763	102,782	48,600
Region 06 Tennessee .....	330	173,867	23,301	14,806	163	7,106	(D)
Region 07 Upper Mississippi .....	2,387	2,037,070	544,012	302,500	916	200,893	109,886
Region 08 Lower Mississippi .....	4,316	5,411,432	3,245,413	4,978,375	1,617	990,604	1,355,874
Region 09 Souris-Red-Rainy .....	233	440,372	78,127	51,072	80	21,809	12,699
Region 10 Missouri .....	18,517	36,166,685	6,061,555	6,403,446	6,173	1,599,090	1,962,618
Region 11 Arkansas-White-Red .....	6,193	14,728,242	2,536,000	3,393,173	1,831	812,593	1,162,078
Region 12 Texas-Gulf .....	7,336	5,829,213	1,525,145	1,973,304	2,886	576,715	700,732
Region 13 Rio Grande .....	6,344	4,854,787	549,722	1,101,142	2,319	159,375	358,101
Region 14 Upper Colorado .....	7,295	3,588,964	834,735	1,393,959	3,037	331,742	528,225
Region 15 Lower Colorado .....	2,260	2,209,932	416,171	2,071,523	1,094	145,436	701,413
Region 16 Great Basin .....	6,575	4,859,686	708,552	1,593,732	2,315	216,181	499,365
Region 17 Pacific Northwest .....	25,232	11,619,966	2,830,415	5,281,792	6,538	761,294	1,387,950
Region 18 California .....	29,062	8,727,221	3,031,122	9,204,676	11,524	847,305	2,772,162
Region 19 Alaska .....	12	4,943	1,355	283	9	834	223
Region 20 Hawaii .....	724	77,999	15,878	42,738	221	12,026	(D)

See footnote(s) at end of table.

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**Table 41. Barriers to Making Improvements to Reduce Energy Use or Conserve Water: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Risk of reduced yield or poor crop quality			Physical field/crop condition limit system improvements			Improvements will not reduce costs enough to cover installation costs		
	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>
United States .....2008 ..	18,578	3,559,851	5,742,434	20,888	3,254,283	5,717,695	33,725	7,132,837	11,934,612
.....2003 ..	9,818	4,708,089	8,881,210	8,951	4,379,816	8,049,323	21,304	10,442,599	18,326,913
<b>2008 DATA</b>									
Alabama .....	54	7,593	3,877	36	4,032	2,617	108	14,152	7,854
Alaska .....	1	(D)	(D)	-	-	-	2	(D)	(D)
Arizona .....	314	43,359	197,244	191	52,928	285,587	113	74,454	405,689
Arkansas .....	355	363,468	631,344	195	215,570	430,124	566	672,025	1,366,433
California .....	6,904	518,786	1,570,471	8,219	475,868	1,522,380	7,426	1,047,357	3,392,938
Colorado .....	342	149,000	197,741	515	184,896	271,558	1,976	420,945	676,440
Connecticut .....	7	(D)	160	7	225	116	20	593	(D)
Delaware .....	57	13,722	9,149	12	1,783	1,853	56	7,036	4,949
Florida .....	451	52,419	64,807	657	53,091	104,365	575	133,943	137,160
Georgia .....	282	25,602	26,146	145	11,633	10,370	553	119,069	87,124
Hawaii .....	97	838	1,867	93	725	946	134	846	1,162
Idaho .....	1,281	221,505	390,929	1,576	327,748	629,184	3,149	372,797	633,562
Illinois .....	128	37,307	15,294	145	38,086	17,164	187	55,273	22,935
Indiana .....	104	41,675	20,654	89	16,065	6,299	213	81,228	34,356
Iowa .....	58	13,009	12,610	22	4,361	3,244	82	23,220	10,884
Kansas .....	440	227,624	270,419	222	131,770	192,681	721	375,507	434,685
Kentucky .....	131	5,186	2,348	60	2,773	1,311	132	6,967	3,807
Louisiana .....	123	95,677	93,365	98	87,728	79,265	252	129,603	115,482
Maine .....	5	322	(D)	1	(D)	(D)	42	2,251	413
Maryland .....	22	4,873	2,811	20	4,403	2,351	102	9,902	7,601
Massachusetts .....	88	480	402	45	292	105	147	2,532	1,041
Michigan .....	234	30,599	14,659	88	26,081	13,035	310	61,477	27,025
Minnesota .....	35	25,649	15,842	12	1,760	1,180	308	68,295	42,165
Mississippi .....	78	52,239	53,108	82	49,902	55,465	190	178,245	208,974
Missouri .....	293	122,257	108,434	235	54,120	44,821	227	157,135	124,025
Montana .....	572	93,049	137,309	1,091	109,202	148,008	1,950	290,477	335,391
Nebraska .....	1,255	673,229	696,873	1,670	647,936	589,908	1,866	1,066,039	984,982
Nevada .....	48	47,517	76,902	53	76,361	100,357	239	73,479	131,393
New Hampshire .....	20	288	87	9	(D)	43	18	254	(D)
New Jersey .....	57	3,980	3,690	49	3,779	2,659	49	7,020	5,172
New Mexico .....	368	60,567	130,067	594	44,072	89,009	1,555	57,446	116,569
New York .....	38	2,918	2,302	15	(D)	510	90	1,517	568
North Carolina .....	75	8,962	4,878	77	6,390	2,570	380	21,644	13,551
North Dakota .....	16	7,836	6,423	44	11,359	9,486	136	41,082	34,436
Ohio .....	24	1,633	585	9	1,724	549	52	2,860	1,537
Oklahoma .....	98	24,095	28,401	13	7,684	11,208	250	43,227	47,770
Oregon .....	560	82,220	140,296	1,048	120,228	207,203	3,060	333,023	581,205
Pennsylvania .....	115	961	605	104	692	489	64	2,045	874
Rhode Island .....	-	-	-	-	-	-	9	14	10
South Carolina .....	175	6,133	5,017	29	4,252	1,846	73	16,212	18,092
South Dakota .....	62	13,419	10,586	160	32,392	25,089	253	54,014	40,513
Tennessee .....	33	6,713	4,218	56	2,951	2,564	81	11,466	7,103
Texas .....	390	209,434	277,796	245	132,402	226,766	2,415	517,013	703,761
Utah .....	698	68,245	161,706	1,017	75,970	152,448	1,467	151,142	345,289
Vermont .....	2	(D)	(D)	-	-	-	4	4	5
Virginia .....	38	4,360	2,266	74	5,703	2,561	108	7,833	3,414
Washington .....	1,461	72,797	158,883	1,231	84,239	213,984	652	155,576	358,579
West Virginia .....	15	(D)	(D)	2	(D)	(D)	28	(D)	(D)
Wisconsin .....	102	24,105	23,804	55	8,766	5,812	259	35,600	21,985
Wyoming .....	472	93,501	165,925	478	131,347	248,585	1,076	228,206	434,584
<b>Water Resources Regions</b>									
Region 01 New England .....	120	1,315	708	62	856	(D)	236	5,644	2,386
Region 02 Mid-Atlantic .....	298	28,082	18,879	242	14,696	9,133	360	32,753	21,192
Region 03 South Atlantic-Gulf .....	1,063	104,079	108,500	974	82,955	125,491	1,716	303,817	261,981
Region 04 Great Lakes .....	301	45,143	25,143	140	31,313	15,100	477	90,884	42,014
Region 05 Ohio .....	245	40,002	18,078	139	20,676	9,318	378	57,396	22,825
Region 06 Tennessee .....	26	(D)	(D)	48	2,863	2,564	80	(D)	(D)
Region 07 Upper Mississippi .....	278	88,215	54,646	198	47,601	25,609	725	164,121	88,680
Region 08 Lower Mississippi .....	622	564,449	724,912	433	362,514	550,714	1,054	1,031,443	1,624,563
Region 09 Souris-Red-Rainy .....	10	4,732	3,107	20	3,786	(D)	54	22,736	15,274
Region 10 Missouri .....	2,660	989,152	1,099,654	3,430	1,007,623	1,060,100	5,389	1,824,039	2,001,163
Region 11 Arkansas-White-Red .....	674	386,855	622,544	341	223,861	334,620	1,694	671,646	944,504
Region 12 Texas-Gulf .....	278	107,688	129,390	204	89,502	164,590	1,920	314,557	425,248
Region 13 Rio Grande .....	251	45,870	91,862	442	34,005	74,112	1,680	147,390	278,954
Region 14 Upper Colorado .....	303	76,946	124,356	637	105,049	220,162	921	189,062	322,578
Region 15 Lower Colorado .....	336	45,669	199,323	276	55,610	292,409	145	79,884	429,434
Region 16 Great Basin .....	949	122,758	228,458	1,094	142,379	254,685	1,705	219,915	421,896
Region 17 Pacific Northwest .....	3,159	384,895	719,184	3,884	541,801	1,055,965	7,593	884,469	1,577,873
Region 18 California .....	6,907	521,486	1,571,011	8,231	486,468	1,519,970	7,462	1,083,398	3,445,872
Region 19 Alaska .....	1	(D)	(D)	-	-	-	2	(D)	(D)
Region 20 Hawaii .....	97	838	1,867	93	725	946	134	846	1,162

See footnote(s) at end of table.

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**Table 41. Barriers to Making Improvements to Reduce Energy Use or Conserve Water: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Cannot finance improvements			Landlord will not share in cost			Uncertainty about future availability of water		
	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>
United States ..... 2008 ..	37,512	6,428,045	11,221,456	6,815	4,026,107	6,850,516	19,536	3,703,317	6,489,259
..... 2003 ..	20,122	8,318,070	14,804,544	8,194	6,382,676	11,026,594	13,790	5,408,640	9,577,502
<b>2008 DATA</b>									
Alabama .....	97	10,012	5,226	5	1,514	1,180	70	4,113	2,139
Alaska .....	3	995	222	-	-	-	-	-	-
Arizona .....	844	104,168	544,529	58	109,197	602,661	355	37,610	208,255
Arkansas .....	807	761,984	1,473,040	688	788,829	1,503,783	168	170,290	281,662
California .....	5,365	732,336	2,563,354	427	408,676	1,492,869	5,729	685,633	2,221,331
Colorado .....	2,471	395,334	531,977	427	165,774	258,064	1,054	280,816	383,757
Connecticut .....	16	150	91	6	200	111	8	148	59
Delaware .....	21	5,842	5,424	23	2,046	1,494	16	6,900	5,025
Florida .....	647	64,154	62,541	28	11,857	22,336	134	20,541	19,279
Georgia .....	794	145,692	123,479	140	38,980	22,629	127	18,942	14,437
Hawaii .....	190	9,085	(D)	42	(D)	(D)	62	626	730
Idaho .....	3,957	516,020	960,300	430	169,000	300,212	1,953	240,730	495,522
Illinois .....	56	19,896	9,686	62	36,200	21,707	18	11,900	6,565
Indiana .....	120	21,050	9,375	41	25,087	7,338	8	5,565	2,160
Iowa .....	43	14,446	5,978	41	11,439	4,008	-	-	-
Kansas .....	647	186,413	224,688	369	273,511	318,385	427	307,584	373,359
Kentucky .....	130	1,714	625	54	1,415	875	47	561	376
Louisiana .....	190	95,374	97,245	148	101,685	103,411	56	25,786	37,349
Maine .....	11	472	107	-	-	-	8	427	71
Maryland .....	39	5,389	3,452	18	4,068	2,281	3	138	10
Massachusetts .....	78	1,531	792	7	147	147	38	190	95
Michigan .....	256	37,433	15,052	52	12,249	6,613	31	10,395	5,586
Minnesota .....	159	35,408	22,324	72	14,676	6,638	29	2,764	863
Mississippi .....	126	121,970	122,525	139	105,020	102,749	38	30,707	31,407
Missouri .....	334	114,335	89,142	173	108,265	94,576	59	24,524	22,439
Montana .....	1,329	234,443	238,001	191	90,328	93,520	736	169,008	137,678
Nebraska .....	1,233	700,554	696,644	829	746,112	615,083	502	410,996	321,898
Nevada .....	280	96,326	195,419	37	16,260	42,335	299	70,878	152,521
New Hampshire .....	13	236	55	3	12	5	4	180	36
New Jersey .....	132	6,950	5,273	11	972	1,145	62	2,485	2,125
New Mexico .....	2,519	112,713	195,855	52	21,343	55,022	1,741	104,174	165,199
New York .....	189	2,034	1,323	-	-	-	5	374	98
North Carolina .....	249	12,068	3,310	12	3,020	1,082	93	7,439	2,763
North Dakota .....	77	34,768	25,733	47	17,667	14,242	37	9,038	7,757
Ohio .....	48	2,035	1,264	4	2,020	1,015	10	1,669	619
Oklahoma .....	125	68,290	76,222	33	16,981	18,240	38	36,964	37,916
Oregon .....	4,346	302,999	545,999	391	125,098	226,402	1,051	136,992	252,787
Pennsylvania .....	74	1,172	772	-	-	-	13	610	208
Rhode Island .....	9	14	10	-	-	-	-	-	-
South Carolina .....	245	5,342	(D)	1	(D)	(D)	31	2,270	1,688
South Dakota .....	188	65,585	59,027	21	6,619	4,767	62	13,270	10,850
Tennessee .....	50	3,494	1,342	15	3,218	1,922	10	743	326
Texas .....	2,273	625,830	832,449	831	423,777	587,635	1,974	524,780	617,288
Utah .....	3,058	197,579	421,784	384	43,287	85,275	1,231	89,954	192,950
Vermont .....	17	127	115	-	-	-	-	-	-
Virginia .....	233	8,620	3,588	16	2,362	817	5	1,614	747
Washington .....	2,018	221,858	407,448	336	79,637	171,800	64	50,438	97,702
West Virginia .....	21	114	28	-	-	-	12	155	142
Wisconsin .....	175	34,305	26,356	69	11,401	5,742	11	1,956	1,096
Wyoming .....	1,210	289,386	577,495	82	25,796	50,084	1,107	180,440	372,392
<b>Water Resources Regions</b>									
Region 01 New England .....	131	2,411	1,056	16	359	262	58	945	261
Region 02 Mid-Atlantic .....	414	27,504	18,619	59	9,268	5,628	102	11,552	8,078
Region 03 South Atlantic-Gulf .....	2,160	236,209	197,375	202	57,830	50,232	442	53,094	40,208
Region 04 Great Lakes .....	471	55,027	29,321	73	19,821	11,612	49	13,806	7,030
Region 05 Ohio .....	293	22,869	10,899	88	30,279	9,470	64	5,486	3,373
Region 06 Tennessee .....	52	5,587	(D)	17	(D)	(D)	16	421	162
Region 07 Upper Mississippi .....	388	87,692	50,699	205	55,648	27,686	57	15,565	6,951
Region 08 Lower Mississippi .....	1,157	1,001,060	1,607,760	967	1,019,553	1,656,606	269	237,277	352,403
Region 09 Souris-Red-Rainy .....	36	17,303	11,080	23	5,966	3,969	6	3,220	2,212
Region 10 Missouri .....	4,254	1,307,704	1,529,909	1,542	994,227	898,893	2,694	867,500	867,325
Region 11 Arkansas-White-Red .....	1,525	561,407	771,151	554	480,823	664,400	1,152	544,050	697,952
Region 12 Texas-Gulf .....	1,878	384,796	518,724	704	268,491	367,862	1,542	369,670	461,936
Region 13 Rio Grande .....	2,643	200,677	350,963	91	49,314	149,807	1,846	154,866	213,820
Region 14 Upper Colorado .....	1,992	318,493	485,701	131	54,147	69,983	540	111,251	239,032
Region 15 Lower Colorado .....	936	108,875	555,523	142	110,289	608,012	425	41,606	216,746
Region 16 Great Basin .....	2,710	279,780	572,839	321	62,147	117,648	1,703	134,588	310,546
Region 17 Pacific Northwest .....	10,449	1,018,000	1,821,803	1,180	370,057	666,545	2,482	421,690	779,548
Region 18 California .....	5,830	782,571	2,653,438	458	436,592	1,540,762	6,027	716,104	2,280,947
Region 19 Alaska .....	3	995	222	-	-	-	-	-	-
Region 20 Hawaii .....	190	9,085	(D)	42	(D)	(D)	62	626	730

See footnote(s) at end of table.

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**Table 41. Barriers to Making Improvements to Reduce Energy Use or Conserve Water: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Will not be farming this operation long enough to justify improvements			Other		
	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Acre-feet applied <sup>2</sup>
United States .....2008 ..	17,280	2,451,156	3,879,158	14,272	2,814,618	4,767,103
.....2003 ..	6,204	1,798,301	3,672,011	15,995	5,820,210	10,807,884
<b>2008 DATA</b>						
Alabama .....	44	904	406	74	6,637	2,977
Alaska .....	2	(D)	(D)	-	-	-
Arizona .....	355	35,365	196,255	440	64,016	313,329
Arkansas .....	226	237,606	482,235	96	107,753	281,925
California .....	4,420	272,740	825,254	2,223	526,092	1,417,991
Colorado .....	1,098	152,075	243,095	2,276	176,617	256,265
Connecticut .....	32	265	105	11	(D)	95
Delaware .....	41	7,456	4,839	22	6,142	4,950
Florida .....	432	32,007	40,160	820	163,856	247,149
Georgia .....	213	23,224	15,558	202	62,541	58,067
Hawaii .....	143	855	1,882	139	1,395	3,699
Idaho .....	583	105,428	209,291	777	137,627	351,167
Illinois .....	89	19,310	9,650	58	30,001	17,509
Indiana .....	79	18,764	6,676	68	27,002	15,057
Iowa .....	51	12,199	4,188	28	7,904	4,270
Kansas .....	258	87,918	94,954	292	131,431	154,212
Kentucky .....	64	1,366	811	22	625	274
Louisiana .....	96	20,966	30,202	26	22,014	16,211
Maine .....	-	-	-	33	2,292	313
Maryland .....	53	7,181	3,255	47	3,765	1,741
Massachusetts .....	51	331	44	3	525	704
Michigan .....	50	14,644	7,300	117	33,737	19,821
Minnesota .....	155	17,340	9,647	174	25,106	17,754
Mississippi .....	141	59,179	51,906	26	20,218	15,854
Missouri .....	231	40,555	31,224	139	57,220	40,618
Montana .....	540	96,719	128,327	465	115,566	171,995
Nebraska .....	933	387,143	323,381	573	376,233	262,501
Nevada .....	40	13,519	34,084	189	40,512	87,635
New Hampshire .....	7	33	9	14	(D)	5
New Jersey .....	71	12,652	9,276	39	1,093	847
New Mexico .....	842	28,875	64,823	153	38,940	51,081
New York .....	25	970	1,374	67	1,205	1,543
North Carolina .....	88	4,272	1,949	157	4,465	1,391
North Dakota .....	55	12,823	9,388	42	14,271	11,701
Ohio .....	30	1,627	666	8	960	587
Oklahoma .....	19	8,824	21,345	118	66,628	62,381
Oregon .....	824	45,517	78,612	135	71,796	149,643
Pennsylvania .....	131	1,458	565	49	323	124
Rhode Island .....	5	5	25	-	-	-
South Carolina .....	68	6,480	7,365	13	5,808	3,943
South Dakota .....	48	15,095	13,103	36	26,620	5,103
Tennessee .....	35	558	353	38	9,527	5,654
Texas .....	1,549	387,366	478,210	1,065	235,826	248,960
Utah .....	1,070	66,917	141,856	900	47,143	121,981
Vermont .....	-	-	-	5	140	46
Virginia .....	26	2,837	1,413	8	160	96
Washington .....	1,575	110,204	185,886	1,996	108,148	253,001
West Virginia .....	18	(D)	(D)	11	271	30
Wisconsin .....	120	10,002	5,047	17	4,285	1,804
Wyoming .....	254	69,364	103,121	61	29,678	83,102
<b>Water Resources Regions</b>						
Region 01 New England .....	95	634	182	63	3,345	1,118
Region 02 Mid-Atlantic .....	300	31,856	19,686	205	12,744	9,281
Region 03 South Atlantic-Gulf .....	870	69,031	68,364	1,252	243,604	314,415
Region 04 Great Lakes .....	138	22,205	10,487	180	43,198	24,843
Region 05 Ohio .....	160	12,036	5,776	85	26,244	15,376
Region 06 Tennessee .....	28	(D)	(D)	32	3,119	1,611
Region 07 Upper Mississippi .....	335	51,312	22,359	223	48,098	28,465
Region 08 Lower Mississippi .....	496	332,242	562,857	198	188,929	331,992
Region 09 Souris-Red-Rainy .....	24	4,461	3,432	35	12,074	8,036
Region 10 Missouri .....	2,668	677,688	722,131	1,452	616,724	614,576
Region 11 Arkansas-White-Red .....	495	190,475	247,938	742	337,092	357,434
Region 12 Texas-Gulf .....	1,334	298,880	358,488	1,012	135,811	141,917
Region 13 Rio Grande .....	956	49,741	115,752	126	63,846	135,856
Region 14 Upper Colorado .....	263	52,896	79,563	2,053	96,907	146,662
Region 15 Lower Colorado .....	356	36,544	202,000	554	67,016	328,217
Region 16 Great Basin .....	1,054	79,006	227,473	573	38,417	94,765
Region 17 Pacific Northwest .....	2,992	274,384	478,885	3,124	344,463	779,098
Region 18 California .....	4,571	266,355	751,579	2,224	531,592	1,429,741
Region 19 Alaska .....	2	(D)	(D)	-	-	-
Region 20 Hawaii .....	143	855	1,882	139	1,395	3,699

<sup>1</sup> Data for 2008 include only positive responses and respondents could choose more than one source of information.

<sup>2</sup> Acres irrigated and acre-feet applied are totals for all irrigation on these farms.



**Table 42. Source of Irrigation Information Relied on to Reduce Irrigation Costs or to Conserve Water: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Total <sup>1</sup>		Extension agents or university specialists		Private irrigation specialists or consultants		Irrigation equipment dealers		Irrigation district or water supplier	
	Farms	Acres irrigated <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>
United States ..... 2008 ..	168,473	48,059,412	61,269	23,619,226	39,557	19,225,263	46,514	21,065,996	25,624	7,037,970
..... 2003 ..	210,106	52,492,687	70,300	21,560,294	31,511	15,991,695	50,476	18,576,691	31,362	7,264,004
<b>2008 DATA</b>										
Alabama .....	537	68,578	266	40,155	62	14,770	159	37,831	4	32
Alaska .....	18	1,554	3	767	-	-	9	481	-	-
Arizona .....	2,557	756,041	615	353,464	380	230,479	256	119,704	690	121,225
Arkansas .....	3,567	3,904,133	2,327	2,666,542	894	1,214,703	739	1,081,841	325	334,383
California .....	37,878	6,695,590	10,462	3,465,478	12,568	3,066,576	6,331	2,349,885	6,799	1,587,547
Colorado .....	9,141	2,470,118	3,470	930,080	1,780	1,040,940	1,930	807,745	2,191	389,676
Connecticut .....	100	1,992	26	1,210	5	225	13	1,269	10	(D)
Delaware .....	269	95,618	160	53,154	69	36,363	137	55,146	7	2,530
Florida .....	4,702	1,143,006	2,350	906,585	1,008	525,658	1,092	292,213	197	161,882
Georgia .....	3,136	917,766	1,992	631,376	685	322,502	1,018	464,397	198	59,863
Hawaii .....	894	98,396	331	77,473	113	8,215	193	16,428	50	1,687
Idaho .....	9,818	2,733,945	1,957	923,595	1,203	990,611	2,298	1,483,623	2,394	596,563
Illinois .....	935	395,590	292	129,661	165	81,220	636	310,178	11	2,745
Indiana .....	920	358,622	295	113,112	227	125,367	621	255,995	14	7,970
Iowa .....	473	153,399	144	51,304	95	30,925	263	98,368	11	5,611
Kansas .....	4,224	2,479,856	1,511	917,691	2,445	1,906,306	1,716	1,210,027	393	259,902
Kentucky .....	688	26,528	421	12,455	24	4,356	180	12,540	6	120
Louisiana .....	1,331	762,453	810	484,945	266	147,480	380	298,942	33	24,865
Maine .....	115	16,591	95	3,903	17	2,226	63	12,287	-	-
Maryland .....	480	76,181	244	35,503	64	25,538	231	56,189	6	1,069
Massachusetts .....	666	16,228	462	12,829	150	3,372	250	7,338	48	857
Michigan .....	1,779	483,419	886	279,275	384	177,898	997	379,367	29	21,970
Minnesota .....	1,384	478,011	663	257,978	281	143,290	758	312,573	58	23,133
Mississippi .....	1,076	1,386,803	571	818,331	402	489,586	445	689,019	51	58,486
Missouri .....	1,599	1,075,992	805	555,815	355	260,757	670	437,342	63	28,711
Montana .....	6,481	1,603,173	1,848	595,496	725	314,756	2,060	757,165	1,791	317,588
Nebraska .....	12,543	7,315,431	6,509	3,811,352	5,735	3,766,754	5,212	3,512,232	1,554	926,437
Nevada .....	1,449	599,007	375	240,255	148	142,900	186	251,989	292	76,341
New Hampshire .....	72	683	54	611	7	110	32	505	-	-
New Jersey .....	489	49,173	300	34,612	58	10,287	232	28,935	5	1,150
New Mexico .....	6,947	701,389	2,106	193,545	423	261,337	429	250,369	384	64,662
New York .....	466	18,769	252	9,332	51	3,080	159	9,047	33	400
North Carolina .....	1,629	127,227	868	79,412	172	41,810	692	89,477	80	8,865
North Dakota .....	536	225,766	272	136,756	142	72,224	254	119,408	69	37,410
Ohio .....	291	15,720	120	5,339	35	1,168	121	5,950	12	44
Oklahoma .....	1,127	355,116	434	128,955	210	109,175	460	149,597	29	23,446
Oregon .....	10,214	1,465,941	3,183	762,447	1,753	555,738	2,844	793,776	1,001	310,142
Pennsylvania .....	765	14,115	239	6,556	104	4,517	329	7,613	23	166
Rhode Island .....	38	421	14	237	4	(D)	15	141	1	(D)
South Carolina .....	615	86,051	398	47,869	132	26,010	283	55,636	3	1,000
South Dakota .....	977	305,773	319	100,173	202	67,271	390	178,999	142	37,307
Tennessee .....	507	70,279	286	42,629	77	24,102	200	50,338	16	4,812
Texas .....	10,534	4,651,870	4,469	2,079,372	2,169	1,820,685	3,936	2,254,185	1,588	832,078
Utah .....	8,911	909,065	3,073	444,950	892	163,683	1,403	313,050	2,081	177,953
Vermont .....	62	480	27	222	1	(D)	38	294	-	-
Virginia .....	611	42,038	188	20,134	77	10,004	262	18,503	-	-
Washington .....	10,049	1,429,678	3,293	559,180	2,049	713,337	4,161	799,077	2,034	246,895
West Virginia .....	38	270	16	179	-	-	16	158	-	-
Wisconsin .....	1,094	379,026	461	170,316	308	118,000	661	320,618	9	5,261
Wyoming .....	3,741	1,096,541	1,007	426,616	441	148,753	754	308,206	889	275,173
<b>Water Resources Regions</b>										
Region 01 New England .....	1,008	36,065	666	18,916	183	6,032	382	21,662	59	870
Region 02 Mid-Atlantic .....	2,509	275,038	1,126	149,952	298	83,712	1,137	165,379	41	4,915
Region 03 South Atlantic-Gulf .....	10,799	2,341,206	5,838	1,694,997	2,142	929,783	3,325	935,341	482	231,642
Region 04 Great Lakes .....	2,626	655,598	1,231	336,636	595	239,900	1,499	517,589	60	22,156
Region 05 Ohio .....	1,677	274,636	821	84,243	222	62,950	693	194,266	28	3,903
Region 06 Tennessee .....	487	37,012	287	26,591	65	14,647	175	22,598	9	45
Region 07 Upper Mississippi .....	3,373	1,228,247	1,342	546,065	704	346,391	1,965	899,659	70	35,629
Region 08 Lower Mississippi .....	6,222	6,477,232	3,935	4,095,794	1,501	1,865,906	1,932	2,308,902	411	385,423
Region 09 Souris-Red-Rainy .....	362	138,128	192	90,992	140	57,157	218	78,904	25	3,969
Region 10 Missouri .....	26,876	11,975,048	11,351	5,680,361	8,728	5,285,851	10,012	5,652,097	5,121	1,795,030
Region 11 Arkansas-White-Red .....	8,512	4,693,428	3,549	1,905,910	3,285	2,798,131	2,320	1,932,140	1,313	564,261
Region 12 Texas-Gulf .....	8,492	3,141,397	3,759	1,419,002	1,349	1,098,625	3,253	1,618,627	995	600,673
Region 13 Rio Grande .....	6,407	921,748	1,779	343,261	773	337,462	492	264,014	433	104,101
Region 14 Upper Colorado .....	7,343	1,039,223	2,843	440,885	621	187,247	1,208	245,140	1,076	146,733
Region 15 Lower Colorado .....	3,019	828,948	812	403,216	390	253,734	277	125,544	847	134,159
Region 16 Great Basin .....	8,511	1,411,484	2,307	575,527	917	357,194	1,288	538,618	2,048	247,483
Region 17 Pacific Northwest .....	31,127	5,708,972	8,519	2,220,095	4,952	2,227,475	9,694	3,114,877	5,721	1,160,716
Region 18 California .....	38,211	6,776,052	10,578	3,508,543	12,579	3,064,851	6,442	2,413,730	6,835	1,594,575
Region 19 Alaska .....	18	1,554	3	767	-	-	9	481	-	-
Region 20 Hawaii .....	894	98,396	331	77,473	113	8,215	193	16,428	50	1,687

See footnote(s) at end of table.

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**Table 42. Source of Irrigation Information Relied on to Reduce Irrigation Costs or to Conserve Water: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	NRCS, local conservation district, other Federal or State agencies		Media reports		Neighboring farmers		Electronic information services (DTN and other internet links)		Other	
	Farms	Acres irrigated <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>	Farms	Acres irrigated <sup>2</sup>
United States .....2008 ..	28,704	12,111,787	22,711	7,780,093	63,880	17,509,843	20,004	9,116,624	25,990	4,731,016
.....2003 ..	30,296	10,393,283	23,979	7,808,666	111,456	26,304,399	12,317	5,661,262	14,226	3,025,600
<b>2008 DATA</b>										
Alabama .....	62	14,899	56	8,568	153	16,378	49	7,437	93	4,135
Alaska .....	1	(D)	1	(D)	5	176	1	(D)	4	(D)
Arizona .....	642	271,251	184	89,524	960	216,472	271	101,505	373	145,716
Arkansas .....	890	1,115,688	456	558,825	1,569	1,652,923	529	537,153	370	345,247
California .....	3,661	1,360,205	6,618	1,434,656	13,773	2,467,067	3,556	1,273,474	7,610	701,657
Colorado .....	2,926	802,461	710	290,308	4,158	835,292	1,275	486,852	1,741	256,790
Connecticut .....	5	651	13	171	18	325	14	51	44	111
Delaware .....	62	21,521	33	8,504	71	19,757	21	12,518	19	5,713
Florida .....	700	381,059	446	84,080	1,016	199,444	675	214,403	748	65,123
Georgia .....	558	241,871	392	106,993	866	227,476	379	130,552	462	101,901
Hawaii .....	130	3,203	118	1,516	287	5,385	87	11,060	227	3,261
Idaho .....	1,519	588,258	1,074	355,865	3,994	1,108,458	974	399,708	1,865	374,020
Illinois .....	59	26,201	123	58,467	366	167,305	156	83,127	103	30,647
Indiana .....	38	25,016	110	55,383	358	153,942	161	84,932	62	24,648
Iowa .....	46	21,376	75	33,073	180	59,211	85	33,328	14	4,178
Kansas .....	555	401,547	792	505,928	1,796	914,941	785	646,304	270	155,854
Kentucky .....	49	943	88	2,804	273	10,898	90	3,712	84	1,977
Louisiana .....	296	215,353	141	55,073	403	217,765	86	47,171	151	54,040
Maine .....	13	1,917	33	2,422	9	2,317	13	1,499	5	1,045
Maryland .....	53	14,497	69	12,718	143	27,094	51	19,329	52	4,330
Massachusetts .....	247	8,980	61	1,186	288	4,495	56	1,423	59	1,650
Michigan .....	277	81,945	233	62,276	680	194,131	308	133,695	109	22,300
Minnesota .....	205	113,818	136	34,273	412	130,855	244	88,213	193	29,236
Mississippi .....	256	366,632	155	199,241	447	631,620	77	100,040	80	102,415
Missouri .....	316	323,341	208	200,849	490	355,005	178	204,467	197	98,440
Montana .....	1,476	435,939	995	286,881	3,684	716,532	583	257,965	548	190,005
Nebraska .....	3,103	1,737,045	2,926	1,583,032	3,735	2,261,540	2,713	2,043,623	910	366,616
Nevada .....	247	180,798	99	97,567	717	254,625	92	105,901	230	107,632
New Hampshire .....	13	109	9	125	10	86	3	12	9	39
New Jersey .....	139	19,839	45	4,221	176	16,151	94	6,690	25	2,682
New Mexico .....	1,764	205,557	397	59,075	2,477	173,361	224	87,048	1,638	165,411
New York .....	94	2,883	123	1,916	141	5,124	72	3,503	84	2,302
North Carolina .....	266	34,201	163	19,262	549	26,096	386	21,928	129	7,716
North Dakota .....	135	44,448	75	18,164	195	66,326	84	47,567	51	18,418
Ohio .....	15	860	27	2,796	91	4,435	60	(D)	54	4,156
Oklahoma .....	194	80,736	155	59,567	295	103,241	158	74,518	176	52,429
Oregon .....	1,517	438,525	1,468	264,667	4,049	689,266	963	276,623	2,170	170,016
Pennsylvania .....	44	1,198	115	989	159	3,351	92	1,756	183	1,975
Rhode Island .....	20	231	6	55	18	250	6	13	1	(D)
South Carolina .....	120	19,100	98	16,763	183	24,028	92	18,733	30	11,327
South Dakota .....	147	56,522	225	72,789	428	120,276	161	74,601	64	16,262
Tennessee .....	51	8,372	37	13,137	176	20,557	83	13,530	54	7,168
Texas .....	1,498	1,188,921	1,305	597,637	3,521	1,891,923	1,417	722,631	1,340	640,762
Utah .....	1,900	341,074	679	93,997	4,604	435,194	478	104,246	755	113,950
Vermont .....	4	8	-	-	16	72	-	-	7	(D)
Virginia .....	38	8,024	28	2,443	98	6,230	111	5,500	192	6,840
Washington .....	1,676	366,898	986	208,120	3,873	473,721	1,488	369,307	1,746	169,058
West Virginia .....	8	(D)	6	(D)	10	25	1	(D)	2	(D)
Wisconsin .....	167	35,261	139	59,333	305	121,777	194	115,474	117	21,792
Wyoming .....	1,102	502,148	280	154,813	1,655	476,904	328	142,701	540	119,719
<b>Water Resources Regions</b>										
Region 01 New England .....	302	11,896	122	3,959	351	7,489	92	2,998	118	2,848
Region 02 Mid-Atlantic .....	337	65,335	278	28,990	679	73,276	389	46,884	384	20,220
Region 03 South Atlantic-Gulf .....	1,702	687,178	1,151	236,169	2,721	489,734	1,583	393,013	1,557	194,768
Region 04 Great Lakes .....	398	93,206	372	79,568	969	269,318	434	171,028	197	35,791
Region 05 Ohio .....	98	19,414	214	44,034	544	97,718	242	50,787	206	22,210
Region 06 Tennessee .....	53	(D)	40	(D)	215	12,280	64	(D)	63	(D)
Region 07 Upper Mississippi .....	404	168,405	376	145,870	1,144	430,224	553	279,794	428	78,723
Region 08 Lower Mississippi .....	1,521	1,818,445	799	902,863	2,489	2,637,619	645	791,695	567	531,140
Region 09 Souris-Red-Rainy .....	93	30,236	76	18,290	115	37,665	82	35,913	47	6,907
Region 10 Missouri .....	6,518	3,028,286	4,974	2,290,413	10,781	4,112,857	4,420	2,921,528	2,320	783,516
Region 11 Arkansas-White-Red .....	1,527	1,049,820	1,076	880,700	3,040	1,686,794	1,717	1,022,383	1,144	488,464
Region 12 Texas-Gulf .....	1,069	847,253	1,116	393,379	3,060	1,378,480	1,088	450,950	1,027	382,645
Region 13 Rio Grande .....	1,698	262,216	456	100,897	2,043	227,493	294	169,196	1,502	152,842
Region 14 Upper Colorado .....	2,521	485,267	299	77,148	2,778	329,484	509	94,501	1,426	203,304
Region 15 Lower Colorado .....	741	288,496	253	97,424	1,263	257,469	276	111,949	441	152,368
Region 16 Great Basin .....	1,475	428,884	700	187,200	4,677	651,611	740	220,657	892	199,449
Region 17 Pacific Northwest .....	4,992	1,414,889	3,640	832,088	12,698	2,313,798	3,216	1,064,226	5,804	745,174
Region 18 California .....	3,124	1,399,465	6,650	1,455,988	14,021	2,490,973	3,572	1,275,310	7,636	724,609
Region 19 Alaska .....	1	(D)	1	(D)	5	176	1	(D)	4	(D)
Region 20 Hawaii .....	130	3,203	118	1,516	287	5,385	87	11,060	227	3,261

<sup>1</sup> Data for 2008 include only positive responses and respondents could choose more than one source of information.

<sup>2</sup> Acres irrigated are totals for all irrigation on these farms.

**Table 43. Discontinuance of All Irrigation by Reason: 2008 and 2003**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Discontinued irrigation since previous census year				Reason for discontinuance <sup>1</sup>							
	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms reporting discontinuance to be permanent		Sufficient soil moisture		Surplus soil moisture or flooding		Shortage of surface water		Shortage of ground water	
			Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>
United States .....2008 ..	22,416	1,302,296	2,236	71,186	3,345	247,512	399	51,948	939	47,590	684	12,330
.....2003 ..	30,057	1,780,887	2,553	148,928	24,880	1,444,676	(NA)	(NA)	1,606	(D)	1,082	(D)
<b>2008 DATA</b>												
Alabama .....	330	9,360	24	646	65	2,006	-	-	11	586	12	24
Alaska .....	19	1,339	1	(D)	9	(D)	1	(D)	-	-	-	-
Arizona .....	440	7,775	218	218	2	(D)	-	-	-	-	218	218
Arkansas .....	319	31,485	60	1,500	50	19,398	-	-	25	3,500	-	-
California .....	1,746	118,380	753	17,286	-	-	-	-	18	9,000	5	5,000
Colorado .....	1,094	37,397	-	-	-	-	-	-	81	11,000	-	-
Connecticut .....	81	1,001	11	99	27	314	-	-	-	-	-	-
Delaware .....	66	1,019	-	-	15	115	-	-	-	-	-	-
Florida .....	1,132	44,490	7	2,100	94	7,333	-	-	-	-	1	(D)
Georgia .....	385	25,706	-	-	79	9,330	-	-	154	1,652	-	-
Hawaii .....	170	3,014	13	91	63	297	-	-	11	11	-	-
Idaho .....	1,172	38,834	-	-	15	6,000	-	-	-	-	273	273
Illinois .....	311	31,342	2	(D)	84	10,514	40	7,130	-	-	13	26
Indiana .....	320	21,573	16	1,219	62	5,912	2	(D)	13	39	-	-
Iowa .....	197	13,472	7	169	48	2,836	23	1,993	5	15	-	-
Kansas .....	266	60,626	-	-	66	14,811	49	12,070	-	-	-	-
Kentucky .....	729	10,410	50	514	145	5,496	2	(D)	61	510	27	160
Louisiana .....	551	35,215	108	4,924	116	6,803	67	3,757	53	2,014	-	-
Maine .....	103	3,420	27	27	12	1,368	-	-	-	-	-	-
Maryland .....	124	1,751	-	-	33	212	-	-	3	30	3	210
Massachusetts .....	169	1,189	-	-	43	188	5	250	-	-	-	-
Michigan .....	577	18,443	75	527	109	3,016	3	1,030	1	(D)	1	(D)
Minnesota .....	306	22,133	21	4,526	91	4,554	-	-	-	-	-	-
Mississippi .....	249	16,643	3	717	97	7,908	-	-	66	1,650	-	-
Missouri .....	442	66,300	46	1,870	75	23,650	27	11,595	-	-	-	-
Montana .....	216	12,320	-	-	-	-	-	-	-	-	-	-
Nebraska .....	1,187	235,758	-	-	119	36,250	117	8,307	-	-	-	-
Nevada .....	70	5,226	16	2,176	52	1,050	-	-	-	-	-	-
New Hampshire .....	54	98	-	-	23	41	-	-	-	-	-	-
New Jersey .....	105	890	13	26	15	748	-	-	-	-	-	-
New Mexico .....	499	28,258	2	(D)	64	4,350	-	-	88	4,428	-	-
New York .....	527	13,380	45	664	163	6,189	7	112	4	100	-	-
North Carolina .....	894	21,207	85	85	238	11,209	-	-	85	85	9	1,170
North Dakota .....	80	13,124	11	2,474	16	2,048	-	-	5	450	5	(D)
Ohio .....	380	3,784	32	563	103	1,428	-	-	9	9	9	9
Oklahoma .....	339	20,302	41	896	79	4,730	-	-	39	156	-	-
Oregon .....	1,242	38,387	3	2,550	47	8,000	-	-	3	3,735	-	-
Pennsylvania .....	388	3,581	103	530	163	1,982	-	-	5	112	3	36
Rhode Island .....	18	59	-	-	14	19	-	-	-	-	-	-
South Carolina .....	353	6,092	179	1,815	7	668	-	-	89	(D)	88	88
South Dakota .....	113	17,626	-	-	60	5,643	3	900	-	-	-	-
Tennessee .....	430	5,290	38	644	121	2,156	-	-	15	163	10	21
Texas .....	2,264	144,098	68	11,500	88	8,000	-	-	-	-	-	-
Utah .....	690	17,164	87	3,252	84	(D)	-	-	-	-	-	-
Vermont .....	69	501	-	-	20	191	8	40	-	-	-	-
Virginia .....	246	8,079	9	135	103	4,572	-	-	20	870	-	-
Washington .....	483	29,051	-	-	283	5,412	-	-	73	5,475	-	-
West Virginia .....	45	424	9	63	17	83	-	-	2	(D)	7	25
Wisconsin .....	270	11,345	39	78	63	1,838	45	3,519	-	-	-	-
Wyoming .....	156	43,935	14	4,480	3	(D)	-	-	-	-	-	-
<b>Water Resources Regions</b>												
Region 01 New England .....	435	5,726	38	126	128	1,951	5	250	-	-	-	-
Region 02 Mid-Atlantic .....	1,067	17,571	105	663	368	8,676	11	(D)	12	242	6	246
Region 03 South Atlantic-Gulf .....	3,170	108,665	294	4,491	507	32,014	-	-	350	4,418	110	5,282
Region 04 Great Lakes .....	1,088	33,392	148	1,615	249	8,421	8	2,743	10	(D)	10	(D)
Region 05 Ohio .....	1,583	29,693	129	2,598	369	11,649	14	2,448	80	658	35	197
Region 06 Tennessee .....	306	3,516	36	348	72	528	-	-	19	(D)	9	9
Region 07 Upper Mississippi .....	1,067	96,928	41	5,162	239	25,206	110	15,193	5	15	13	26
Region 08 Lower Mississippi .....	973	97,969	211	8,949	297	44,365	67	3,757	145	7,214	-	-
Region 09 Souris-Red-Rainy .....	55	8,366	4	2,460	25	1,918	-	-	-	-	-	-
Region 10 Missouri .....	2,102	374,751	28	4,663	300	64,601	134	15,102	5	450	5	450
Region 11 Arkansas-White-Red .....	1,154	113,174	43	2,838	84	10,730	49	12,070	146	14,406	-	-
Region 12 Texas-Gulf .....	1,801	102,243	68	11,500	88	8,000	-	-	-	-	-	-
Region 13 Rio Grande .....	702	22,325	-	-	64	4,350	-	-	-	-	-	-
Region 14 Upper Colorado .....	1,221	26,472	109	(D)	84	1,176	-	-	-	-	109	(D)
Region 15 Lower Colorado .....	395	9,844	109	109	4	(D)	-	-	62	1,178	109	109
Region 16 Great Basin .....	458	20,858	103	5,428	50	(D)	-	-	-	-	-	-
Region 17 Pacific Northwest .....	2,857	101,120	-	-	345	19,412	-	-	76	9,210	273	273
Region 18 California .....	1,793	125,330	756	19,836	-	-	-	-	18	9,000	5	5,000
Region 19 Alaska .....	19	1,339	1	(D)	9	(D)	1	(D)	-	-	-	-
Region 20 Hawaii .....	170	3,014	13	91	63	297	-	-	11	11	-	-

See footnote(s) at end of table.

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**Table 43. Discontinuance of All Irrigation by Reason: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Reason for discontinuance <sup>1</sup> - con.									
	Irrigation is uneconomical		Land degradation (erosion, salinity, etc.)		Loss of water rights		Restrictions on water use		Sold or leased water rights	
	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>
United States .....	2,502	90,713	7	(D)	125	735	963	3,467	268	19,084
2003 ..	1,778	86,289	159	17,124	-	-	(NA)	(NA)	270	35,369
<b>2008 DATA</b>										
Alabama .....	30	1,626	-	-	-	-	4	4	-	-
Alaska .....	1	(D)	-	-	-	-	-	-	-	-
Arizona .....	110	660	-	-	109	109	-	-	-	-
Arkansas .....	60	1,500	-	-	-	-	-	-	-	-
California .....	743	1,486	-	-	-	-	743	1,486	-	-
Colorado .....	-	-	-	-	-	-	193	1,930	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-
Florida .....	303	8,983	-	-	-	-	-	-	2	(D)
Georgia .....	51	204	-	-	-	-	-	-	-	-
Hawaii .....	16	1,379	-	-	-	-	23	47	11	11
Idaho .....	29	10,872	-	-	-	-	-	-	-	-
Illinois .....	23	1,202	-	-	-	-	-	-	-	-
Indiana .....	5	820	-	-	-	-	-	-	-	-
Iowa .....	1	(D)	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-
Kentucky .....	111	3,495	6	12	7	14	-	-	-	-
Louisiana .....	53	2,014	-	-	-	-	-	-	-	-
Maine .....	2	(D)	-	-	-	-	-	-	-	-
Maryland .....	7	256	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-
Michigan .....	33	3,018	1	(D)	-	-	-	-	-	-
Minnesota .....	17	2,665	-	-	-	-	-	-	-	-
Mississippi .....	3	2,538	-	-	-	-	-	-	-	-
Missouri .....	3	5,695	-	-	9	612	-	-	-	-
Montana .....	-	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	16	2,176
New Hampshire .....	4	4	-	-	-	-	-	-	-	-
New Jersey .....	3	(D)	-	-	-	-	-	-	-	-
New Mexico .....	6	1,260	-	-	-	-	-	-	-	-
New York .....	13	616	-	-	-	-	-	-	-	-
North Carolina .....	46	5,198	-	-	-	-	-	-	-	-
North Dakota .....	6	585	-	-	-	-	-	-	-	-
Ohio .....	34	976	-	-	-	-	-	-	-	-
Oklahoma .....	42	2,630	-	-	-	-	-	-	-	-
Oregon .....	154	3,080	-	-	-	-	-	-	154	3,080
Pennsylvania .....	62	956	-	-	-	-	-	-	-	-
Rhode Island .....	2	(D)	-	-	-	-	-	-	-	-
South Carolina .....	52	124	-	-	-	-	-	-	-	-
South Dakota .....	16	1,120	-	-	-	-	-	-	-	-
Tennessee .....	70	1,044	-	-	-	-	-	-	-	-
Texas .....	132	14,700	-	-	-	-	-	-	-	-
Utah .....	138	276	-	-	-	-	-	-	84	1,092
Vermont .....	-	-	-	-	-	-	-	-	-	-
Virginia .....	30	2,038	-	-	-	-	-	-	-	-
Washington .....	42	6,180	-	-	-	-	-	-	-	-
West Virginia .....	8	109	-	-	-	-	-	-	-	-
Wisconsin .....	41	1,011	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	1	(D)
<b>Water Resources Regions</b>										
Region 01 New England .....	8	144	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	84	2,534	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf .....	489	16,818	-	-	-	-	4	4	2	(D)
Region 04 Great Lakes .....	71	4,498	1	(D)	-	-	-	-	-	-
Region 05 Ohio .....	177	6,035	6	12	7	14	-	-	-	-
Region 06 Tennessee .....	42	426	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	44	3,398	-	-	9	612	-	-	-	-
Region 08 Lower Mississippi .....	135	8,179	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	16	695	-	-	-	-	-	-	-	-
Region 10 Missouri .....	23	5,370	-	-	-	-	-	-	1	(D)
Region 11 Arkansas-White-Red .....	42	2,630	-	-	-	-	193	1,930	-	-
Region 12 Texas-Gulf .....	132	14,700	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....	6	1,260	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	138	(D)	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	110	660	-	-	109	109	-	-	-	-
Region 16 Great Basin .....	14	4,872	-	-	-	-	-	-	100	3,268
Region 17 Pacific Northwest .....	211	15,260	-	-	-	-	-	-	154	3,080
Region 18 California .....	743	1,486	-	-	-	-	743	1,486	-	-
Region 19 Alaska .....	1	(D)	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	16	1,379	-	-	-	-	23	47	11	11

See footnote(s) at end of table.

--continued

**Table 43. Discontinuance of All Irrigation by Reason: 2008 and 2003 - Con.**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Reason for discontinuance <sup>1</sup> - con.							
	Converted to non-agricultural uses		Converted to agricultural enterprise not requiring irrigation		Available surface water too salty due to drought conditions		Other	
	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>	Farms	Acres irrigated in previous census year <sup>2</sup>
United States .....	806	8,997	567	37,544	378	30,979	14,925	847,538
2008 ..	49	3,592	2,196	150,377	190	13,214	15,130	931,679
2003 ..								
<b>2008 DATA</b>								
Alabama .....	-	-	2	(D)	12	260	222	6,506
Alaska .....	-	-	-	-	2	(D)	7	306
Arizona .....	-	-	-	-	-	-	110	4,437
Arkansas .....	-	-	25	3,500	-	-	209	10,587
California .....	743	1,486	107	23,426	-	-	873	79,468
Colorado .....	-	-	-	-	-	-	820	24,467
Connecticut .....	-	-	-	-	13	119	41	568
Delaware .....	-	-	-	-	-	-	51	904
Florida .....	-	-	-	-	-	-	798	19,372
Georgia .....	-	-	-	-	-	-	204	15,764
Hawaii .....	-	-	-	-	2	(D)	91	1,336
Idaho .....	-	-	-	-	-	-	870	27,689
Illinois .....	-	-	-	-	26	7,357	159	7,867
Indiana .....	-	-	26	78	4	619	239	14,143
Iowa .....	-	-	-	-	20	2,280	102	6,862
Kansas .....	-	-	-	-	-	-	151	33,745
Kentucky .....	-	-	-	-	36	905	434	3,091
Louisiana .....	17	850	28	2,170	-	-	287	20,471
Maine .....	-	-	-	-	2	(D)	89	1,434
Maryland .....	-	-	3	210	3	210	86	1,143
Massachusetts .....	38	114	38	114	2	(D)	81	181
Michigan .....	-	-	2	(D)	35	732	426	12,773
Minnesota .....	-	-	-	-	-	-	230	18,044
Mississippi .....	3	717	66	1,650	-	-	153	8,775
Missouri .....	-	-	-	-	56	10,024	296	25,335
Montana .....	-	-	-	-	-	-	216	12,320
Nebraska .....	-	-	-	-	-	-	951	191,201
Nevada .....	-	-	-	-	-	-	52	2,050
New Hampshire .....	-	-	-	-	6	12	25	(D)
New Jersey .....	-	-	20	140	-	-	72	724
New Mexico .....	-	-	-	-	-	-	341	18,220
New York .....	-	-	4	140	82	2,143	299	5,066
North Carolina .....	-	-	16	592	-	-	542	7,351
North Dakota .....	-	-	-	-	-	-	59	10,626
Ohio .....	-	-	14	140	29	56	218	1,786
Oklahoma .....	-	-	-	-	3	705	188	13,401
Oregon .....	-	-	-	-	-	-	1,041	27,307
Pennsylvania .....	-	-	25	140	3	60	184	1,072
Rhode Island .....	-	-	5	10	-	-	2	(D)
South Carolina .....	-	-	8	80	-	-	249	3,984
South Dakota .....	-	-	11	1,419	4	2,600	51	8,184
Tennessee .....	-	-	10	21	11	29	255	2,428
Texas .....	5	5,830	-	-	-	-	2,108	124,598
Utah .....	-	-	141	2,436	-	-	465	13,552
Vermont .....	-	-	-	-	2	(D)	43	238
Virginia .....	-	-	2	(D)	-	-	123	2,957
Washington .....	-	-	-	-	-	-	124	16,664
West Virginia .....	-	-	1	(D)	6	(D)	17	112
Wisconsin .....	-	-	13	26	19	1,509	119	5,334
Wyoming .....	-	-	-	-	-	-	152	33,030
<b>Water Resources Regions</b>								
Region 01 New England .....	38	114	43	124	23	1,205	243	2,202
Region 02 Mid-Atlantic .....	-	-	50	890	39	508	615	8,100
Region 03 South Atlantic-Gulf .....	-	-	24	672	4	100	2,068	53,474
Region 04 Great Lakes .....	-	-	21	981	81	2,565	703	18,054
Region 05 Ohio .....	-	-	26	99	72	1,182	988	14,335
Region 06 Tennessee .....	-	-	12	151	23	193	186	2,316
Region 07 Upper Mississippi .....	-	-	13	26	74	14,015	615	45,805
Region 08 Lower Mississippi .....	20	1,567	119	7,320	-	-	457	43,944
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	45	6,913
Region 10 Missouri .....	-	-	11	1,419	55	10,374	1,627	280,476
Region 11 Arkansas-White-Red .....	-	-	-	-	3	705	649	72,023
Region 12 Texas-Gulf .....	5	5,830	-	-	-	-	1,645	82,743
Region 13 Rio Grande .....	-	-	-	-	-	-	632	16,715
Region 14 Upper Colorado .....	-	-	138	276	-	-	890	24,911
Region 15 Lower Colorado .....	-	-	-	-	-	-	110	4,437
Region 16 Great Basin .....	-	-	3	2,160	-	-	425	11,650
Region 17 Pacific Northwest .....	-	-	-	-	-	-	2,009	71,380
Region 18 California .....	743	1,486	107	23,426	-	-	920	86,418
Region 19 Alaska .....	-	-	-	-	2	(D)	7	306
Region 20 Hawaii .....	-	-	-	-	2	(D)	91	1,336

<sup>1</sup> Respondents could choose more than one reason for not irrigating.

<sup>2</sup> Acres irrigated are totals for all irrigation on these farms. Data were acquired from the 2007 and 2002 Censuses of Agriculture results.

**Table 1. Irrigated Horticultural Operations: 2008**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Operations	Area under protection			Area in the open		
		Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	28,881	20,610	1,423,578,687	1,369,090,815	18,797	791,987	579,633
Alabama .....	375	248	19,804,213	19,793,413	303	25,209	20,170
Alaska .....	78	69	493,524	493,524	29	31	31
Arizona .....	175	111	41,873,904	41,872,084	142	8,004	7,451
Arkansas .....	193	110	4,384,340	4,384,340	128	8,487	7,412
California .....	2,566	1,636	239,155,164	221,413,474	1,897	57,732	52,886
Colorado .....	343	176	7,137,602	6,920,954	265	13,646	11,841
Connecticut .....	379	318	21,783,684	17,408,464	234	6,884	2,356
Delaware .....	113	88	1,609,512	1,600,512	55	1,896	1,856
Florida .....	2,794	1,377	342,186,011	338,298,971	2,211	84,332	72,609
Georgia .....	620	305	24,155,246	22,951,834	507	39,145	36,568
Hawaii .....	861	562	29,271,934	28,749,930	494	2,124	1,793
Idaho .....	306	140	2,302,790	2,288,790	236	11,041	10,719
Illinois .....	617	482	44,950,503	44,801,203	413	31,979	17,274
Indiana .....	509	393	7,145,044	7,015,798	289	9,228	7,268
Iowa .....	267	215	15,538,896	15,482,226	155	5,440	3,178
Kansas .....	230	189	7,526,148	7,180,898	154	4,482	3,074
Kentucky .....	654	564	13,405,128	13,318,362	340	6,708	1,909
Louisiana .....	350	236	9,955,738	9,920,738	290	7,383	5,401
Maine .....	379	354	7,171,628	6,833,315	214	2,506	1,327
Maryland .....	404	307	10,954,369	10,791,959	272	11,356	8,764
Massachusetts .....	519	448	9,849,814	9,508,662	314	2,140	1,444
Michigan .....	1,372	1,043	64,442,619	62,986,691	659	36,755	16,882
Minnesota .....	461	350	20,495,877	19,742,327	282	14,130	7,165
Mississippi .....	230	146	6,159,100	6,062,850	177	5,509	4,172
Missouri .....	453	370	14,267,264	14,167,884	284	11,842	7,269
Montana .....	269	203	1,494,034	1,391,172	199	1,784	1,769
Nebraska .....	248	137	1,830,496	1,796,561	166	5,098	3,926
Nevada .....	28	17	50,325	46,725	28	829	829
New Hampshire .....	280	241	4,088,644	4,013,644	170	972	714
New Jersey .....	808	613	44,994,489	44,443,422	560	30,506	21,409
New Mexico .....	122	92	9,613,518	7,769,978	73	2,948	2,679
New York .....	1,095	951	21,584,724	21,380,080	575	15,142	8,765
North Carolina .....	1,159	828	34,350,958	33,926,877	782	30,369	20,932
North Dakota .....	30	27	742,626	742,626	3	61	61
Ohio .....	998	807	37,135,295	36,921,081	463	18,798	7,238
Oklahoma .....	271	184	2,863,686	2,863,686	154	23,753	19,836
Oregon .....	1,536	1,099	46,247,355	45,513,689	1,182	59,225	52,679
Pennsylvania .....	1,571	1,353	74,926,310	64,534,712	817	17,301	4,115
Rhode Island .....	171	133	1,358,596	1,315,996	98	3,177	2,383
South Carolina .....	326	170	7,066,826	6,713,170	273	21,228	18,418
South Dakota .....	67	52	489,936	478,832	43	1,316	966
Tennessee .....	739	576	9,753,743	9,603,037	391	25,198	12,046
Texas .....	1,054	720	99,314,549	94,533,909	727	51,103	45,134
Utah .....	173	93	8,627,968	8,375,468	111	5,051	4,601
Vermont .....	289	239	3,269,212	3,228,820	139	617	186
Virginia .....	496	386	15,709,916	14,769,134	359	13,388	8,285
Washington .....	744	506	18,628,574	17,603,094	511	20,398	19,172
West Virginia .....	159	138	1,918,400	1,918,400	78	1,619	339
Wisconsin .....	960	778	10,873,679	10,605,423	521	33,308	11,543
Wyoming .....	40	30	624,776	612,076	30	813	793
<b>Water Resources Regions</b>							
Region 01 New England .....	1,817	1,569	44,764,456	39,551,779	1,087	15,767	8,284
Region 02 Mid-Atlantic .....	3,844	3,102	138,504,942	126,858,705	2,307	75,467	49,633
Region 03 South Atlantic-Gulf .....	5,330	2,945	428,947,796	423,432,868	4,187	205,830	173,361
Region 04 Great Lakes .....	2,647	2,108	105,073,601	103,282,299	1,311	56,842	23,113
Region 05 Ohio .....	2,341	1,924	57,432,358	56,636,700	1,207	46,124	18,012
Region 06 Tennessee .....	724	601	16,294,364	15,810,663	345	12,410	6,791
Region 07 Upper Mississippi .....	1,951	1,551	82,317,955	81,222,769	1,165	81,659	39,991
Region 08 Lower Mississippi .....	472	348	8,604,138	8,410,152	330	10,467	7,394
Region 09 Souris-Red-Rainy .....	48	40	735,226	735,226	20	487	112
Region 10 Missouri .....	1,128	777	30,456,928	30,080,101	749	26,299	20,172
Region 11 Arkansas-White-Red .....	766	513	12,749,404	12,291,954	488	42,874	35,188
Region 12 Texas-Gulf .....	989	676	98,600,961	93,820,321	687	47,703	42,144
Region 13 Rio Grande .....	106	72	801,718	733,858	76	3,117	2,851
Region 14 Upper Colorado .....	123	43	2,264,250	2,238,570	107	1,673	1,593
Region 15 Lower Colorado .....	216	129	51,097,904	49,342,484	171	8,903	8,350
Region 16 Great Basin .....	174	99	8,204,293	7,951,793	117	5,638	5,189
Region 17 Pacific Northwest .....	2,697	1,829	67,700,491	65,926,365	2,026	90,847	82,753
Region 18 California .....	2,569	1,653	239,262,444	221,520,754	1,894	57,725	52,878
Region 19 Alaska .....	78	69	493,524	493,524	29	31	31
Region 20 Hawaii .....	861	562	29,271,934	28,749,930	494	2,124	1,793

**Table 2. Irrigated Horticultural Operations by Selected Crops Irrigated: 2008**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Floriculture and bedding crops					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	12,816	716,103,974	691,526,939	6,062	40,031	30,725
Alabama .....	129	4,371,167	4,371,167	78	234	177
Alaska .....	56	361,976	361,976	24	19	19
Arizona .....	18	182,300	182,300	27	1,127	(D)
Arkansas .....	88	3,988,003	3,988,003	63	142	142
California .....	762	122,092,525	112,596,299	640	9,844	8,954
Colorado .....	152	5,148,211	5,025,247	60	42	42
Connecticut .....	232	11,891,391	9,676,853	126	(D)	(D)
Delaware .....	78	1,445,248	1,436,248	39	75	35
Florida .....	536	199,594,893	197,177,879	347	4,185	3,921
Georgia .....	106	5,953,672	5,250,372	140	568	459
Hawaii .....	308	17,355,414	16,909,634	182	599	479
Idaho .....	80	1,687,222	1,673,222	21	9	9
Illinois .....	311	18,215,566	18,088,366	150	817	500
Indiana .....	296	5,229,828	5,159,226	116	409	344
Iowa .....	170	14,916,320	14,906,000	69	385	372
Kansas .....	145	5,370,979	5,025,729	67	46	46
Kentucky .....	352	7,559,162	7,481,842	124	100	93
Louisiana .....	89	2,416,274	2,367,614	62	82	61
Maine .....	291	3,583,887	3,477,886	121	(D)	128
Maryland .....	231	7,827,833	7,745,643	140	278	232
Massachusetts .....	359	7,792,482	7,469,160	195	427	(D)
Michigan .....	857	48,347,386	46,953,896	242	2,083	2,061
Minnesota .....	269	17,125,943	16,697,535	68	55	55
Mississippi .....	86	2,613,520	2,517,270	44	260	180
Missouri .....	278	13,237,871	13,163,964	158	166	157
Montana .....	149	1,030,010	983,430	69	51	36
Nebraska .....	127	1,545,893	1,514,493	20	10	10
Nevada .....	-	-	-	-	-	-
New Hampshire .....	194	3,227,861	3,188,361	126	(D)	(D)
New Jersey .....	423	18,298,963	17,119,363	230	4,778	4,172
New Mexico .....	56	9,321,123	7,479,569	25	260	260
New York .....	725	15,346,062	15,275,852	299	503	458
North Carolina .....	444	17,840,122	17,715,922	240	304	237
North Dakota .....	27	735,282	735,282	-	-	-
Ohio .....	558	16,323,144	16,244,394	161	5,473	190
Oklahoma .....	126	1,599,619	1,599,619	28	305	285
Oregon .....	341	12,306,391	12,256,959	250	2,146	(D)
Pennsylvania .....	896	15,788,830	14,994,067	385	1,092	514
Rhode Island .....	97	855,400	828,038	37	145	142
South Carolina .....	107	2,065,848	1,722,848	24	33	33
South Dakota .....	40	459,520	448,416	4	4	4
Tennessee .....	307	3,216,609	3,106,983	68	78	65
Texas .....	447	33,936,438	33,456,996	153	386	384
Utah .....	69	6,469,140	6,209,790	4	24	24
Vermont .....	162	2,236,742	2,217,350	57	(D)	52
Virginia .....	240	6,723,590	6,643,926	139	173	162
Washington .....	256	8,608,776	8,399,678	178	1,322	1,264
West Virginia .....	117	1,525,875	1,525,875	25	7	7
Wisconsin .....	604	7,868,195	7,702,929	226	293	240
Wyoming .....	25	465,468	453,468	11	6	5
<b>Water Resources Regions</b>						
Region 01 New England .....	1,223	27,105,809	24,375,694	631	1,227	946
Region 02 Mid-Atlantic .....	2,116	56,552,927	54,567,876	1,060	6,062	5,208
Region 03 South Atlantic-Gulf .....	1,342	229,892,524	226,605,010	853	5,545	4,967
Region 04 Great Lakes .....	1,667	64,570,689	63,018,713	519	3,008	2,490
Region 05 Ohio .....	1,303	28,458,017	28,082,747	442	5,991	633
Region 06 Tennessee .....	349	5,883,707	5,571,707	72	82	82
Region 07 Upper Mississippi .....	1,141	49,438,057	48,770,432	438	1,560	1,189
Region 08 Lower Mississippi .....	180	3,537,384	3,284,048	79	107	85
Region 09 Souris-Red-Rainy .....	40	727,882	727,882	-	-	-
Region 10 Missouri .....	628	25,756,064	25,557,548	225	193	159
Region 11 Arkansas-White-Red .....	383	10,372,555	9,952,785	174	469	449
Region 12 Texas-Gulf .....	409	33,545,190	33,065,748	154	397	395
Region 13 Rio Grande .....	36	475,783	408,193	25	260	260
Region 14 Upper Colorado .....	39	1,588,315	1,564,351	15	22	22
Region 15 Lower Colorado .....	25	8,932,300	7,182,300	29	1,169	(D)
Region 16 Great Basin .....	69	6,469,140	6,209,790	4	24	24
Region 17 Pacific Northwest .....	729	22,885,296	22,611,786	498	3,497	(D)
Region 18 California .....	773	122,194,945	112,698,719	638	9,801	8,912
Region 19 Alaska .....	56	361,976	361,976	24	19	19
Region 20 Hawaii .....	308	17,355,414	16,909,634	182	599	479

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**Table 2. Irrigated Horticultural Operations by Selected Crops Irrigated: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Nursery crops					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	6,061	476,031,408	452,048,743	9,983	290,530	198,768
Alabama .....	94	12,560,816	12,560,816	182	5,125	3,947
Alaska .....	16	47,452	47,452	8	5	5
Arizona .....	72	9,938,184	9,938,184	91	2,936	2,406
Arkansas .....	46	349,702	349,702	34	(D)	169
California .....	652	65,468,527	59,483,974	933	24,619	22,290
Colorado .....	36	1,414,949	1,373,352	142	4,204	3,635
Connecticut .....	63	6,378,289	5,799,749	118	5,555	1,617
Delaware .....	1	(D)	(D)	4	32	32
Florida .....	740	131,565,104	130,193,584	1,543	34,912	29,381
Georgia .....	132	11,164,780	11,148,580	274	8,727	7,890
Hawaii .....	202	6,655,222	6,655,222	261	1,078	884
Idaho .....	22	247,050	247,050	96	3,697	3,542
Illinois .....	121	2,844,224	2,842,608	237	20,348	6,398
Indiana .....	90	1,268,062	1,261,660	145	4,640	3,605
Iowa .....	28	(D)	(D)	50	286	163
Kansas .....	56	2,118,482	2,118,482	67	222	132
Kentucky .....	139	4,560,890	4,502,570	157	2,888	658
Louisiana .....	125	5,998,511	5,880,341	208	4,711	3,242
Maine .....	42	118,503	116,828	92	1,044	400
Maryland .....	72	1,368,827	1,289,917	122	6,835	5,211
Massachusetts .....	70	416,850	413,618	101	585	414
Michigan .....	169	9,616,219	9,566,611	309	12,376	4,369
Minnesota .....	52	1,531,648	1,251,648	176	5,755	3,375
Mississippi .....	48	3,014,800	3,014,800	82	1,678	1,398
Missouri .....	82	461,512	459,112	85	2,330	1,674
Montana .....	81	257,761	257,761	81	517	517
Nebraska .....	6	102,000	101,500	108	1,950	1,285
Nevada .....	12	29,400	25,800	12	9	(D)
New Hampshire .....	30	83,120	70,120	55	359	274
New Jersey .....	201	26,104,558	25,676,566	318	15,985	10,215
New Mexico .....	30	75,606	74,292	32	(D)	165
New York .....	165	2,615,018	2,611,016	259	4,676	3,161
North Carolina .....	275	12,716,914	12,527,039	449	14,332	9,007
North Dakota .....	-	-	-	-	-	-
Ohio .....	150	19,828,817	19,744,817	197	6,096	4,351
Oklahoma .....	33	522,000	522,000	67	1,948	1,488
Oregon .....	547	23,689,768	23,300,912	781	32,928	29,128
Pennsylvania .....	240	26,900,509	17,814,486	297	5,197	2,171
Rhode Island .....	36	301,360	298,960	36	400	248
South Carolina .....	29	(D)	(D)	186	5,907	5,123
South Dakota .....	4	8,280	8,280	30	464	114
Tennessee .....	230	5,251,391	5,174,761	269	13,610	4,371
Texas .....	302	57,760,222	53,803,482	372	9,448	7,815
Utah .....	11	(D)	(D)	52	277	276
Vermont .....	45	202,824	184,824	88	512	116
Virginia .....	133	7,561,245	6,945,373	173	7,492	3,893
Washington .....	187	6,933,700	6,454,668	261	3,226	2,989
West Virginia .....	26	280,725	280,725	55	1,487	282
Wisconsin .....	108	1,521,992	1,518,312	273	8,724	4,895
Wyoming .....	10	34,500	34,500	15	(D)	(D)
<b>Water Resources Regions</b>						
Region 01 New England .....	265	7,409,806	6,792,959	433	7,959	2,963
Region 02 Mid-Atlantic .....	710	62,493,488	52,281,091	1,077	36,038	22,976
Region 03 South Atlantic-Gulf .....	1,289	173,203,461	171,625,710	2,677	71,760	57,796
Region 04 Great Lakes .....	382	30,604,541	30,470,531	657	18,859	8,052
Region 05 Ohio .....	390	8,347,349	8,258,029	528	23,887	9,322
Region 06 Tennessee .....	202	7,921,543	7,890,913	219	4,529	2,029
Region 07 Upper Mississippi .....	262	5,740,772	5,449,074	625	33,692	15,429
Region 08 Lower Mississippi .....	159	4,137,816	(D)	216	4,027	2,411
Region 09 Souris-Red-Rainy .....	-	-	-	20	487	112
Region 10 Missouri .....	176	3,473,911	3,400,619	335	6,922	4,729
Region 11 Arkansas-White-Red .....	122	1,310,054	1,300,599	217	3,351	2,846
Region 12 Texas-Gulf .....	282	57,455,832	53,499,092	360	9,064	7,430
Region 13 Rio Grande .....	29	82,206	82,152	25	139	139
Region 14 Upper Colorado .....	12	545,620	544,360	56	676	641
Region 15 Lower Colorado .....	78	9,962,184	9,958,584	110	3,615	3,085
Region 16 Great Basin .....	17	127,900	(D)	60	289	289
Region 17 Pacific Northwest .....	816	31,043,724	30,175,836	1,173	39,500	35,307
Region 18 California .....	652	65,468,527	59,483,974	926	24,652	22,323
Region 19 Alaska .....	16	47,452	47,452	8	5	5
Region 20 Hawaii .....	202	6,655,222	6,655,222	261	1,078	884

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**Table 2. Irrigated Horticultural Operations by Selected Crops Irrigated: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Propagative materials					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	3,150	71,334,757	68,221,983	792	10,689	10,211
Alabama .....	66	1,944,796	1,941,796	14	53	49
Alaska .....	4	(D)	(D)	8	(D)	(D)
Arizona .....	29	303,400	303,400	6	(D)	143
Arkansas .....	17	19,823	19,823	6	24	24
California .....	284	24,149,621	22,149,266	95	2,753	2,733
Colorado .....	12	260,687	208,600	16	268	214
Connecticut .....	47	380,793	360,556	2	(D)	(D)
Delaware .....	10	(D)	(D)	-	-	-
Florida .....	290	8,800,622	8,727,724	147	696	691
Georgia .....	59	1,904,506	1,891,594	21	24	24
Hawaii .....	73	634,700	634,700	22	(D)	20
Idaho .....	12	33,103	33,103	13	1,482	1,482
Illinois .....	55	382,338	369,838	13	37	37
Indiana .....	42	156,138	147,576	6	27	12
Iowa .....	24	148,500	148,500	10	5	5
Kansas .....	20	9,388	9,388	13	13	13
Kentucky .....	78	512,682	510,732	6	12	12
Louisiana .....	66	1,868,783	1,868,783	-	-	-
Maine .....	16	19,788	17,508	5	8	4
Maryland .....	38	482,165	482,165	3	3	3
Massachusetts .....	34	867,820	861,820	12	11	11
Michigan .....	121	5,425,342	5,424,512	21	15	11
Minnesota .....	45	1,137,587	1,096,337	14	10	9
Mississippi .....	32	319,180	319,180	-	-	-
Missouri .....	57	185,724	171,864	6	1	1
Montana .....	28	12,209	12,209	5	15	15
Nebraska .....	15	33,600	33,600	5	(Z)	(Z)
Nevada .....	5	1,125	1,125	5	(Z)	(Z)
New Hampshire .....	31	540,619	539,369	10	10	5
New Jersey .....	130	1,226,927	1,172,474	11	6	6
New Mexico .....	24	98,574	98,118	-	-	-
New York .....	115	570,394	552,894	32	152	152
North Carolina .....	136	1,934,328	1,934,328	13	6	6
North Dakota .....	9	7,344	7,344	-	-	-
Ohio .....	38	436,288	436,288	14	79	54
Oklahoma .....	35	283,447	283,447	4	310	310
Oregon .....	276	4,973,738	4,692,330	72	(D)	(D)
Pennsylvania .....	133	2,742,488	2,568,700	20	313	13
Rhode Island .....	6	18,000	18,000	-	-	-
South Carolina .....	14	430,480	430,480	3	5	5
South Dakota .....	-	-	-	-	-	-
Tennessee .....	120	601,524	599,284	11	8	7
Texas .....	200	4,943,426	4,651,774	39	107	107
Utah .....	15	146,600	133,450	5	2	2
Vermont .....	26	26,004	26,004	6	(D)	12
Virginia .....	74	777,462	770,870	19	6	6
Washington .....	72	1,148,818	1,138,018	21	(D)	(D)
West Virginia .....	5	15,000	15,000	5	5	5
Wisconsin .....	108	412,914	402,850	32	117	117
Wyoming .....	4	3,462	2,762	1	(D)	(D)
<b>Water Resources Regions</b>						
Region 01 New England .....	146	1,837,820	1,808,053	35	255	(D)
Region 02 Mid-Atlantic .....	430	5,358,410	(D)	77	470	170
Region 03 South Atlantic-Gulf .....	586	15,781,367	15,693,937	192	774	769
Region 04 Great Lakes .....	213	6,254,378	6,253,548	38	71	42
Region 05 Ohio .....	217	(D)	1,152,390	34	114	99
Region 06 Tennessee .....	106	(D)	596,949	13	17	13
Region 07 Upper Mississippi .....	201	1,872,337	1,802,121	57	132	131
Region 08 Lower Mississippi .....	63	(D)	1,182,848	16	25	25
Region 09 Souris-Red-Rainy .....	9	7,344	7,344	-	-	-
Region 10 Missouri .....	64	392,082	345,380	25	243	189
Region 11 Arkansas-White-Red .....	104	436,408	416,463	5	311	311
Region 12 Texas-Gulf .....	181	4,933,924	4,642,272	39	107	107
Region 13 Rio Grande .....	23	110,514	110,514	3	177	177
Region 14 Upper Colorado .....	6	3,060	2,604	6	(D)	(D)
Region 15 Lower Colorado .....	29	303,400	303,400	6	(D)	143
Region 16 Great Basin .....	20	(D)	(D)	10	2	2
Region 17 Pacific Northwest .....	391	6,168,630	5,876,422	111	5,065	(D)
Region 18 California .....	284	24,149,621	22,149,266	95	2,753	2,733
Region 19 Alaska .....	4	(D)	(D)	8	(D)	(D)
Region 20 Hawaii .....	73	634,700	634,700	22	(D)	20

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**Table 2. Irrigated Horticultural Operations by Selected Crops Irrigated: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Food crops grown under protection			Mushroom crops		
	Operations	Square feet	Square feet irrigated	Operations	Square feet	Square feet irrigated
United States .....	3,365	91,430,799	88,144,699	260	57,085,389	56,952,981
Alabama .....	35	125,634	125,634	-	-	-
Alaska .....	36	81,004	81,004	1	(D)	(D)
Arizona .....	16	30,173,200	30,173,200	-	-	-
Arkansas .....	17	26,812	26,812	-	-	-
California .....	165	17,083,300	16,890,309	73	5,843,508	5,770,980
Colorado .....	21	105,255	105,255	-	-	-
Connecticut .....	98	2,198,256	636,296	-	-	-
Delaware .....	9	(D)	(D)	-	-	-
Florida .....	59	1,846,363	1,826,434	-	-	-
Georgia .....	49	4,572,288	4,542,288	6	3,000	3,000
Hawaii .....	21	4,538,784	4,473,760	-	-	-
Idaho .....	55	335,415	335,415	-	-	-
Illinois .....	49	508,000	498,400	5	22,442,735	22,442,735
Indiana .....	78	424,884	381,204	-	-	-
Iowa .....	63	306,876	298,776	-	-	-
Kansas .....	26	27,299	27,299	-	-	-
Kentucky .....	134	568,338	568,218	-	-	-
Louisiana .....	18	73,170	69,000	-	-	-
Maine .....	95	3,442,250	3,213,893	-	-	-
Maryland .....	63	1,275,544	1,274,234	-	-	-
Massachusetts .....	92	708,462	699,864	-	-	-
Michigan .....	143	1,052,472	1,040,472	5	1,200	1,200
Minnesota .....	74	699,199	695,307	-	-	-
Mississippi .....	19	211,600	211,600	-	-	-
Missouri .....	80	363,724	362,644	12	18,480	(D)
Montana .....	65	190,022	134,022	-	-	-
Nebraska .....	27	149,003	146,968	-	-	-
Nevada .....	5	19,800	19,800	-	-	-
New Hampshire .....	67	230,794	210,794	-	-	-
New Jersey .....	51	511,019	511,019	-	-	-
New Mexico .....	31	99,207	98,991	-	-	-
New York .....	218	2,582,740	2,499,730	11	(D)	320,000
North Carolina .....	166	1,687,876	1,686,376	19	16,200	16,200
North Dakota .....	-	-	-	-	-	-
Ohio .....	127	498,746	447,282	6	22,200	22,200
Oklahoma .....	24	11,520	11,520	-	-	-
Oregon .....	156	4,091,954	4,017,724	12	48,600	27,000
Pennsylvania .....	232	2,730,577	2,393,553	78	26,706,298	26,706,298
Rhode Island .....	31	183,836	170,998	-	-	-
South Carolina .....	13	(D)	(D)	7	2,800	2,800
South Dakota .....	16	22,136	22,136	-	-	-
Tennessee .....	95	592,659	587,909	-	-	-
Texas .....	84	2,430,024	2,429,424	-	-	-
Utah .....	14	(D)	(D)	1	(D)	(D)
Vermont .....	102	803,642	800,642	-	-	-
Virginia .....	48	448,045	393,965	-	-	-
Washington .....	91	1,603,140	1,276,590	11	5,040	5,040
West Virginia .....	20	96,800	96,800	-	-	-
Wisconsin .....	153	(D)	(D)	13	(D)	(D)
Wyoming .....	14	121,346	121,346	-	-	-
<b>Water Resources Regions</b>						
Region 01 New England .....	415	7,398,416	5,563,663	-	-	-
Region 02 Mid-Atlantic .....	560	5,453,615	5,354,135	84	(D)	(D)
Region 03 South Atlantic-Gulf .....	287	8,603,951	8,492,022	20	10,000	10,000
Region 04 Great Lakes .....	346	3,364,843	3,278,279	12	135,600	135,600
Region 05 Ohio .....	392	1,833,696	1,455,794	11	17,522,200	17,522,200
Region 06 Tennessee .....	122	880,354	880,354	12	12,000	12,000
Region 07 Upper Mississippi .....	281	1,893,915	1,840,259	11	22,514,735	22,514,735
Region 08 Lower Mississippi .....	23	75,780	71,610	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-
Region 10 Missouri .....	138	621,039	563,004	6	1,200	1,200
Region 11 Arkansas-White-Red .....	77	160,259	160,259	6	17,280	9,000
Region 12 Texas-Gulf .....	78	2,427,324	2,426,724	-	-	-
Region 13 Rio Grande .....	36	114,207	113,991	-	-	-
Region 14 Upper Colorado .....	15	127,255	127,255	-	-	-
Region 15 Lower Colorado .....	21	30,623,200	30,623,200	-	-	-
Region 16 Great Basin .....	14	61,800	61,800	1	(D)	(D)
Region 17 Pacific Northwest .....	326	6,083,197	5,682,417	23	53,640	32,040
Region 18 California .....	177	17,088,160	16,895,169	73	5,843,508	5,770,980
Region 19 Alaska .....	36	81,004	81,004	1	(D)	(D)
Region 20 Hawaii .....	21	4,538,784	4,473,760	-	-	-

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**Table 2. Irrigated Horticultural Operations by Selected Crops Irrigated: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sod			Christmas trees and short rotation woody crops		
	Operations	Acres	Acres irrigated	Operations	Acres	Acres irrigated
United States .....	1,237	348,905	286,762	1,305	75,203	43,210
Alabama .....	50	19,458	15,891	13	286	74
Alaska .....	1	(D)	(D)	-	-	-
Arizona .....	7	3,293	3,293	9	(D)	(D)
Arkansas .....	31	8,133	7,069	6	1	1
California .....	43	15,162	15,038	145	1,210	759
Colorado .....	42	8,318	7,136	32	724	724
Connecticut .....	5	(D)	(D)	-	-	-
Delaware .....	3	1,780	1,780	9	9	9
Florida .....	110	41,374	36,319	130	1,001	(D)
Georgia .....	59	28,884	27,853	12	42	42
Hawaii .....	23	(D)	(D)	28	(D)	(D)
Idaho .....	32	5,384	5,337	30	158	118
Illinois .....	20	10,430	10,099	19	112	112
Indiana .....	7	3,289	2,834	31	671	295
Iowa .....	22	4,413	2,340	10	6	6
Kansas .....	23	4,154	2,836	8	41	41
Kentucky .....	16	3,568	1,084	30	84	33
Louisiana .....	7	2,215	1,840	26	231	231
Maine .....	5	1,125	725	6	120	8
Maryland .....	16	3,971	3,071	12	26	13
Massachusetts .....	1	(D)	(D)	6	48	(D)
Michigan .....	37	7,195	5,567	83	14,141	4,769
Minnesota .....	24	6,300	3,294	12	1,202	426
Mississippi .....	24	3,495	2,539	8	13	13
Missouri .....	33	8,009	5,369	12	1,290	67
Montana .....	7	1,145	1,145	21	22	22
Nebraska .....	31	2,954	2,567	11	137	17
Nevada .....	4	(D)	(D)	-	-	-
New Hampshire .....	1	(D)	(D)	-	-	-
New Jersey .....	29	8,934	6,454	59	568	488
New Mexico .....	4	1,746	1,497	18	769	757
New York .....	16	9,074	4,852	12	379	52
North Carolina .....	68	14,875	11,138	69	750	516
North Dakota .....	3	61	61	-	-	-
Ohio .....	38	5,471	2,274	48	1,272	237
Oklahoma .....	57	20,882	17,647	10	251	50
Oregon .....	13	1,599	1,599	69	(D)	(D)
Pennsylvania .....	19	551	301	76	1,747	695
Rhode Island .....	13	2,506	1,966	6	24	3
South Carolina .....	22	14,339	12,538	36	920	695
South Dakota .....	5	841	841	-	-	-
Tennessee .....	45	11,426	7,539	9	30	22
Texas .....	119	38,423	34,858	78	2,340	1,570
Utah .....	31	4,595	4,146	18	45	45
Vermont .....	-	-	-	-	-	-
Virginia .....	16	5,538	4,046	11	14	14
Washington .....	17	2,531	2,003	47	(D)	(D)
West Virginia .....	-	-	-	3	120	45
Wisconsin .....	32	8,800	5,771	27	14,813	485
Wyoming .....	6	540	540	-	-	-
<b>Water Resources Regions</b>						
Region 01 New England .....	25	4,984	3,584	18	192	(D)
Region 02 Mid-Atlantic .....	91	28,305	19,574	160	2,272	937
Region 03 South Atlantic-Gulf .....	324	121,746	105,807	247	2,704	2,195
Region 04 Great Lakes .....	63	10,186	7,223	103	16,694	5,072
Region 05 Ohio .....	66	13,560	6,909	107	1,887	660
Region 06 Tennessee .....	30	7,409	4,564	24	325	70
Region 07 Upper Mississippi .....	80	30,091	21,777	67	14,303	1,013
Region 08 Lower Mississippi .....	29	5,872	4,574	32	247	247
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-
Region 10 Missouri .....	119	16,967	14,510	63	1,786	443
Region 11 Arkansas-White-Red .....	102	37,262	30,571	35	1,394	932
Region 12 Texas-Gulf .....	114	36,533	33,118	67	1,239	729
Region 13 Rio Grande .....	4	1,746	1,497	18	769	757
Region 14 Upper Colorado .....	15	(D)	(D)	18	401	401
Region 15 Lower Colorado .....	9	3,467	3,467	9	(D)	(D)
Region 16 Great Basin .....	33	4,997	4,548	13	25	25
Region 17 Pacific Northwest .....	66	9,974	9,399	151	29,379	(D)
Region 18 California .....	43	15,162	15,038	145	1,210	759
Region 19 Alaska .....	1	(D)	(D)	-	-	-
Region 20 Hawaii .....	23	(D)	(D)	28	(D)	(D)

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**Table 2. Irrigated Horticultural Operations by Selected Crops Irrigated: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Other horticultural crops					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	596	13,044,447	12,724,080	1,515	13,009	9,965
Alabama .....	14	797,000	794,000	5	33	33
Alaska .....	4	(D)	(D)	-	-	-
Arizona .....	15	1,275,000	1,275,000	17	164	164
Arkansas .....	-	-	-	6	7	7
California .....	92	4,522,646	4,522,646	205	4,106	3,112
Colorado .....	11	208,500	208,500	18	90	90
Connecticut .....	28	935,010	935,010	12	11	11
Delaware .....	-	-	-	-	-	-
Florida .....	32	385,350	373,350	221	1,447	(D)
Georgia .....	13	116,000	116,000	30	900	300
Hawaii .....	22	89,200	78,000	36	(D)	182
Idaho .....	-	-	-	56	231	231
Illinois .....	24	559,256	559,256	36	236	129
Indiana .....	10	66,132	66,132	21	194	178
Iowa .....	2	(D)	(D)	17	345	294
Kansas .....	-	-	-	7	7	7
Kentucky .....	24	255,000	255,000	23	29	29
Louisiana .....	9	260,000	225,000	7	28	28
Maine .....	6	7,200	7,200	24	63	63
Maryland .....	-	-	-	23	243	234
Massachusetts .....	13	64,200	64,200	46	769	391
Michigan .....	-	-	-	25	105	105
Minnesota .....	5	1,500	1,500	15	7	6
Mississippi .....	-	-	-	35	63	42
Missouri .....	1	(D)	(D)	3	1	1
Montana .....	6	4,032	3,750	34	34	34
Nebraska .....	-	-	-	11	47	47
Nevada .....	-	-	-	7	(D)	(D)
New Hampshire .....	5	6,250	5,000	10	40	30
New Jersey .....	-	-	-	16	75	75
New Mexico .....	6	19,008	19,008	6	1	1
New York .....	12	120,588	120,588	27	201	90
North Carolina .....	15	161,693	47,012	31	51	34
North Dakota .....	-	-	-	-	-	-
Ohio .....	20	26,100	26,100	33	160	132
Oklahoma .....	25	447,100	447,100	9	56	56
Oregon .....	53	1,351,964	1,219,964	100	797	718
Pennsylvania .....	19	57,608	57,608	76	656	421
Rhode Island .....	-	-	-	6	102	24
South Carolina .....	13	387,567	387,567	6	24	24
South Dakota .....	-	-	-	8	7	7
Tennessee .....	18	134,100	134,100	35	47	42
Texas .....	34	192,257	192,257	67	400	400
Utah .....	-	-	-	14	109	109
Vermont .....	-	-	-	12	5	5
Virginia .....	5	20,000	15,000	45	164	164
Washington .....	19	329,100	329,100	40	438	213
West Virginia .....	-	-	-	-	-	-
Wisconsin .....	21	196,594	190,640	33	35	35
Wyoming .....	-	-	-	1	(D)	(D)
<b>Water Resources Regions</b>						
Region 01 New England .....	52	1,012,660	1,011,410	104	990	524
Region 02 Mid-Atlantic .....	19	(D)	(D)	140	1,013	769
Region 03 South Atlantic-Gulf .....	73	1,023,189	1,006,189	324	2,527	1,832
Region 04 Great Lakes .....	19	125,628	125,628	80	373	233
Region 05 Ohio .....	50	165,540	165,540	96	410	390
Region 06 Tennessee .....	31	976,421	858,740	24	(D)	34
Region 07 Upper Mississippi .....	49	852,102	846,148	80	611	451
Region 08 Lower Mississippi .....	15	392,000	357,000	22	73	52
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-
Region 10 Missouri .....	18	212,632	212,350	47	143	143
Region 11 Arkansas-White-Red .....	31	452,848	452,848	27	78	78
Region 12 Texas-Gulf .....	28	186,509	186,509	48	364	364
Region 13 Rio Grande .....	6	19,008	19,008	13	22	22
Region 14 Upper Colorado .....	-	-	-	17	120	120
Region 15 Lower Colorado .....	15	1,275,000	1,275,000	23	168	168
Region 16 Great Basin .....	-	-	-	10	301	301
Region 17 Pacific Northwest .....	72	1,681,064	1,549,064	213	1,495	1,191
Region 18 California .....	92	4,522,646	4,522,646	211	4,107	3,114
Region 19 Alaska .....	4	(D)	(D)	-	-	-
Region 20 Hawaii .....	22	89,200	78,000	36	(D)	182

**Table 3. Estimated Quantity of Water Applied to Crops Grown Under Protection on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All methods								
	Operations	Square feet irrigated	Gallons applied (1,000)	Water source					
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers	
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)
United States .....	20,610	1,369,090,815	25,768,753	14,796	15,979,605	3,520	6,600,479	4,785	3,188,668
Alabama .....	248	19,793,413	425,848	146	307,729	45	98,904	96	19,216
Alaska .....	69	493,524	1,671	57	1,583	8	5	12	83
Arizona .....	111	41,872,084	997,810	77	676,163	12	207,921	38	113,727
Arkansas .....	110	4,384,340	43,599	52	5,684	7	3,497	53	34,419
California .....	1,636	221,413,474	3,950,979	944	2,120,403	226	662,546	676	1,168,030
Colorado .....	176	6,920,954	86,149	75	29,608	18	16,354	99	40,188
Connecticut .....	318	17,408,464	83,464	209	44,352	88	28,156	66	10,956
Delaware .....	88	1,600,512	11,572	68	5,826	11	1,859	20	3,887
Florida .....	1,377	338,298,971	9,144,430	1,247	7,383,134	234	1,466,388	100	294,908
Georgia .....	305	22,951,834	644,814	250	367,392	48	273,720	62	3,702
Hawaii .....	562	28,749,930	266,305	177	86,569	104	79,195	311	100,541
Idaho .....	140	2,288,790	9,982	99	3,924	10	201	38	5,858
Illinois .....	482	44,801,203	340,178	385	84,948	101	245,801	61	9,429
Indiana .....	393	7,015,798	51,722	267	36,094	69	11,200	114	4,428
Iowa .....	215	15,482,226	203,774	169	41,982	35	49,132	36	112,660
Kansas .....	189	7,180,898	53,840	121	16,923	23	21,988	69	14,929
Kentucky .....	564	13,318,362	111,348	137	22,130	128	48,631	334	40,587
Louisiana .....	236	9,920,738	156,126	203	85,369	50	49,998	19	20,759
Maine .....	354	6,833,315	61,892	311	30,899	50	23,722	39	7,271
Maryland .....	307	10,791,959	96,320	257	66,216	40	26,655	35	3,449
Massachusetts .....	448	9,508,662	93,683	272	64,817	31	6,246	163	22,620
Michigan .....	1,043	62,986,691	795,444	831	475,326	110	101,189	207	218,929
Minnesota .....	350	19,742,327	328,008	305	289,967	27	2,069	43	35,971
Mississippi .....	146	6,062,850	64,643	129	58,147	10	6,307	73	189
Missouri .....	370	14,167,884	169,785	276	64,494	63	68,586	15	36,705
Montana .....	203	1,391,172	17,206	186	14,486	11	497	29	2,223
Nebraska .....	137	1,796,561	12,267	126	10,184	16	2,064	6	19
Nevada .....	17	46,725	1,310	11	1,003	6	(Z)	6	306
New Hampshire .....	241	4,013,644	82,426	214	78,687	35	2,416	12	1,323
New Jersey .....	613	44,443,422	385,431	538	333,486	100	34,485	77	17,460
New Mexico .....	92	7,769,978	86,860	80	83,740	6	6	18	3,115
New York .....	951	21,380,080	322,320	684	161,527	163	77,448	212	83,345
North Carolina .....	828	33,926,877	561,950	680	106,013	228	441,233	81	14,703
North Dakota .....	27	742,626	7,901	27	7,352	9	516	9	34
Ohio .....	807	36,921,081	398,445	526	159,912	216	206,531	174	32,002
Oklahoma .....	184	2,863,686	12,095	99	1,830	42	9,100	67	1,164
Oregon .....	1,099	45,513,689	1,061,588	796	458,883	238	437,006	221	165,700
Pennsylvania .....	1,353	64,534,712	558,752	1,106	231,966	231	250,182	178	76,604
Rhode Island .....	133	1,315,996	9,031	71	4,184	50	2,625	38	2,223
South Carolina .....	170	6,713,170	225,068	139	43,713	22	180,605	11	750
South Dakota .....	52	478,832	6,712	24	2,857	4	35	24	3,821
Tennessee .....	576	9,603,037	252,018	311	110,791	133	83,692	215	57,536
Texas .....	720	94,533,909	2,425,360	452	1,207,984	162	968,916	250	248,459
Utah .....	93	8,375,468	100,432	45	21,301	4	6,720	54	72,411
Vermont .....	239	3,228,820	38,652	154	18,510	95	8,509	34	11,633
Virginia .....	386	14,769,134	371,391	278	41,312	102	325,143	45	4,935
Washington .....	506	17,603,094	415,542	357	371,604	45	2,405	129	41,533
West Virginia .....	138	1,918,400	17,405	76	10,692	25	1,039	47	5,673
Wisconsin .....	778	10,605,423	193,349	741	123,990	29	59,035	46	10,325
Wyoming .....	30	612,076	11,854	11	3,920	-	-	23	7,934
<b>Water Resources Regions</b>									
Region 01 New England .....	1,569	39,551,779	339,923	1,135	235,846	278	59,181	330	44,896
Region 02 Mid-Atlantic .....	3,102	126,858,705	1,332,748	2,566	773,647	564	449,905	363	109,196
Region 03 South Atlantic-Gulf .....	2,945	423,432,868	10,962,565	2,520	8,168,274	574	2,473,452	313	320,838
Region 04 Great Lakes .....	2,108	103,282,299	1,251,889	1,594	636,865	280	307,332	425	307,692
Region 05 Ohio .....	1,924	56,636,700	667,468	940	187,318	446	379,929	775	100,220
Region 06 Tennessee .....	601	15,810,663	310,164	368	187,306	127	70,876	180	51,982
Region 07 Upper Mississippi .....	1,551	81,222,769	938,967	1,332	500,256	189	309,162	173	129,550
Region 08 Lower Mississippi .....	348	8,410,152	190,458	268	139,543	49	18,836	61	32,079
Region 09 Souris-Red-Rainy .....	40	735,226	7,952	35	(D)	14	(D)	9	34
Region 10 Missouri .....	777	30,080,101	314,121	560	78,543	85	124,958	227	110,620
Region 11 Arkansas-White-Red .....	513	12,291,954	113,966	313	31,891	87	25,672	153	56,403
Region 12 Texas-Gulf .....	676	93,820,321	2,400,723	415	1,197,698	156	968,356	243	234,669
Region 13 Rio Grande .....	72	733,858	16,500	72	14,550	-	-	12	1,950
Region 14 Upper Colorado .....	43	2,238,570	35,804	10	(D)	12	(D)	27	17,860
Region 15 Lower Colorado .....	129	49,342,484	1,069,316	89	747,363	12	207,921	44	114,033
Region 16 Great Basin .....	99	7,951,793	100,236	51	(D)	10	(D)	54	72,411
Region 17 Pacific Northwest .....	1,829	65,926,365	1,496,668	1,338	841,366	299	439,984	392	215,317
Region 18 California .....	1,653	221,520,754	3,951,309	956	2,120,468	226	662,546	681	1,168,295
Region 19 Alaska .....	69	493,524	1,671	57	1,583	8	5	12	83
Region 20 Hawaii .....	562	28,749,930	266,305	177	86,569	104	79,195	311	100,541

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**Table 3. Estimated Quantity of Water Applied to Crops Grown Under Protection on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Hand watered									
	Operations	Square feet irrigated	Gallons applied (1,000)	Water source						
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States .....	14,535	338,548,915	3,720,238	10,220	2,015,279	1,981	586,832	3,641	1,118,127	
Alabama .....	131	2,335,232	17,899	54	(D)	18	(D)	71	11,847	
Alaska .....	57	440,324	1,384	45	1,296	8	5	12	83	
Arizona .....	76	1,450,623	14,111	61	(D)	-	-	16	(D)	
Arkansas .....	85	3,900,200	40,209	41	3,320	5	3,120	39	33,769	
California .....	947	43,357,705	553,338	462	205,517	128	44,090	440	303,731	
Colorado .....	135	4,250,972	46,520	57	13,918	6	340	79	32,262	
Connecticut .....	265	5,425,748	41,313	167	24,108	72	(D)	60	60	
Delaware .....	68	827,248	6,845	48	3,874	10	1,770	20	1,202	
Florida .....	317	5,626,925	(D)	277	80,572	52	(D)	40	(D)	
Georgia .....	168	4,570,316	58,371	136	55,365	14	(D)	38	(D)	
Hawaii .....	244	3,248,257	16,651	85	11,033	46	(D)	120	(D)	
Idaho .....	110	1,166,760	3,289	79	1,456	-	-	38	1,833	
Illinois .....	376	6,236,125	56,392	317	43,933	57	7,524	41	4,934	
Indiana .....	321	4,438,748	40,288	219	30,319	39	6,476	90	3,493	
Iowa .....	179	9,885,700	145,814	134	27,838	25	47,416	30	70,560	
Kansas .....	165	2,891,456	29,330	108	11,139	14	3,570	62	14,621	
Kentucky .....	435	6,233,848	47,276	104	19,577	100	5,087	266	22,612	
Louisiana .....	87	1,146,612	6,146	61	1,267	7	1,400	19	3,479	
Maine .....	308	2,875,902	32,773	274	25,539	41	3,814	33	3,420	
Maryland .....	232	5,132,866	51,628	191	33,112	29	16,141	35	2,375	
Massachusetts .....	416	6,744,482	67,645	253	41,076	24	(D)	150	(D)	
Michigan .....	894	45,013,899	493,070	703	300,795	75	38,339	184	153,936	
Minnesota .....	318	13,308,060	165,622	273	137,620	22	2,042	43	25,960	
Mississippi .....	75	832,720	14,430	68	14,367	-	-	7	63	
Missouri .....	291	8,527,360	89,323	209	25,751	44	45,493	63	18,079	
Montana .....	174	1,285,762	14,378	163	12,041	11	435	23	1,902	
Nebraska .....	132	1,619,061	11,884	121	9,916	16	1,949	6	19	
Nevada .....	11	21,525	368	5	62	-	-	6	306	
New Hampshire .....	199	3,242,745	34,162	172	32,127	30	(D)	12	(D)	
New Jersey .....	434	9,453,444	71,719	373	64,478	53	3,611	66	3,630	
New Mexico .....	73	579,494	10,176	61	8,978	6	6	12	1,192	
New York .....	829	15,060,526	157,263	599	103,024	114	(D)	178	(D)	
North Carolina .....	516	5,994,836	68,535	434	52,798	80	7,965	49	8,372	
North Dakota .....	27	720,126	7,887	27	7,339	9	514	9	34	
Ohio .....	614	9,805,411	105,384	400	53,319	116	29,267	147	22,797	
Oklahoma .....	142	1,389,459	3,840	75	(D)	34	2,439	49	(D)	
Oregon .....	603	7,876,424	119,579	415	64,652	110	10,786	144	44,141	
Pennsylvania .....	1,123	40,872,837	387,996	924	154,062	183	190,714	139	43,220	
Rhode Island .....	119	1,021,296	6,531	64	(D)	36	(D)	38	(D)	
South Carolina .....	91	639,654	21,052	70	18,425	15	(D)	8	(D)	
South Dakota .....	40	461,976	5,137	16	1,685	4	35	20	3,418	
Tennessee .....	411	4,290,187	67,717	219	21,363	44	3,281	182	43,073	
Texas .....	537	16,390,571	218,328	306	104,106	87	40,879	219	73,343	
Utah .....	78	7,004,798	67,563	40	16,625	4	6,720	44	44,218	
Vermont .....	182	2,042,546	17,432	115	(D)	71	(D)	34	11,470	
Virginia .....	284	2,643,852	(D)	222	15,417	57	1,580	39	(D)	
Washington .....	393	7,971,934	67,688	263	55,723	33	2,023	111	9,942	
West Virginia .....	132	1,517,600	11,702	70	6,617	20	960	47	4,125	
Wisconsin .....	665	6,356,805	83,753	633	74,090	12	170	40	9,492	
Wyoming .....	26	417,958	8,615	7	1,949	-	-	23	6,666	
<b>Water Resources Regions</b>										
Region 01 New England .....	1,350	19,125,269	179,532	968	128,206	209	15,015	305	36,311	
Region 02 Mid-Atlantic .....	2,438	51,295,651	472,516	2,023	337,252	385	60,036	318	75,228	
Region 03 South Atlantic-Gulf .....	1,206	18,584,230	250,444	979	209,148	176	24,524	182	16,771	
Region 04 Great Lakes .....	1,769	56,440,051	608,329	1,334	362,825	172	69,519	370	175,985	
Region 05 Ohio .....	1,522	37,342,792	364,140	735	109,585	297	194,016	625	60,539	
Region 06 Tennessee .....	464	5,880,817	79,553	294	34,079	60	3,078	146	42,397	
Region 07 Upper Mississippi .....	1,308	27,545,574	336,994	1,139	265,556	107	(D)	141	(D)	
Region 08 Lower Mississippi .....	177	2,132,214	23,648	110	12,314	12	(D)	55	(D)	
Region 09 Souris-Red-Rainy .....	40	712,126	7,938	35	(D)	14	(D)	9	34	
Region 10 Missouri .....	681	21,743,553	246,101	479	54,124	67	92,019	203	99,958	
Region 11 Arkansas-White-Red .....	387	7,290,457	61,491	242	9,420	66	9,307	109	42,764	
Region 12 Texas-Gulf .....	499	15,749,043	211,476	275	101,400	81	40,723	212	69,353	
Region 13 Rio Grande .....	60	528,374	9,590	60	9,563	-	-	6	27	
Region 14 Upper Colorado .....	26	1,022,320	15,247	6	(D)	-	-	20	(D)	
Region 15 Lower Colorado .....	82	1,471,023	14,417	61	(D)	-	-	22	(D)	
Region 16 Great Basin .....	83	7,005,923	67,625	45	(D)	4	(D)	44	44,218	
Region 17 Pacific Northwest .....	1,184	17,529,292	199,529	837	128,543	149	13,182	297	57,804	
Region 18 California .....	958	43,461,625	553,632	468	205,546	128	44,090	445	303,996	
Region 19 Alaska .....	57	440,324	1,384	45	1,296	8	5	12	83	
Region 20 Hawaii .....	244	3,248,257	16,651	85	11,033	46	(D)	120	(D)	

--continued

**Table 3. Estimated Quantity of Water Applied to Crops Grown Under Protection on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Gravity irrigation								
	Operations	Square feet irrigated	Gallons applied (1,000)	Water source					
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers	
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)
United States .....	191	14,584,204	223,036	126	39,076	59	67,783	29	116,177
Alabama .....	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-
California .....	29	7,779,250	201,443	17	20,803	5	64,800	12	115,840
Colorado .....	6	(D)	17	-	-	6	17	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-
Florida .....	12	3,504,200	4,372	12	4,372	-	-	-	-
Georgia .....	6	1,306,800	1,307	6	1,307	-	-	-	-
Hawaii .....	7	192,500	(D)	-	-	7	(D)	7	(D)
Idaho .....	7	21,000	168	7	168	-	-	-	-
Illinois .....	-	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-
Iowa .....	2	(D)	(D)	-	-	2	(D)	-	-
Kansas .....	-	-	-	-	-	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-
Michigan .....	16	800,000	1,378	10	(D)	6	(D)	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-
Missouri .....	6	6,300	(D)	6	(D)	-	-	-	-
Montana .....	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-
New Hampshire .....	5	45,000	608	-	-	5	608	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-
New Mexico .....	-	-	-	-	-	-	-	-	-
New York .....	11	86,000	(D)	-	-	11	(D)	-	-
North Carolina .....	-	-	-	-	-	-	-	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	-	-	-	-	-	-	-
Oregon .....	30	175,064	3,007	14	2,512	6	(D)	10	(D)
Pennsylvania .....	6	141,120	1,128	6	1,128	-	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-	-
South Dakota .....	-	-	-	-	-	-	-	-	-
Tennessee .....	-	-	-	-	-	-	-	-	-
Texas .....	38	455,170	7,782	38	7,665	6	118	-	-
Utah .....	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-
Virginia .....	-	-	-	-	-	-	-	-	-
Washington .....	10	30,000	108	10	(D)	5	(D)	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>									
Region 01 New England .....	5	45,000	608	-	-	5	608	-	-
Region 02 Mid-Atlantic .....	12	177,120	1,488	6	(D)	6	(D)	-	-
Region 03 South Atlantic-Gulf .....	18	4,811,000	5,679	18	5,679	-	-	-	-
Region 04 Great Lakes .....	21	850,000	1,878	10	(D)	11	(D)	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	2	(D)	(D)	-	-	2	(D)	-	-
Region 08 Lower Mississippi .....	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	6	(D)	(D)	6	(D)	-	-	-	-
Region 11 Arkansas-White-Red .....	-	-	-	-	-	-	-	-	-
Region 12 Texas-Gulf .....	38	455,170	7,782	38	7,665	6	118	-	-
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	6	1,800	17	-	-	6	17	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	47	226,064	3,283	31	(D)	11	(D)	10	(D)
Region 18 California .....	29	7,779,250	201,443	17	20,803	5	64,800	12	115,840
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	7	192,500	(D)	-	-	7	(D)	7	(D)

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**Table 3. Estimated Quantity of Water Applied to Crops Grown Under Protection on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sprinkler									
	Operations	Square feet irrigated	Gallons applied (1,000)	Water source						
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States .....	6,328	752,511,338	16,586,309	4,567	10,219,216	1,450	5,050,157	1,230	1,316,935	
Alabama .....	129	14,126,346	403,055	93	302,547	34	(D)	24	(D)	
Alaska .....	-	-	-	-	-	-	-	-	-	
Arizona .....	40	3,824,535	97,366	32	(D)	3	(D)	12	49,955	
Arkansas .....	30	416,488	2,545	16	1,576	2	(D)	14	(D)	
California .....	579	87,859,901	1,740,884	380	883,639	100	401,220	197	456,026	
Colorado .....	39	2,183,012	31,427	28	11,938	7	15,997	10	3,492	
Connecticut .....	65	9,065,929	(D)	41	4,375	27	19,675	8	(D)	
Delaware .....	41	380,264	3,456	31	1,193	11	89	10	2,175	
Florida .....	1,001	285,101,956	8,255,537	931	6,684,968	167	1,283,254	34	287,315	
Georgia .....	115	14,770,998	570,669	91	298,600	39	271,880	18	189	
Hawaii .....	324	17,320,275	118,476	92	13,330	54	20,868	194	84,279	
Idaho .....	31	784,110	2,835	21	2,155	3	130	7	550	
Illinois .....	125	35,928,652	250,376	91	34,624	51	211,992	9	3,759	
Indiana .....	87	1,186,622	5,627	63	2,869	18	2,594	24	164	
Iowa .....	37	4,503,050	44,668	26	(D)	6	(D)	9	31,628	
Kansas .....	16	4,192,642	22,558	7	4,140	9	18,418	-	-	
Kentucky .....	87	5,346,880	51,222	12	812	28	40,342	53	10,068	
Louisiana .....	149	8,367,086	134,369	136	68,491	43	48,598	6	17,280	
Maine .....	42	182,300	955	42	798	11	157	-	-	
Maryland .....	72	3,740,159	26,859	62	21,192	17	5,547	6	120	
Massachusetts .....	28	1,009,122	(D)	28	(D)	-	-	-	-	
Michigan .....	279	19,561,671	140,225	216	63,819	34	47,409	56	28,997	
Minnesota .....	98	11,134,630	86,780	89	76,772	-	-	13	10,008	
Mississippi .....	59	2,063,460	20,568	56	20,275	3	294	-	-	
Missouri .....	88	3,174,620	65,666	61	37,798	14	(D)	32	(D)	
Montana .....	27	109,520	532	21	167	5	62	12	303	
Nebraska .....	-	-	-	-	-	-	-	-	-	
Nevada .....	-	-	-	-	-	-	-	-	-	
New Hampshire .....	31	901,785	(D)	31	(D)	5	(D)	-	-	
New Jersey .....	234	29,948,625	194,229	208	151,063	50	29,599	10	13,566	
New Mexico .....	-	-	-	-	-	-	-	-	-	
New York .....	156	3,938,672	72,030	117	32,448	26	36,706	25	2,876	
North Carolina .....	278	16,916,462	365,236	169	(D)	155	342,557	32	(D)	
North Dakota .....	-	-	-	-	-	-	-	-	-	
Ohio .....	200	23,152,994	240,758	92	60,185	80	173,831	34	6,742	
Oklahoma .....	68	824,007	7,829	41	(D)	9	6,653	26	(D)	
Oregon .....	523	36,112,885	886,835	388	(D)	136	417,011	97	(D)	
Pennsylvania .....	201	18,300,876	113,701	160	30,638	51	54,579	32	28,484	
Rhode Island .....	13	159,900	1,037	6	(D)	7	(D)	-	-	
South Carolina .....	50	5,145,251	180,510	44	(D)	3	168,899	3	(D)	
South Dakota .....	4	151,360	1,008	4	1,008	-	-	-	-	
Tennessee .....	224	4,513,128	140,933	136	60,352	73	72,909	45	7,672	
Texas .....	286	53,807,546	1,554,354	169	551,979	95	911,090	102	91,285	
Utah .....	21	625,670	7,945	7	(D)	-	-	14	(D)	
Vermont .....	39	72,960	876	19	(D)	13	(D)	7	(D)	
Virginia .....	147	10,485,167	318,084	95	15,643	51	299,939	12	2,503	
Washington .....	147	9,039,760	325,792	124	(D)	5	42	21	(D)	
West Virginia .....	21	295,500	4,319	6	3,226	-	-	15	1,094	
Wisconsin .....	90	1,742,444	45,089	85	16,401	5	28,688	-	-	
Wyoming .....	7	42,118	548	-	-	-	-	7	548	
<b>Water Resources Regions</b>										
Region 01 New England .....	191	11,346,036	50,857	154	(D)	56	20,564	8	(D)	
Region 02 Mid-Atlantic .....	769	60,767,243	598,886	622	238,047	174	333,053	67	27,786	
Region 03 South Atlantic-Gulf .....	1,589	336,655,699	9,716,870	1,360	7,250,037	403	2,175,300	86	291,533	
Region 04 Great Lakes .....	522	44,185,961	398,274	384	129,457	104	217,952	85	50,864	
Region 05 Ohio .....	402	13,513,748	237,281	159	(D)	129	177,069	162	(D)	
Region 06 Tennessee .....	164	7,214,150	189,871	107	123,002	50	61,270	34	5,599	
Region 07 Upper Mississippi .....	294	53,292,122	423,021	228	128,338	56	239,883	44	54,800	
Region 08 Lower Mississippi .....	191	6,548,670	141,658	173	110,057	30	(D)	18	(D)	
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	
Region 10 Missouri .....	97	4,486,474	49,130	64	17,700	23	24,044	37	7,386	
Region 11 Arkansas-White-Red .....	141	4,386,175	39,366	88	12,550	29	16,317	41	10,499	
Region 12 Texas-Gulf .....	273	53,374,346	1,543,542	163	551,372	89	910,686	95	81,485	
Region 13 Rio Grande .....	5	15,000	225	5	225	-	-	-	-	
Region 14 Upper Colorado .....	6	1,073,740	16,770	-	-	6	(D)	2	(D)	
Region 15 Lower Colorado .....	40	3,824,535	97,366	32	(D)	3	(D)	12	49,955	
Region 16 Great Basin .....	21	625,670	7,945	7	(D)	-	-	14	(D)	
Region 17 Pacific Northwest .....	720	46,021,593	1,215,887	549	652,089	144	417,182	134	146,616	
Region 18 California .....	579	87,859,901	1,740,884	380	883,639	100	401,220	197	456,026	
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii .....	324	17,320,275	118,476	92	13,330	54	20,868	194	84,279	

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**Table 3. Estimated Quantity of Water Applied to Crops Grown Under Protection on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Drip, trickle, or low-flow micro irrigation								
	Operations	Square feet irrigated	Gallons applied (1,000)	Water source					
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers	
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)
United States .....	6,336	371,620,978	4,946,370	4,595	3,610,778	957	763,334	1,418	572,257
Alabama .....	71	3,633,401	4,895	40	(D)	11	(D)	31	(D)
Alaska .....	28	87,280	287	28	287	-	-	-	-
Arizona .....	46	35,927,810	853,546	35	625,032	9	(D)	6	(D)
Arkansas .....	19	71,652	845	11	788	2	(D)	6	(D)
California .....	570	110,645,964	1,396,511	368	962,901	59	146,007	217	287,602
Colorado .....	36	545,170	8,186	14	3,752	-	-	22	4,434
Connecticut .....	137	3,411,087	16,373	99	15,869	33	(D)	10	(D)
Delaware .....	29	403,000	1,270	19	760	-	-	10	510
Florida .....	374	55,164,918	778,419	321	611,876	50	(D)	36	(D)
Georgia .....	75	6,604,232	13,160	69	10,814	2	(D)	6	(D)
Hawaii .....	118	9,088,398	130,589	65	62,206	12	56,628	48	11,755
Idaho .....	39	663,560	3,691	22	145	7	71	10	3,474
Illinois .....	141	2,504,726	9,410	103	6,390	25	2,284	19	736
Indiana .....	151	1,745,028	5,687	115	2,787	21	2,130	30	771
Iowa .....	82	1,250,476	(D)	53	1,053	18	1,195	21	(D)
Kansas .....	44	182,600	1,952	25	1,644	-	-	19	308
Kentucky .....	145	1,496,316	10,821	32	1,612	16	3,160	102	6,049
Louisiana .....	34	806,792	15,611	34	15,611	-	-	-	-
Maine .....	86	4,075,419	27,783	59	4,196	9	19,736	18	3,851
Maryland .....	103	3,919,850	16,258	85	10,337	17	4,967	12	954
Massachusetts .....	188	2,281,978	8,455	110	(D)	7	(D)	71	(D)
Michigan .....	458	17,900,212	145,678	350	107,323	33	11,345	128	27,010
Minnesota .....	132	3,506,605	59,470	132	59,440	5	27	4	3
Mississippi .....	59	3,313,670	29,645	46	23,506	7	6,013	6	126
Missouri .....	113	6,038,024	(D)	58	(D)	31	(D)	25	(D)
Montana .....	41	192,610	2,296	41	2,278	-	-	12	18
Nebraska .....	24	239,300	363	24	248	6	115	-	-
Nevada .....	11	25,200	941	11	941	6	(Z)	-	-
New Hampshire .....	94	2,032,834	32,152	83	31,075	10	(D)	6	(D)
New Jersey .....	181	12,203,705	119,478	163	117,939	12	1,275	23	263
New Mexico .....	38	7,197,484	76,684	38	74,761	-	-	12	1,923
New York .....	329	7,354,246	89,220	204	(D)	69	(D)	80	45,312
North Carolina .....	298	8,134,399	(D)	251	33,842	42	(D)	53	(D)
North Dakota .....	9	22,500	14	9	13	9	1	-	-
Ohio .....	239	5,662,472	52,303	171	46,408	49	3,433	41	2,463
Oklahoma .....	33	674,400	426	16	58	16	8	17	361
Oregon .....	197	3,691,744	51,417	135	(D)	60	(D)	35	(D)
Pennsylvania .....	513	7,654,810	53,769	399	44,666	100	4,289	65	4,814
Rhode Island .....	40	148,200	1,456	20	(D)	13	(D)	20	(D)
South Carolina .....	38	780,698	18,149	37	(D)	1	(D)	-	-
South Dakota .....	16	16,856	567	12	164	-	-	4	403
Tennessee .....	134	1,516,526	42,966	81	29,075	41	7,502	36	6,388
Texas .....	172	27,876,702	644,890	114	544,229	23	16,829	55	83,831
Utah .....	12	1,175,000	(D)	7	(D)	-	-	5	(D)
Vermont .....	128	1,146,620	20,344	97	13,365	51	(D)	6	(D)
Virginia .....	95	2,436,530	32,547	48	(D)	35	23,624	17	(D)
Washington .....	127	2,655,300	14,669	89	(D)	13	(D)	34	(D)
West Virginia .....	41	335,300	1,384	20	850	10	80	16	455
Wisconsin .....	240	3,027,374	63,949	228	32,940	17	30,177	20	832
Wyoming .....	8	152,000	2,691	4	1,971	-	-	4	720
<b>Water Resources Regions</b>									
Region 01 New England .....	595	12,594,126	98,213	410	68,447	90	22,909	131	6,857
Region 02 Mid-Atlantic .....	1,085	30,341,489	254,391	871	192,440	202	(D)	121	(D)
Region 03 South Atlantic-Gulf .....	898	76,117,215	885,747	761	697,151	117	176,063	119	12,533
Region 04 Great Lakes .....	765	23,341,962	226,640	560	140,719	87	15,264	191	70,657
Region 05 Ohio .....	591	7,859,594	63,951	323	40,599	99	(D)	214	(D)
Region 06 Tennessee .....	126	3,047,979	40,404	72	30,225	29	6,528	42	3,650
Region 07 Upper Mississippi .....	547	11,072,441	133,398	437	(D)	81	33,840	76	(D)
Region 08 Lower Mississippi .....	67	1,007,384	25,152	43	17,173	12	(D)	12	(D)
Region 09 Souris-Red-Rainy .....	15	23,100	14	15	13	9	1	-	-
Region 10 Missouri .....	154	5,824,034	18,762	110	6,591	24	8,894	32	3,276
Region 11 Arkansas-White-Red .....	121	1,304,002	13,104	72	9,916	18	48	47	3,140
Region 12 Texas-Gulf .....	159	27,667,342	637,922	101	537,261	23	16,829	55	83,831
Region 13 Rio Grande .....	31	197,484	6,684	31	4,761	-	-	12	1,923
Region 14 Upper Colorado .....	9	140,710	3,771	4	(D)	-	-	5	(D)
Region 15 Lower Colorado .....	58	43,377,810	924,746	47	696,232	9	(D)	6	(D)
Region 16 Great Basin .....	18	750,200	16,116	13	(D)	6	(Z)	5	(D)
Region 17 Pacific Northwest .....	375	7,129,104	69,932	258	50,593	80	(D)	85	(D)
Region 18 California .....	576	110,649,324	1,396,547	374	962,937	59	146,007	217	287,602
Region 19 Alaska .....	28	87,280	287	28	287	-	-	-	-
Region 20 Hawaii .....	118	9,088,398	130,589	65	62,206	12	56,628	48	11,755

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**Table 3. Estimated Quantity of Water Applied to Crops Grown Under Protection on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Subirrigation								
	Operations	Square feet irrigated	Gallons applied (1,000)	Water source					
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers	
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)
United States .....	420	18,950,180	292,799	282	95,255	61	132,372	120	65,172
Alabama .....	-	-	-	-	-	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-
Arizona .....	7	669,116	32,787	-	-	-	-	7	32,787
Arkansas .....	-	-	-	-	-	-	-	-	-
California .....	26	4,026,460	58,802	22	47,543	4	6,429	4	4,829
Colorado .....	-	-	-	-	-	-	-	-	-
Connecticut .....	5	(D)	(D)	-	-	-	-	5	(D)
Delaware .....	-	-	-	-	-	-	-	-	-
Florida .....	12	(D)	(D)	12	1,346	5	(D)	-	-
Georgia .....	6	1,306,800	1,307	6	1,307	-	-	-	-
Hawaii .....	15	78,000	(D)	-	-	-	-	15	(D)
Idaho .....	-	-	-	-	-	-	-	-	-
Illinois .....	3	1,200,000	24,000	-	-	3	24,000	-	-
Indiana .....	6	14,400	120	6	120	-	-	-	-
Iowa .....	10	338,700	(D)	5	(D)	-	-	5	(D)
Kansas .....	-	-	-	-	-	-	-	-	-
Kentucky .....	41	477,852	2,030	6	130	6	42	29	1,858
Louisiana .....	-	-	-	-	-	-	-	-	-
Maine .....	18	127,200	381	18	366	6	15	-	-
Maryland .....	12	155,448	1,574	12	1,574	-	-	-	-
Massachusetts .....	8	340,000	(D)	8	(D)	7	70	-	-
Michigan .....	29	1,915,390	15,093	21	(D)	4	(D)	13	8,987
Minnesota .....	9	380,112	16,136	9	16,136	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-
Missouri .....	-	-	-	-	-	-	-	-	-
Montana .....	-	-	-	-	-	-	-	-	-
Nebraska .....	6	18,000	21	6	21	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-
New Hampshire .....	16	(D)	(D)	16	(D)	-	-	-	-
New Jersey .....	6	1,200	6	6	6	-	-	-	-
New Mexico .....	-	-	-	-	-	-	-	-	-
New York .....	23	162,200	(D)	17	(D)	-	-	6	(D)
North Carolina .....	8	(D)	(D)	7	(D)	8	(D)	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-
Oklahoma .....	-	-	-	-	-	-	-	-	-
Oregon .....	18	151,638	752	12	(D)	-	-	6	(D)
Pennsylvania .....	44	1,437,637	2,158	30	1,471	7	600	7	87
Rhode Island .....	7	9,800	7	7	7	-	-	-	-
South Carolina .....	7	147,567	5,357	1	(D)	6	(D)	-	-
South Dakota .....	-	-	-	-	-	-	-	-	-
Tennessee .....	12	36,000	402	-	-	-	-	12	402
Texas .....	6	2,700	6	6	6	-	-	-	-
Utah .....	5	250,000	(D)	-	-	-	-	5	(D)
Vermont .....	-	-	-	-	-	-	-	-	-
Virginia .....	6	60,000	(D)	6	(D)	-	-	-	-
Washington .....	17	526,000	7,285	11	7,218	5	18	6	49
West Virginia .....	-	-	-	-	-	-	-	-	-
Wisconsin .....	32	151,280	558	32	558	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>									
Region 01 New England .....	54	845,320	10,713	49	(D)	13	85	5	(D)
Region 02 Mid-Atlantic .....	73	1,648,485	5,467	59	(D)	7	(D)	7	(D)
Region 03 South Atlantic-Gulf .....	39	6,112,727	103,826	32	6,260	19	97,566	-	-
Region 04 Great Lakes .....	60	2,096,670	16,768	46	(D)	4	(D)	19	10,187
Region 05 Ohio .....	47	483,852	2,096	6	(D)	6	(D)	35	1,924
Region 06 Tennessee .....	6	30,000	336	-	-	-	-	6	336
Region 07 Upper Mississippi .....	41	2,011,212	(D)	33	(D)	3	24,000	5	4,628
Region 08 Lower Mississippi .....	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	6	18,000	(D)	6	(D)	-	-	-	-
Region 11 Arkansas-White-Red .....	6	2,700	6	6	6	-	-	-	-
Region 12 Texas-Gulf .....	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	7	669,116	32,787	-	-	-	-	7	32,787
Region 16 Great Basin .....	5	250,000	8,550	-	-	-	-	5	8,550
Region 17 Pacific Northwest .....	35	677,638	8,037	23	(D)	5	18	12	(D)
Region 18 California .....	26	4,026,460	58,802	22	47,543	4	6,429	4	4,829
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	15	78,000	(D)	-	-	-	-	15	(D)

**Table 4. Estimated Quantity of Water Applied to Crops Grown in the Open on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All methods								
	Operations	Acres irrigated	Gallons applied (1,000)	Water source					
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers	
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)
United States .....	18,797	579,633	209,392,915	12,707	103,727,069	5,303	50,764,157	3,943	54,901,690
Alabama .....	303	20,170	5,974,133	196	2,538,857	112	3,219,758	61	215,517
Alaska .....	29	31	1,018	21	552	4	72	4	394
Arizona .....	142	7,451	10,077,845	85	2,028,954	22	873,473	66	7,175,418
Arkansas .....	128	7,412	1,803,809	72	844,893	47	(D)	33	(D)
California .....	1,897	52,886	35,010,414	1,031	25,227,979	303	2,716,989	890	7,065,446
Colorado .....	265	11,841	6,949,727	134	4,295,123	52	849,107	124	1,805,496
Connecticut .....	234	2,356	855,216	159	45,727	76	806,975	27	2,514
Delaware .....	55	1,856	518,906	36	441,236	31	77,559	10	111
Florida .....	2,211	72,609	22,643,702	1,896	15,353,479	557	(D)	175	(D)
Georgia .....	507	36,568	9,700,097	399	5,323,255	187	4,324,422	27	52,420
Hawaii .....	494	1,793	597,133	192	261,368	77	50,370	299	285,395
Idaho .....	236	10,719	2,594,648	129	966,561	63	(D)	102	(D)
Illinois .....	413	17,274	2,200,463	292	1,745,574	123	448,795	53	6,094
Indiana .....	289	7,268	864,166	221	631,472	60	229,997	48	2,696
Iowa .....	155	3,178	249,234	86	228,227	49	20,266	36	740
Kansas .....	154	3,074	637,861	80	434,444	25	185,039	60	18,379
Kentucky .....	340	1,909	339,217	99	(D)	120	263,562	149	(D)
Louisiana .....	290	5,401	1,071,775	223	718,307	99	332,921	26	20,547
Maine .....	214	1,327	341,545	157	(D)	46	280,836	24	(D)
Maryland .....	272	8,764	1,496,310	212	1,252,631	63	(D)	24	(D)
Massachusetts .....	314	1,444	87,480	172	(D)	101	27,225	84	(D)
Michigan .....	659	16,882	2,089,767	487	1,271,447	202	637,838	91	180,481
Minnesota .....	282	7,165	1,092,200	250	706,794	75	383,309	15	2,096
Mississippi .....	177	4,172	680,039	127	275,585	23	401,756	34	2,698
Missouri .....	284	7,269	1,140,890	179	492,683	81	640,385	47	7,822
Montana .....	199	1,769	474,005	156	291,106	35	172,302	29	10,596
Nebraska .....	166	3,926	844,086	137	814,654	25	12,195	11	17,237
Nevada .....	28	829	459,737	16	(D)	7	(D)	12	1,161
New Hampshire .....	170	714	94,465	141	64,895	18	22,930	18	6,639
New Jersey .....	560	21,409	5,043,410	469	3,294,626	145	1,740,331	41	8,454
New Mexico .....	73	2,679	682,488	59	254,621	19	62,771	14	365,097
New York .....	575	8,765	568,642	375	239,129	175	324,155	129	5,357
North Carolina .....	782	20,932	5,525,033	459	623,037	422	4,748,839	60	153,156
North Dakota .....	3	61	23,037	-	-	3	23,037	-	-
Ohio .....	463	7,238	1,121,831	301	433,783	179	647,124	59	40,924
Oklahoma .....	154	19,836	5,231,080	86	2,462,131	54	2,016,968	43	751,981
Oregon .....	1,182	52,679	37,357,580	819	10,616,889	391	(D)	229	(D)
Pennsylvania .....	817	4,115	646,683	588	97,028	241	220,410	109	329,244
Rhode Island .....	98	2,383	502,113	45	9,452	41	446,121	20	46,539
South Carolina .....	273	18,418	3,107,420	220	1,841,111	114	(D)	9	(D)
South Dakota .....	43	966	273,591	32	(D)	7	(D)	9	(D)
Tennessee .....	391	12,046	2,611,749	203	436,987	182	2,096,564	72	78,198
Texas .....	727	45,134	16,902,881	509	10,531,005	228	3,443,072	225	2,928,803
Utah .....	111	4,601	2,842,612	27	1,883,333	18	(D)	75	(D)
Vermont .....	139	186	24,322	84	18,804	55	4,761	13	757
Virginia .....	359	8,285	2,158,406	222	473,088	174	1,653,257	35	32,061
Washington .....	511	19,172	12,132,212	290	2,144,364	90	(D)	162	(D)
West Virginia .....	78	339	94,356	57	88,808	15	3,398	11	2,150
Wisconsin .....	521	11,543	1,175,724	466	1,049,656	59	121,693	26	4,375
Wyoming .....	30	793	477,856	11	234,882	8	203,754	23	39,220
<b>Water Resources Regions</b>									
Region 01 New England .....	1,087	8,284	1,895,120	726	197,292	294	1,583,653	173	114,175
Region 02 Mid-Atlantic .....	2,307	49,633	9,540,818	1,721	5,769,947	732	3,718,759	223	52,112
Region 03 South Atlantic-Gulf .....	4,187	173,361	47,943,730	3,272	25,883,645	1,417	20,433,313	344	1,626,771
Region 04 Great Lakes .....	1,311	23,113	3,080,851	913	1,475,476	376	1,416,610	207	188,765
Region 05 Ohio .....	1,207	18,012	3,217,907	623	745,078	417	2,042,764	350	430,065
Region 06 Tennessee .....	345	6,791	768,497	210	301,405	128	421,089	40	46,004
Region 07 Upper Mississippi .....	1,165	39,991	5,272,121	940	4,149,949	271	1,110,347	105	11,825
Region 08 Lower Mississippi .....	330	7,394	1,156,714	257	708,298	79	428,711	49	19,706
Region 09 Souris-Red-Rainy .....	20	112	27,670	9	22,468	14	5,202	-	-
Region 10 Missouri .....	749	20,172	7,498,686	473	4,927,900	145	1,454,349	218	1,116,437
Region 11 Arkansas-White-Red .....	488	35,188	9,457,012	281	5,125,957	177	3,359,130	105	971,925
Region 12 Texas-Gulf .....	687	42,144	16,667,686	493	10,472,916	202	3,347,505	204	2,847,266
Region 13 Rio Grande .....	76	2,851	695,697	58	253,317	26	(D)	18	(D)
Region 14 Upper Colorado .....	107	1,593	982,265	26	72,981	28	129,881	63	779,403
Region 15 Lower Colorado .....	171	8,350	10,180,527	100	2,057,810	30	914,890	86	7,207,827
Region 16 Great Basin .....	117	5,189	3,238,770	41	2,311,911	25	(D)	65	(D)
Region 17 Pacific Northwest .....	2,026	82,753	51,637,205	1,321	13,207,216	559	7,046,242	503	31,383,747
Region 18 California .....	1,894	52,878	35,533,490	1,030	25,781,583	302	2,716,984	887	7,034,923
Region 19 Alaska .....	29	31	1,018	21	552	4	72	4	394
Region 20 Hawaii .....	494	1,793	597,133	192	261,368	77	50,370	299	285,395

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**Table 4. Estimated Quantity of Water Applied to Crops Grown in the Open on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Hand watered									
	Operations	Acres irrigated	Gallons applied (1,000)	Water source						
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States .....	5,189	7,295	1,513,957	3,437	(D)	877	(D)	1,510	(D)	
Alabama .....	36	34	5,706	24	(D)	6	100	12	(D)	
Alaska .....	16	7	670	12	276	-	-	4	394	
Arizona .....	50	59	72,315	22	(D)	8	(D)	22	21,461	
Arkansas .....	61	142	26,334	34	(D)	17	21,245	16	(D)	
California .....	705	2,113	(D)	321	(D)	95	(D)	402	513,511	
Colorado .....	63	100	28,979	35	17,963	6	2,016	36	9,000	
Connecticut .....	70	87	3,841	43	3,294	33	540	11	6	
Delaware .....	-	-	-	-	-	-	-	-	-	
Florida .....	167	126	23,095	151	20,580	26	777	21	1,738	
Georgia .....	87	52	6,851	75	(D)	5	23	12	(D)	
Hawaii .....	181	290	32,695	58	10,343	36	4,064	111	18,288	
Idaho .....	15	18	5,591	15	(D)	1	(D)	-	-	
Illinois .....	166	293	20,668	110	17,443	41	1,632	32	1,593	
Indiana .....	87	50	4,346	75	2,065	12	2,221	6	60	
Iowa .....	57	31	(D)	35	2,289	7	(D)	15	185	
Kansas .....	82	43	12,486	36	1,180	7	140	45	11,166	
Kentucky .....	105	261	41,656	47	30,292	18	3,309	46	8,056	
Louisiana .....	7	(D)	(D)	-	-	-	-	7	(D)	
Maine .....	99	117	(D)	88	7,860	6	(Z)	11	(D)	
Maryland .....	87	81	6,221	75	6,106	-	-	12	115	
Massachusetts .....	134	119	19,017	89	11,820	32	(D)	32	(D)	
Michigan .....	178	160	(D)	148	(D)	31	3,254	21	379	
Minnesota .....	79	129	29,375	68	15,549	6	12,480	10	1,346	
Mississippi .....	36	36	980	14	(D)	1	(D)	21	(D)	
Missouri .....	58	76	1,845	32	69	13	1,358	20	418	
Montana .....	68	32	4,878	57	3,395	12	1,260	11	223	
Nebraska .....	58	29	(D)	37	(D)	11	(D)	10	(D)	
Nevada .....	6	(D)	1,074	-	-	-	-	6	1,074	
New Hampshire .....	72	(D)	(D)	72	(D)	5	(Z)	-	-	
New Jersey .....	92	83	(D)	76	19,292	10	280	22	(D)	
New Mexico .....	18	13	4,089	12	(D)	6	(D)	6	274	
New York .....	181	121	4,591	110	3,110	30	601	65	880	
North Carolina .....	158	92	9,734	117	6,928	40	(D)	21	(D)	
North Dakota .....	-	-	-	-	-	-	-	-	-	
Ohio .....	154	334	19,578	113	(D)	28	(D)	27	(D)	
Oklahoma .....	34	27	(D)	9	90	17	(D)	16	3,776	
Oregon .....	197	150	(D)	153	12,082	27	3,401	53	(D)	
Pennsylvania .....	363	396	(D)	264	(D)	109	(D)	64	(D)	
Rhode Island .....	38	(D)	(D)	26	(D)	12	19	6	5	
South Carolina .....	19	9	4,278	19	4,278	-	-	-	-	
South Dakota .....	21	12	2,996	13	2,689	-	-	8	307	
Tennessee .....	121	406	8,695	65	4,316	20	797	42	3,583	
Texas .....	244	249	46,582	160	33,975	32	983	95	11,625	
Utah .....	9	25	259	5	10	-	-	4	249	
Vermont .....	103	82	5,665	66	(D)	37	(D)	13	(D)	
Virginia .....	127	142	18,346	93	15,088	34	2,111	23	1,146	
Washington .....	145	165	(D)	85	(D)	19	(D)	53	(D)	
West Virginia .....	66	26	5,119	40	2,737	15	1,988	11	394	
Wisconsin .....	253	372	(D)	234	(D)	6	42	13	613	
Wyoming .....	16	16	11,027	4	437	-	-	16	10,591	
<b>Water Resources Regions</b>										
Region 01 New England .....	446	422	47,857	358	39,360	88	(D)	60	(D)	
Region 02 Mid-Atlantic .....	763	770	72,060	573	59,131	180	9,067	120	3,862	
Region 03 South Atlantic-Gulf .....	468	340	(D)	386	(D)	89	3,520	66	4,049	
Region 04 Great Lakes .....	426	588	35,922	314	27,973	62	5,598	85	2,350	
Region 05 Ohio .....	459	943	(D)	260	(D)	101	5,359	139	13,400	
Region 06 Tennessee .....	101	76	5,599	68	(D)	10	368	23	(D)	
Region 07 Upper Mississippi .....	455	548	63,903	379	(D)	36	(D)	63	(D)	
Region 08 Lower Mississippi .....	41	30	1,510	10	1,004	-	-	31	506	
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	
Region 10 Missouri .....	267	244	(D)	146	16,206	40	(D)	111	31,225	
Region 11 Arkansas-White-Red .....	135	180	35,262	68	4,025	53	24,000	40	7,237	
Region 12 Texas-Gulf .....	232	244	46,035	148	33,632	20	779	95	11,625	
Region 13 Rio Grande .....	17	8	(D)	17	2,467	6	(D)	-	-	
Region 14 Upper Colorado .....	26	63	(D)	10	(D)	-	-	16	(D)	
Region 15 Lower Colorado .....	62	63	74,590	28	(D)	14	(D)	34	23,147	
Region 16 Great Basin .....	9	25	(D)	5	10	-	-	4	(D)	
Region 17 Pacific Northwest .....	381	343	(D)	277	23,562	53	(D)	107	10,308	
Region 18 California .....	704	2,113	(D)	320	(D)	89	(D)	401	512,950	
Region 19 Alaska .....	16	7	670	12	276	-	-	4	394	
Region 20 Hawaii .....	181	290	32,695	58	10,343	36	4,064	111	18,288	

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**Table 4. Estimated Quantity of Water Applied to Crops Grown in the Open on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Gravity irrigation								
	Operations	Acres irrigated	Gallons applied (1,000)	Water source					
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers	
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)
United States .....	562	27,186	11,755,412	257	5,406,664	182	(D)	212	(D)
Alabama .....	2	(D)	(D)	2	(D)	-	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-
Arizona .....	23	2,309	3,292,399	10	(D)	2	(D)	21	1,761,306
Arkansas .....	5	50	(D)	-	-	5	(D)	-	-
California .....	69	5,656	3,814,682	41	2,160,300	21	614,476	22	1,039,905
Colorado .....	82	2,983	1,685,358	21	1,036,219	23	134,250	53	514,890
Connecticut .....	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-
Florida .....	72	3,962	899,757	42	416,737	21	(D)	14	(D)
Georgia .....	3	700	(D)	3	(D)	2	(D)	-	-
Hawaii .....	22	18	8,095	7	350	22	7,745	-	-
Idaho .....	57	(D)	(D)	35	(D)	6	(D)	31	330,000
Illinois .....	-	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-
Iowa .....	2	(D)	(D)	-	-	2	(D)	-	-
Kansas .....	-	-	-	-	-	-	-	-	-
Kentucky .....	6	3	1,160	-	-	6	1,160	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-
Maine .....	11	21	(D)	5	(D)	-	-	6	(D)
Maryland .....	-	-	-	-	-	-	-	-	-
Massachusetts .....	6	14	(D)	-	-	-	-	6	(D)
Michigan .....	4	120	(D)	-	-	4	(D)	-	-
Minnesota .....	-	-	-	-	-	-	-	-	-
Mississippi .....	6	350	58,478	1	(D)	5	(D)	-	-
Missouri .....	6	1	34	6	34	-	-	-	-
Montana .....	11	14	4,856	-	-	-	-	11	4,856
Nebraska .....	5	100	(D)	5	(D)	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-
New Hampshire .....	10	15	16,890	5	(D)	5	(D)	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-
New Mexico .....	20	1,077	506,372	12	92,672	6	48,878	8	364,823
New York .....	5	30	7,500	5	6,750	5	750	-	-
North Carolina .....	32	99	4,908	19	(D)	19	(D)	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-
Ohio .....	9	477	32,611	-	-	7	(D)	2	(D)
Oklahoma .....	1	(D)	(D)	-	-	1	(D)	-	-
Oregon .....	11	31	1,954	-	-	6	1,629	5	325
Pennsylvania .....	14	186	(D)	7	81	7	(D)	-	-
Rhode Island .....	1	(D)	(D)	-	-	1	(D)	-	-
South Carolina .....	15	(D)	(D)	15	(D)	-	-	1	(D)
South Dakota .....	-	-	-	-	-	-	-	-	-
Tennessee .....	-	-	-	-	-	-	-	-	-
Texas .....	36	1,902	364,520	14	171,770	-	-	24	192,749
Utah .....	7	190	(D)	-	-	-	-	7	(D)
Vermont .....	-	-	-	-	-	-	-	-	-
Virginia .....	6	1	12	-	-	6	12	-	-
Washington .....	2	(D)	(D)	2	(D)	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-
Wyoming .....	1	(D)	(D)	-	-	-	-	1	(D)
<b>Water Resources Regions</b>									
Region 01 New England .....	28	(D)	(D)	10	(D)	6	(D)	12	5,918
Region 02 Mid-Atlantic .....	20	186	2,473	7	81	13	2,392	-	-
Region 03 South Atlantic-Gulf .....	127	7,917	(D)	79	613,079	47	(D)	15	(D)
Region 04 Great Lakes .....	9	150	27,660	5	6,750	9	20,910	-	-
Region 05 Ohio .....	15	480	(D)	-	-	13	3,771	2	(D)
Region 06 Tennessee .....	2	(D)	(D)	2	(D)	-	-	-	-
Region 07 Upper Mississippi .....	2	(D)	(D)	-	-	2	(D)	-	-
Region 08 Lower Mississippi .....	1	(D)	(D)	1	(D)	-	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	50	2,546	1,379,214	26	(D)	2	(D)	37	(D)
Region 11 Arkansas-White-Red .....	37	937	252,265	15	(D)	17	128,620	5	(D)
Region 12 Texas-Gulf .....	21	1,266	238,998	11	125,114	-	-	12	113,884
Region 13 Rio Grande .....	24	1,164	511,216	6	(D)	6	(D)	18	(D)
Region 14 Upper Colorado .....	35	412	210,318	-	-	10	16,944	25	193,374
Region 15 Lower Colorado .....	30	2,984	3,310,417	17	(D)	2	(D)	21	1,761,306
Region 16 Great Basin .....	2	(D)	(D)	-	-	-	-	2	(D)
Region 17 Pacific Northwest .....	75	3,369	720,435	37	(D)	12	(D)	41	333,225
Region 18 California .....	62	4,980	3,796,664	34	2,142,282	21	614,476	22	1,039,905
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	22	18	8,095	7	350	22	7,745	-	-

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**Table 4. Estimated Quantity of Water Applied to Crops Grown in the Open on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Sprinkler								
	Operations	Acres irrigated	Gallons applied (1,000)	Water source					
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers	
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)
United States .....	10,583	412,421	135,275,186	6,977	76,076,598	3,628	41,948,780	1,880	17,249,807
Alabama .....	250	18,019	5,672,280	162	2,334,106	105	3,137,514	42	200,659
Alaska .....	13	(D)	328	9	256	4	72	-	-
Arizona .....	52	3,700	5,396,994	34	679,495	15	79,732	17	4,637,767
Arkansas .....	62	7,020	1,750,898	32	839,488	25	(D)	17	(D)
California .....	851	27,443	23,419,352	448	18,413,785	166	1,899,778	379	3,105,789
Colorado .....	125	8,277	4,974,982	76	3,136,742	23	701,763	47	1,136,478
Connecticut .....	102	1,750	832,581	59	30,735	38	800,796	17	1,049
Delaware .....	41	1,822	510,353	32	432,794	31	77,559	-	-
Florida .....	1,763	41,271	11,762,373	1,518	8,981,525	444	2,533,667	114	247,181
Georgia .....	382	30,501	8,497,603	288	4,885,875	154	(D)	15	(D)
Hawaii .....	249	815	277,947	82	71,683	27	35,548	166	170,716
Idaho .....	132	6,659	1,661,542	66	(D)	35	(D)	58	646,185
Illinois .....	193	13,793	1,980,820	140	1,616,771	85	361,281	8	2,768
Indiana .....	130	6,499	798,964	80	577,323	44	219,573	24	2,068
Iowa .....	70	2,906	239,183	34	223,947	41	15,218	6	17
Kansas .....	30	2,886	578,587	24	394,388	11	184,199	-	-
Kentucky .....	96	1,428	226,475	18	3,122	48	216,820	36	6,533
Louisiana .....	256	4,763	1,013,461	196	(D)	97	331,577	19	(D)
Maine .....	69	1,078	326,193	46	(D)	23	279,844	7	(D)
Maryland .....	137	5,713	1,368,241	101	1,148,311	48	(D)	12	(D)
Massachusetts .....	153	972	49,609	76	(D)	68	23,391	20	(D)
Michigan .....	409	13,312	1,632,351	270	917,543	157	536,479	68	178,330
Minnesota .....	198	6,556	954,212	168	583,518	59	369,944	5	750
Mississippi .....	104	1,891	424,045	81	71,070	17	(D)	13	(D)
Missouri .....	91	5,802	1,033,875	57	397,182	41	636,688	6	5
Montana .....	105	1,612	452,132	78	276,652	23	169,962	13	5,518
Nebraska .....	73	2,874	760,107	63	743,166	5	(D)	6	(D)
Nevada .....	4	(D)	(D)	4	(D)	1	(D)	-	-
New Hampshire .....	73	418	37,538	59	26,917	13	(D)	7	(D)
New Jersey .....	366	18,267	4,436,430	277	2,738,952	129	(D)	22	(D)
New Mexico .....	4	1,497	(D)	4	110,525	1	(D)	-	-
New York .....	287	7,857	436,151	179	217,025	98	215,517	54	3,609
North Carolina .....	479	17,427	5,150,970	223	405,301	314	4,616,533	36	129,136
North Dakota .....	3	61	23,037	-	-	3	23,037	-	-
Ohio .....	209	5,396	909,704	102	(D)	106	595,154	35	(D)
Oklahoma .....	110	17,634	4,539,684	50	1,800,918	45	1,990,708	35	748,058
Oregon .....	880	31,261	15,107,879	576	(D)	324	(D)	163	(D)
Pennsylvania .....	209	1,755	563,300	145	(D)	81	(D)	32	324,644
Rhode Island .....	52	2,083	477,252	13	(D)	33	(D)	14	46,453
South Carolina .....	155	11,096	1,952,985	118	930,440	77	1,022,317	6	228
South Dakota .....	18	873	268,163	11	(D)	2	(D)	5	(D)
Tennessee .....	229	8,787	2,270,747	102	291,062	122	1,939,218	34	40,466
Texas .....	436	38,164	14,328,971	324	8,914,160	173	2,758,256	114	2,856,555
Utah .....	85	4,356	2,757,915	22	1,883,323	13	(D)	55	(D)
Vermont .....	62	70	2,864	37	(D)	18	(D)	7	(D)
Virginia .....	189	6,570	1,801,386	107	325,956	122	1,448,287	12	27,143
Washington .....	328	7,443	1,611,895	189	(D)	53	(D)	105	(D)
West Virginia .....	29	305	87,914	19	85,004	5	1,410	5	1,500
Wisconsin .....	219	10,539	1,027,797	171	905,913	53	118,123	13	3,761
Wyoming .....	21	(D)	441,179	7	234,445	8	203,754	11	2,980
<b>Water Resources Regions</b>									
Region 01 New England .....	473	6,322	1,724,529	271	89,442	181	1,537,938	65	97,148
Region 02 Mid-Atlantic .....	1,117	39,455	8,286,813	781	4,884,411	457	3,364,319	97	38,083
Region 03 South Atlantic-Gulf .....	3,109	121,330	33,838,871	2,386	17,611,781	1,103	15,578,701	225	648,389
Region 04 Great Lakes .....	712	17,559	2,414,197	438	1,003,759	270	1,228,174	110	182,263
Region 05 Ohio .....	432	13,344	2,749,149	192	575,357	199	1,836,928	118	336,863
Region 06 Tennessee .....	189	4,968	561,193	96	109,837	100	408,325	17	43,030
Region 07 Upper Mississippi .....	589	34,470	4,706,229	460	3,698,920	198	1,000,833	26	6,476
Region 08 Lower Mississippi .....	259	6,440	1,075,444	199	628,877	77	427,367	24	19,200
Region 09 Souris-Red-Rainy .....	20	103	26,170	9	21,208	14	4,962	-	-
Region 10 Missouri .....	308	15,719	5,866,190	212	3,737,652	81	1,416,883	56	711,455
Region 11 Arkansas-White-Red .....	237	30,816	8,410,904	114	4,360,785	107	(D)	60	(D)
Region 12 Texas-Gulf .....	424	36,415	14,252,967	324	8,914,160	168	2,682,924	107	2,655,883
Region 13 Rio Grande .....	12	1,588	122,093	9	(D)	1	(D)	3	1,955
Region 14 Upper Colorado .....	36	(D)	565,622	6	11,731	13	(D)	19	(D)
Region 15 Lower Colorado .....	54	3,874	5,448,661	36	689,828	17	121,066	17	4,637,767
Region 16 Great Basin .....	87	4,758	3,032,374	24	(D)	12	(D)	55	(D)
Region 17 Pacific Northwest .....	1,406	45,483	17,923,730	875	8,390,092	428	(D)	331	(D)
Region 18 California .....	857	28,149	23,991,775	454	18,985,850	171	1,899,818	384	3,106,106
Region 19 Alaska .....	13	(D)	328	9	256	4	72	-	-
Region 20 Hawaii .....	249	815	277,947	82	71,683	27	35,548	166	170,716

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**Table 4. Estimated Quantity of Water Applied to Crops Grown in the Open on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Drip, trickle, or low-flow micro irrigation								
	Operations	Acres irrigated	Gallons applied (1,000)	Water source					
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers	
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)
United States .....	7,153	183,569	56,058,674	5,019	19,617,193	1,627	4,641,396	1,448	31,800,085
Alabama .....	109	1,862	290,307	59	196,106	33	82,144	32	12,057
Alaska .....	4	(Z)	20	4	20	-	-	-	-
Arizona .....	74	1,414	1,315,835	38	264,630	13	296,382	26	754,823
Arkansas .....	12	128	(D)	12	(D)	-	-	-	-
California .....	949	17,648	6,340,224	500	4,119,703	139	123,513	486	2,097,008
Colorado .....	68	477	255,236	28	99,029	6	11,079	38	145,128
Connecticut .....	108	536	18,794	83	11,698	24	5,638	16	1,458
Delaware .....	20	3	489	10	378	-	-	10	111
Florida .....	876	19,271	6,696,979	755	(D)	178	1,316,396	56	(D)
Georgia .....	130	5,316	(D)	98	(D)	57	(D)	-	-
Hawaii .....	177	864	277,192	72	178,012	19	3,013	112	96,167
Idaho .....	78	855	349,445	32	(D)	32	(D)	31	(D)
Illinois .....	217	3,339	198,975	150	111,359	66	85,883	20	1,733
Indiana .....	152	770	60,857	122	52,084	24	8,204	18	568
Iowa .....	59	245	7,492	28	1,990	21	4,963	15	538
Kansas .....	56	146	46,789	34	38,876	7	700	15	7,213
Kentucky .....	175	407	69,926	58	(D)	48	42,273	85	(D)
Louisiana .....	43	582	55,361	41	(D)	2	(D)	-	-
Maine .....	97	114	3,823	74	2,822	17	992	6	8
Maryland .....	138	3,048	121,707	111	98,072	31	22,968	6	667
Massachusetts .....	143	336	9,148	84	5,631	26	(D)	45	(D)
Michigan .....	215	3,382	422,626	182	(D)	41	(D)	15	1,772
Minnesota .....	60	530	108,612	60	107,727	13	885	-	-
Mississippi .....	48	735	(D)	48	(D)	7	(D)	-	-
Missouri .....	138	1,396	105,136	91	95,399	30	2,339	21	7,398
Montana .....	43	111	12,139	43	11,059	6	1,080	-	-
Nebraska .....	80	935	74,384	71	63,922	15	10,462	-	-
Nevada .....	18	(D)	(D)	12	(D)	6	465	6	86
New Hampshire .....	83	261	30,359	71	27,609	2	(D)	11	(D)
New Jersey .....	216	2,989	565,428	207	536,382	13	(D)	8	(D)
New Mexico .....	31	91	(D)	31	(D)	-	-	-	-
New York .....	210	765	(D)	156	12,244	54	(D)	38	868
North Carolina .....	250	3,178	307,322	151	161,482	123	(D)	21	(D)
North Dakota .....	-	-	-	-	-	-	-	-	-
Ohio .....	178	1,568	159,938	123	104,946	71	48,430	10	6,562
Oklahoma .....	45	2,571	664,522	20	(D)	17	(D)	16	147
Oregon .....	316	79,507	22,216,399	244	(D)	100	150,062	44	(D)
Pennsylvania .....	429	1,801	59,331	344	47,944	104	9,320	43	2,066
Rhode Island .....	32	88	16,995	19	(D)	7	(D)	6	81
South Carolina .....	138	4,287	(D)	120	(D)	42	194,126	8	(D)
South Dakota .....	17	86	2,433	17	2,428	5	5	-	-
Tennessee .....	125	2,546	326,547	76	141,608	57	150,790	14	34,149
Texas .....	257	5,306	2,156,775	190	1,411,099	79	677,802	52	67,874
Utah .....	23	(D)	(D)	-	-	5	9,125	18	(D)
Vermont .....	31	49	15,793	19	(D)	12	(D)	-	-
Virginia .....	149	1,604	338,633	95	132,015	53	202,846	18	3,772
Washington .....	156	11,349	(D)	76	(D)	16	(D)	68	(D)
West Virginia .....	19	16	1,324	13	1,068	-	-	6	256
Wisconsin .....	153	726	(D)	147	(D)	6	3,528	-	-
Wyoming .....	8	4	(D)	-	-	-	-	8	(D)
<b>Water Resources Regions</b>									
Region 01 New England .....	474	1,364	90,114	343	61,487	75	(D)	84	(D)
Region 02 Mid-Atlantic .....	1,002	9,244	1,077,697	823	818,119	214	249,862	73	9,716
Region 03 South Atlantic-Gulf .....	1,534	34,502	8,907,607	1,214	5,987,059	445	2,491,648	117	428,900
Region 04 Great Lakes .....	460	5,437	603,072	356	436,993	110	161,927	49	4,151
Region 05 Ohio .....	558	3,588	366,036	303	(D)	172	196,705	144	(D)
Region 06 Tennessee .....	100	1,136	(D)	76	182,893	18	(D)	12	577
Region 07 Upper Mississippi .....	420	5,240	501,568	329	403,691	109	(D)	23	(D)
Region 08 Lower Mississippi .....	67	682	(D)	65	(D)	2	(D)	-	-
Region 09 Souris-Red-Rainy .....	3	9	1,500	3	1,260	3	240	-	-
Region 10 Missouri .....	259	1,664	181,742	177	(D)	36	(D)	57	(D)
Region 11 Arkansas-White-Red .....	135	3,615	737,693	91	(D)	26	22,548	30	(D)
Region 12 Texas-Gulf .....	256	4,705	2,129,685	189	1,400,010	77	663,802	50	65,874
Region 13 Rio Grande .....	31	91	(D)	31	(D)	-	-	-	-
Region 14 Upper Colorado .....	36	324	(D)	8	42,361	9	(D)	23	(D)
Region 15 Lower Colorado .....	82	1,419	1,315,928	38	264,630	13	296,382	34	754,916
Region 16 Great Basin .....	32	277	(D)	12	(D)	13	3,059	13	4,371
Region 17 Pacific Northwest .....	565	91,758	32,895,360	379	(D)	142	(D)	138	(D)
Region 18 California .....	958	17,650	6,340,668	506	4,119,757	144	123,553	489	2,097,359
Region 19 Alaska .....	4	(Z)	20	4	20	-	-	-	-
Region 20 Hawaii .....	177	864	277,192	72	178,012	19	3,013	112	96,167

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**Table 4. Estimated Quantity of Water Applied to Crops Grown in the Open on Irrigated Horticultural Operations by Method of Distribution and Water Source: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Subirrigation									
	Operations	Acres irrigated	Gallons applied (1,000)	Water source						
				Ground water (from wells)		On-farm surface water		Water from off-farm suppliers		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States .....	238	15,420	4,789,688	135	(D)	77	(D)	55	(D)	
Alabama .....	1	(D)	(D)	-	-	-	-	1	(D)	
Alaska .....	-	-	-	-	-	-	-	-	-	
Arizona .....	7	14	302	7	241	-	-	7	60	
Arkansas .....	5	125	16,293	-	-	5	16,293	-	-	
California .....	23	1,827	(D)	7	(D)	8	(D)	10	309,233	
Colorado .....	6	18	5,171	6	5,171	-	-	-	-	
Connecticut .....	-	-	-	-	-	-	-	-	-	
Delaware .....	4	32	8,064	4	8,064	-	-	-	-	
Florida .....	51	9,852	3,261,498	39	(D)	15	(D)	6	309,300	
Georgia .....	-	-	-	-	-	-	-	-	-	
Hawaii .....	15	9	1,204	7	980	-	-	8	224	
Idaho .....	1	(D)	(D)	1	(D)	-	-	-	-	
Illinois .....	-	-	-	-	-	-	-	-	-	
Indiana .....	-	-	-	-	-	-	-	-	-	
Iowa .....	-	-	-	-	-	-	-	-	-	
Kansas .....	-	-	-	-	-	-	-	-	-	
Kentucky .....	-	-	-	-	-	-	-	-	-	
Louisiana .....	2	(D)	(D)	-	-	2	(D)	-	-	
Maine .....	-	-	-	-	-	-	-	-	-	
Maryland .....	6	1	141	6	141	-	-	-	-	
Massachusetts .....	6	14	(D)	6	(D)	-	-	-	-	
Michigan .....	-	-	-	-	-	-	-	-	-	
Minnesota .....	-	-	-	-	-	-	-	-	-	
Mississippi .....	4	1,160	(D)	4	(D)	-	-	-	-	
Missouri .....	-	-	-	-	-	-	-	-	-	
Montana .....	-	-	-	-	-	-	-	-	-	
Nebraska .....	-	-	-	-	-	-	-	-	-	
Nevada .....	-	-	-	-	-	-	-	-	-	
New Hampshire .....	5	1	(D)	5	(D)	-	-	-	-	
New Jersey .....	5	150	(D)	-	-	5	(D)	-	-	
New Mexico .....	6	9	3,910	6	978	6	2,933	-	-	
New York .....	2	(D)	(D)	-	-	2	(D)	-	-	
North Carolina .....	6	168	52,099	5	(D)	1	(D)	-	-	
North Dakota .....	-	-	-	-	-	-	-	-	-	
Ohio .....	-	-	-	-	-	-	-	-	-	
Oklahoma .....	8	16	(D)	8	(D)	-	-	-	-	
Oregon .....	16	42	(D)	6	(D)	-	-	10	(D)	
Pennsylvania .....	6	3	(D)	-	-	-	-	6	(D)	
Rhode Island .....	-	-	-	-	-	-	-	-	-	
South Carolina .....	7	(D)	(D)	1	(D)	6	(D)	-	-	
South Dakota .....	-	-	-	-	-	-	-	-	-	
Tennessee .....	5	380	5,760	-	-	5	5,760	-	-	
Texas .....	7	21	6,032	-	-	7	6,032	-	-	
Utah .....	8	30	1,552	-	-	4	1,303	4	249	
Vermont .....	-	-	-	-	-	-	-	-	-	
Virginia .....	6	1	30	6	30	-	-	-	-	
Washington .....	11	(D)	536	5	9	11	527	-	-	
West Virginia .....	-	-	-	-	-	-	-	-	-	
Wisconsin .....	6	3	390	6	390	-	-	-	-	
Wyoming .....	3	(D)	(D)	-	-	-	-	3	(D)	
<b>Water Resources Regions</b>										
Region 01 New England .....	11	15	(D)	11	(D)	-	-	-	-	
Region 02 Mid-Atlantic .....	23	786	101,775	10	8,205	7	93,120	6	450	
Region 03 South Atlantic-Gulf .....	74	11,805	3,991,391	55	(D)	22	(D)	6	(D)	
Region 04 Great Lakes .....	-	-	-	-	-	-	-	-	-	
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-	
Region 06 Tennessee .....	6	455	7,760	-	-	5	(D)	1	(D)	
Region 07 Upper Mississippi .....	6	3	(D)	6	(D)	-	-	-	-	
Region 08 Lower Mississippi .....	2	(D)	(D)	-	-	2	(D)	-	-	
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	
Region 10 Missouri .....	3	25	(D)	-	-	-	-	3	(D)	
Region 11 Arkansas-White-Red .....	13	141	20,889	8	(D)	5	(D)	-	-	
Region 12 Texas-Gulf .....	-	-	-	-	-	-	-	-	-	
Region 13 Rio Grande .....	13	30	9,943	6	978	13	8,965	-	-	
Region 14 Upper Colorado .....	6	(D)	(D)	6	(D)	-	-	-	-	
Region 15 Lower Colorado .....	9	54	30,932	7	241	-	-	9	30,690	
Region 16 Great Basin .....	8	30	1,552	-	-	4	1,303	4	249	
Region 17 Pacific Northwest .....	28	213	(D)	12	(D)	11	527	10	(D)	
Region 18 California .....	21	1,787	(D)	7	(D)	8	(D)	8	278,603	
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii .....	15	9	1,204	7	980	-	-	8	224	



**Table 5. Recycled Water Use on Irrigated Horticultural Operations: 2008**

[Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Operations	Area irrigated with recycled water			
		Under protection		In the open	
		Operations	Square feet irrigated	Operations	Acres irrigated
United States .....	1,453	827	222,018,512	1,055	43,567
Alabama .....	38	16	1,042,000	38	1,606
Alaska .....	-	-	-	-	-
Arizona .....	4	3	27,122,320	2	(D)
Arkansas .....	2	2	(D)	2	(D)
California .....	129	93	48,765,774	79	3,696
Colorado .....	5	5	500	-	-
Connecticut .....	25	11	7,815,003	15	665
Delaware .....	-	-	-	-	-
Florida .....	102	39	6,973,428	83	3,584
Georgia .....	77	19	6,398,112	77	2,696
Hawaii .....	-	-	-	-	-
Idaho .....	2	-	-	2	(D)
Illinois .....	33	24	872,250	27	2,002
Indiana .....	26	8	674,000	20	107
Iowa .....	5	2	(D)	3	59
Kansas .....	5	-	-	5	4
Kentucky .....	-	-	-	-	-
Louisiana .....	55	50	2,958,246	36	506
Maine .....	15	15	3,139,263	-	-
Maryland .....	18	16	267,378	12	1,282
Massachusetts .....	21	14	370,000	14	(D)
Michigan .....	42	33	4,336,920	9	90
Minnesota .....	37	14	382,612	28	734
Mississippi .....	1	-	-	1	(D)
Missouri .....	21	13	8,213,000	15	(D)
Montana .....	7	5	22,000	2	(D)
Nebraska .....	-	-	-	-	-
Nevada .....	-	-	-	-	-
New Hampshire .....	7	6	396,000	1	(D)
New Jersey .....	36	16	3,980,475	31	416
New Mexico .....	-	-	-	-	-
New York .....	19	8	22,200	14	57
North Carolina .....	139	86	15,640,202	118	7,538
North Dakota .....	-	-	-	-	-
Ohio .....	81	55	10,352,060	46	874
Oklahoma .....	10	-	-	10	444
Oregon .....	97	49	15,822,272	85	3,908
Pennsylvania .....	64	34	20,629,052	36	133
Rhode Island .....	5	-	-	5	340
South Carolina .....	32	2	(D)	32	1,416
South Dakota .....	-	-	-	-	-
Tennessee .....	42	27	1,178,166	26	731
Texas .....	121	75	20,740,604	102	6,794
Utah .....	5	5	250,000	-	-
Vermont .....	-	-	-	-	-
Virginia .....	65	45	9,983,495	53	1,556
Washington .....	27	21	699,000	9	(D)
West Virginia .....	5	5	29,300	-	-
Wisconsin .....	25	11	828,000	14	608
Wyoming .....	3	-	-	3	2
<b>Water Resources Regions</b>					
Region 01 New England .....	73	46	11,720,266	35	1,281
Region 02 Mid-Atlantic .....	157	97	14,759,648	106	3,303
Region 03 South Atlantic-Gulf .....	400	172	32,842,062	356	16,925
Region 04 Great Lakes .....	130	80	14,815,068	70	1,384
Region 05 Ohio .....	84	46	21,341,830	60	899
Region 06 Tennessee .....	28	20	536,100	10	55
Region 07 Upper Mississippi .....	90	49	2,082,862	64	3,007
Region 08 Lower Mississippi .....	42	37	503,206	29	489
Region 09 Souris-Red-Rainy .....	3	-	-	3	(D)
Region 10 Missouri .....	35	20	9,801,000	22	33
Region 11 Arkansas-White-Red .....	34	14	216,500	29	802
Region 12 Texas-Gulf .....	111	75	20,740,604	92	6,473
Region 13 Rio Grande .....	-	-	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-
Region 15 Lower Colorado .....	4	3	27,122,320	2	(D)
Region 16 Great Basin .....	5	5	250,000	-	-
Region 17 Pacific Northwest .....	123	70	16,521,272	93	5,060
Region 18 California .....	134	93	48,765,774	84	3,700
Region 19 Alaska .....	-	-	-	-	-
Region 20 Hawaii .....	-	-	-	-	-

**Table 6. Reclaimed Water Use and Cost of Purchased Reclaimed Water on Irrigated Horticultural Operations: 2008**

[Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Operations	Estimated gallons (1,000)	Area irrigated				Purchased reclaimed water		
			Under protection		In the open		Operations	Gallons purchased (1,000)	Average price paid per 1,000 gallons (dollars)
			Operations	Square feet irrigated	Operations	Acres irrigated			
United States .....	202	1,900,670	48	2,432,209	182	6,736	39	(D)	(D)
Alabama .....	14	2,848	-	-	14	206	-	-	-
Alaska .....	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-
Arkansas .....	6	3	-	-	6	4	-	-	-
California .....	41	1,597,188	17	1,115,017	41	1,822	31	1,158,671	3
Colorado .....	1	(D)	-	-	1	(D)	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-
Florida .....	50	69,281	13	27,570	44	1,956	7	980	1
Georgia .....	-	-	-	-	-	-	-	-	-
Hawaii .....	1	(D)	-	-	1	(D)	-	-	-
Idaho .....	7	(D)	7	1,260,000	-	-	-	-	-
Illinois .....	-	-	-	-	-	-	-	-	-
Indiana .....	-	-	-	-	-	-	-	-	-
Iowa .....	-	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-
Kentucky .....	-	-	-	-	-	-	-	-	-
Louisiana .....	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-
Maryland .....	-	-	-	-	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-
Michigan .....	1	(D)	-	-	1	(D)	-	-	-
Minnesota .....	5	5,000	-	-	5	18	-	-	-
Mississippi .....	3	(Z)	-	-	3	180	-	-	-
Missouri .....	6	30	-	-	6	3	-	-	-
Montana .....	2	(D)	-	-	2	(D)	-	-	-
Nebraska .....	1	(D)	-	-	1	(D)	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-
New Mexico .....	-	-	-	-	-	-	-	-	-
New York .....	8	5,126	8	(D)	3	30	-	-	-
North Carolina .....	9	7,398	1	(D)	9	648	-	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-
Ohio .....	-	-	-	-	-	-	-	-	-
Oklahoma .....	1	(D)	-	-	1	(D)	-	-	-
Oregon .....	1	(D)	-	-	1	(D)	-	-	-
Pennsylvania .....	15	769	2	(D)	13	106	-	-	-
Rhode Island .....	-	-	-	-	-	-	-	-	-
South Carolina .....	7	(D)	-	-	7	(D)	1	(D)	(D)
South Dakota .....	-	-	-	-	-	-	-	-	-
Tennessee .....	-	-	-	-	-	-	-	-	-
Texas .....	11	46,400	-	-	11	347	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-
Vermont .....	-	-	-	-	-	-	-	-	-
Virginia .....	12	1,212	-	-	12	306	-	-	-
Washington .....	-	-	-	-	-	-	-	-	-
West Virginia .....	-	-	-	-	-	-	-	-	-
Wisconsin .....	-	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>									
Region 01 New England .....	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic .....	24	907	5	7,320	22	142	-	-	-
Region 03 South Atlantic-Gulf .....	89	163,167	14	49,842	83	3,496	8	(D)	(D)
Region 04 Great Lakes .....	6	(D)	5	30	1	(D)	-	-	-
Region 05 Ohio .....	-	-	-	-	-	-	-	-	-
Region 06 Tennessee .....	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi .....	5	5,000	-	-	5	18	-	-	-
Region 08 Lower Mississippi .....	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	8	(D)	-	-	8	(D)	-	-	-
Region 11 Arkansas-White-Red .....	9	(D)	-	-	9	354	-	-	-
Region 12 Texas-Gulf .....	9	44,400	-	-	9	147	-	-	-
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	10	2,020	7	1,260,000	3	140	-	-	-
Region 18 California .....	41	1,597,188	17	1,115,017	41	1,822	31	1,158,671	3
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	1	(D)	-	-	1	(D)	-	-	-

**Table 7. Other Uses of Irrigation Water on Horticultural Operations: 2008**

[Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Operations reporting <sup>1</sup>			
	Prevent freeze damage	Crop cooling to delay early budding or blooming, or to reduce heat stress	Leaching to remove salts from soil	Other purpose
United States .....	1,886	2,057	592	764
Alabama .....	22	36	6	15
Alaska .....	4	8	8	4
Arizona .....	8	26	8	5
Arkansas .....	2	6	-	2
California .....	145	188	113	45
Colorado .....	5	17	10	-
Connecticut .....	14	14	7	14
Delaware .....	-	11	-	-
Florida .....	792	253	63	93
Georgia .....	67	90	8	34
Hawaii .....	8	59	8	14
Idaho .....	11	38	7	15
Illinois .....	24	43	14	28
Indiana .....	17	63	20	6
Iowa .....	-	6	4	5
Kansas .....	7	11	7	16
Kentucky .....	12	23	16	37
Louisiana .....	23	53	18	6
Maine .....	7	20	-	8
Maryland .....	14	26	6	-
Massachusetts .....	20	17	6	-
Michigan .....	88	75	28	23
Minnesota .....	5	34	21	-
Mississippi .....	16	26	-	1
Missouri .....	37	34	6	15
Montana .....	7	6	5	33
Nebraska .....	-	16	6	-
Nevada .....	-	-	-	-
New Hampshire .....	1	17	5	11
New Jersey .....	34	39	7	15
New Mexico .....	-	-	-	-
New York .....	17	41	8	26
North Carolina .....	82	80	28	56
North Dakota .....	-	-	-	3
Ohio .....	9	60	3	27
Oklahoma .....	3	29	2	2
Oregon .....	71	165	20	32
Pennsylvania .....	55	68	25	70
Rhode Island .....	-	2	-	1
South Carolina .....	33	26	-	7
South Dakota .....	4	6	4	1
Tennessee .....	70	78	12	25
Texas .....	66	86	25	22
Utah .....	4	11	6	5
Vermont .....	-	12	-	-
Virginia .....	12	41	7	17
Washington .....	32	40	18	11
West Virginia .....	13	5	5	-
Wisconsin .....	25	44	19	14
Wyoming .....	-	8	3	-
<b>Water Resources Regions</b>				
Region 01 New England .....	42	70	18	34
Region 02 Mid-Atlantic .....	134	192	41	89
Region 03 South Atlantic-Gulf .....	1,011	504	110	211
Region 04 Great Lakes .....	109	133	31	64
Region 05 Ohio .....	49	166	36	74
Region 06 Tennessee .....	53	59	12	20
Region 07 Upper Mississippi .....	50	118	66	47
Region 08 Lower Mississippi .....	10	52	18	8
Region 09 Souris-Red-Rainy .....	-	5	-	-
Region 10 Missouri .....	23	59	32	45
Region 11 Arkansas-White-Red .....	50	92	10	14
Region 12 Texas-Gulf .....	60	68	25	16
Region 13 Rio Grande .....	5	-	5	-
Region 14 Upper Colorado .....	-	4	-	-
Region 15 Lower Colorado .....	8	26	8	5
Region 16 Great Basin .....	4	11	6	12
Region 17 Pacific Northwest .....	121	236	45	62
Region 18 California .....	145	195	113	45
Region 19 Alaska .....	4	8	8	4
Region 20 Hawaii .....	8	59	8	14

<sup>1</sup> Respondents could report more than one other use of irrigation water.

**Table 8. Discontinuance of All Irrigation on Horticultural Operations Since 2007 by Reason: 2008**

[Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Discontinued irrigation		Operations reporting reasons for discontinuance <sup>1 2</sup>							
	Operations	Operations reporting discontinuance to be permanent	Sufficient soil moisture	Shortage of surface water	Shortage of ground water	Irrigation is uneconomical	Restrictions on water use	Converted to agricultural enterprise that does not require irrigation	Available surface water too salty due to drought conditions	Other
United States .....	839	63	547	4	6	42	5	2	7	259
Alabama .....	8	-	2	-	-	-	-	-	-	6
Alaska .....	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-
Arkansas .....	6	-	6	-	-	-	-	-	-	-
California .....	19	-	12	-	-	-	-	-	-	7
Colorado .....	5	-	-	-	-	-	-	-	-	5
Connecticut .....	16	-	11	-	-	-	-	-	-	5
Delaware .....	-	-	-	-	-	-	-	-	-	-
Florida .....	22	4	10	2	-	3	-	-	-	7
Georgia .....	12	-	12	-	-	-	-	-	-	-
Hawaii .....	42	8	15	-	-	-	-	-	-	27
Idaho .....	-	-	-	-	-	-	-	-	-	-
Illinois .....	25	-	20	-	-	2	-	-	-	3
Indiana .....	20	6	6	-	-	-	-	-	6	8
Iowa .....	11	5	6	-	-	-	-	-	-	5
Kansas .....	13	-	11	-	-	7	-	-	-	2
Kentucky .....	47	2	21	-	-	6	-	2	-	24
Louisiana .....	-	-	-	-	-	-	-	-	-	-
Maine .....	12	-	12	-	-	-	-	-	-	-
Maryland .....	20	-	17	-	-	-	-	-	-	3
Massachusetts .....	18	-	12	-	-	-	-	-	-	6
Michigan .....	39	5	13	-	-	5	-	-	-	21
Minnesota .....	24	-	15	-	-	3	-	-	-	6
Mississippi .....	5	3	-	-	-	-	-	-	-	5
Missouri .....	33	-	27	-	-	-	-	-	-	6
Montana .....	-	-	-	-	-	-	-	-	-	-
Nebraska .....	5	-	5	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-
New Jersey .....	67	-	55	-	6	-	5	-	-	10
New Mexico .....	-	-	-	-	-	-	-	-	-	-
New York .....	22	-	14	-	-	-	-	-	-	8
North Carolina .....	64	7	41	-	-	7	-	-	-	16
North Dakota .....	-	-	-	-	-	-	-	-	-	-
Ohio .....	41	6	40	-	-	-	-	-	-	1
Oklahoma .....	9	-	8	-	-	-	-	-	1	-
Oregon .....	45	-	32	-	-	-	-	-	-	13
Pennsylvania .....	22	-	10	-	-	-	-	-	-	12
Rhode Island .....	6	-	-	-	-	-	-	-	-	6
South Carolina .....	21	-	6	2	-	-	-	-	-	13
South Dakota .....	-	-	-	-	-	-	-	-	-	-
Tennessee .....	26	6	16	-	-	3	-	-	-	7
Texas .....	6	-	6	-	-	-	-	-	-	-
Utah .....	-	-	-	-	-	-	-	-	-	-
Vermont .....	6	-	6	-	-	-	-	-	-	-
Virginia .....	5	-	5	-	-	-	-	-	-	5
Washington .....	67	5	57	-	-	6	-	-	-	10
West Virginia .....	-	-	-	-	-	-	-	-	-	-
Wisconsin .....	30	6	18	-	-	-	-	-	-	12
Wyoming .....	-	-	-	-	-	-	-	-	-	-
<b>Water Resources Regions</b>										
Region 01 New England .....	52	-	35	-	-	-	-	-	-	17
Region 02 Mid-Atlantic .....	125	-	98	-	6	-	5	-	-	30
Region 03 South Atlantic-Gulf .....	78	7	37	4	-	3	-	-	-	34
Region 04 Great Lakes .....	87	11	43	-	-	5	-	-	-	39
Region 05 Ohio .....	142	8	88	-	-	16	-	2	6	36
Region 06 Tennessee .....	31	7	20	-	-	-	-	-	-	11
Region 07 Upper Mississippi .....	73	11	48	-	-	5	-	-	-	20
Region 08 Lower Mississippi .....	14	6	6	-	-	-	-	-	-	8
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri .....	32	-	30	-	-	7	-	-	-	2
Region 11 Arkansas-White-Red .....	21	-	20	-	-	-	-	-	1	-
Region 12 Texas-Gulf .....	6	-	6	-	-	-	-	-	-	-
Region 13 Rio Grande .....	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado .....	5	-	-	-	-	-	-	-	-	5
Region 15 Lower Colorado .....	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin .....	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest .....	112	5	89	-	-	6	-	-	-	23
Region 18 California .....	19	-	12	-	-	-	-	-	-	7
Region 19 Alaska .....	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii .....	42	8	15	-	-	-	-	-	-	27

<sup>1</sup> Respondents could choose more than one reason for not irrigating in 2008.

<sup>2</sup> No data were reported in the additional report form categories of surplus soil moisture or flooding, land degradation (erosion, salinity, etc.), loss of water rights, sold or leased water, and converted to non-agricultural uses.

**Table 9. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2008**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	All operations with irrigated horticulture					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	20,610	1,423,578,687	1,369,090,815	18,797	791,987	579,633
Alabama .....	248	19,804,213	19,793,413	303	25,209	20,170
Alaska .....	69	493,524	493,524	29	31	31
Arizona .....	111	41,873,904	41,872,084	142	8,004	7,451
Arkansas .....	110	4,384,340	4,384,340	128	8,487	7,412
California .....	1,636	239,155,164	221,413,474	1,897	57,732	52,886
Colorado .....	176	7,137,602	6,920,954	265	13,646	11,841
Connecticut .....	318	21,783,684	17,408,464	234	6,884	2,356
Delaware .....	88	1,609,512	1,600,512	55	1,896	1,856
Florida .....	1,377	342,186,011	338,298,971	2,211	84,332	72,609
Georgia .....	305	24,155,246	22,951,834	507	39,145	36,568
Hawaii .....	562	29,271,934	28,749,930	494	2,124	1,793
Idaho .....	140	2,302,790	2,288,790	236	11,041	10,719
Illinois .....	482	44,950,503	44,801,203	413	31,979	17,274
Indiana .....	393	7,145,044	7,015,798	289	9,228	7,268
Iowa .....	215	15,538,896	15,482,226	155	5,440	3,178
Kansas .....	189	7,526,148	7,180,898	154	4,482	3,074
Kentucky .....	564	13,405,128	13,318,362	340	6,708	1,909
Louisiana .....	236	9,955,738	9,920,738	290	7,383	5,401
Maine .....	354	7,171,628	6,833,315	214	2,506	1,327
Maryland .....	307	10,954,369	10,791,959	272	11,356	8,764
Massachusetts .....	448	9,849,814	9,508,662	314	2,140	1,444
Michigan .....	1,043	64,442,619	62,986,691	659	36,755	16,882
Minnesota .....	350	20,495,877	19,742,327	282	14,130	7,165
Mississippi .....	146	6,159,100	6,062,850	177	5,509	4,172
Missouri .....	370	14,267,264	14,167,884	284	11,842	7,269
Montana .....	203	1,494,034	1,391,172	199	1,784	1,769
Nebraska .....	137	1,830,496	1,796,561	166	5,098	3,926
Nevada .....	17	50,325	46,725	28	829	829
New Hampshire .....	241	4,088,644	4,013,644	170	972	714
New Jersey .....	613	44,994,489	44,443,422	560	30,506	21,409
New Mexico .....	92	9,613,518	7,769,978	73	2,948	2,679
New York .....	951	21,584,724	21,380,080	575	15,142	8,765
North Carolina .....	828	34,350,958	33,926,877	782	30,369	20,932
North Dakota .....	27	742,626	742,626	3	61	61
Ohio .....	807	37,135,295	36,921,081	463	18,798	7,238
Oklahoma .....	184	2,863,686	2,863,686	154	23,753	19,836
Oregon .....	1,099	46,247,355	45,513,689	1,182	59,225	52,679
Pennsylvania .....	1,353	74,926,310	64,534,712	817	17,301	4,115
Rhode Island .....	133	1,358,596	1,315,996	98	3,177	2,383
South Carolina .....	170	7,066,826	6,713,170	273	21,228	18,418
South Dakota .....	52	489,936	478,832	43	1,316	966
Tennessee .....	576	9,753,743	9,603,037	391	25,198	12,046
Texas .....	720	99,314,549	94,533,909	727	51,103	45,134
Utah .....	93	8,627,968	8,375,468	111	5,051	4,601
Vermont .....	239	3,269,212	3,228,820	139	617	186
Virginia .....	386	15,709,916	14,769,134	359	13,388	8,285
Washington .....	506	18,628,574	17,603,094	511	20,398	19,172
West Virginia .....	138	1,918,400	1,918,400	78	1,619	339
Wisconsin .....	778	10,873,679	10,605,423	521	33,308	11,543
Wyoming .....	30	624,776	612,076	30	813	793
<b>Water Resources Regions</b>						
Region 01 New England .....	1,569	44,764,456	39,551,779	1,087	15,767	8,284
Region 02 Mid-Atlantic .....	3,102	138,504,942	126,858,705	2,307	75,467	49,633
Region 03 South Atlantic-Gulf .....	2,945	428,947,796	423,432,868	4,187	205,830	173,361
Region 04 Great Lakes .....	2,108	105,073,601	103,282,299	1,311	56,842	23,113
Region 05 Ohio .....	1,924	57,432,358	56,636,700	1,207	46,124	18,012
Region 06 Tennessee .....	601	16,294,364	15,810,663	345	12,410	6,791
Region 07 Upper Mississippi .....	1,551	82,317,955	81,222,769	1,165	81,659	39,991
Region 08 Lower Mississippi .....	348	8,604,138	8,410,152	330	10,467	7,394
Region 09 Souris-Red-Rainy .....	40	735,226	735,226	20	487	112
Region 10 Missouri .....	777	30,456,928	30,080,101	749	26,299	20,172
Region 11 Arkansas-White-Red .....	513	12,749,404	12,291,954	488	42,874	35,188
Region 12 Texas-Gulf .....	676	98,600,961	93,820,321	687	47,703	42,144
Region 13 Rio Grande .....	72	801,718	733,858	76	3,117	2,851
Region 14 Upper Colorado .....	43	2,264,250	2,238,570	107	1,673	1,593
Region 15 Lower Colorado .....	129	51,097,904	49,342,484	171	8,903	8,350
Region 16 Great Basin .....	99	8,204,293	7,951,793	117	5,638	5,189
Region 17 Pacific Northwest .....	1,829	67,700,491	65,926,365	2,026	90,847	82,753
Region 18 California .....	1,653	239,262,444	221,520,754	1,894	57,725	52,878
Region 19 Alaska .....	69	493,524	493,524	29	31	31
Region 20 Hawaii .....	562	29,271,934	28,749,930	494	2,124	1,793

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**Table 9. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$0 - \$9,999					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	2,398	5,242,090	4,693,599	2,851	6,000	4,824
Alabama .....	18	14,940	14,940	6	1	1
Alaska .....	5	5,808	5,808	4	4	4
Arizona .....	8	1,024	1,024	-	-	-
Arkansas .....	12	33,648	33,648	24	22	19
California .....	152	234,072	211,438	302	1,002	993
Colorado .....	10	16,500	16,500	17	73	73
Connecticut .....	11	81,000	81,000	24	11	11
Delaware .....	-	-	-	9	9	9
Florida .....	137	216,850	212,700	320	663	652
Georgia .....	68	297,482	297,482	99	108	96
Hawaii .....	99	298,628	298,628	166	213	192
Idaho .....	48	35,920	35,920	111	298	298
Illinois .....	12	24,600	15,000	26	17	17
Indiana .....	24	17,712	17,712	18	11	11
Iowa .....	5	11,280	11,280	15	7	7
Kansas .....	19	51,800	51,800	6	1	1
Kentucky .....	137	270,342	256,092	74	96	(D)
Louisiana .....	26	24,052	24,052	21	581	42
Maine .....	60	62,298	58,578	29	78	78
Maryland .....	33	32,974	32,974	11	6	4
Massachusetts .....	37	89,472	86,352	37	114	114
Michigan .....	113	386,314	370,714	92	152	101
Minnesota .....	31	26,240	26,240	40	26	21
Mississippi .....	19	40,800	40,800	48	65	44
Missouri .....	30	33,396	22,596	12	1	1
Montana .....	71	61,201	60,919	94	99	(D)
Nebraska .....	10	102,400	102,400	37	45	38
Nevada .....	-	-	-	6	4	4
New Hampshire .....	20	21,220	21,220	25	19	19
New Jersey .....	24	30,366	30,366	63	346	195
New Mexico .....	-	-	-	12	24	7
New York .....	79	119,484	110,884	27	18	18
North Carolina .....	171	756,298	332,217	130	177	135
North Dakota .....	-	-	-	-	-	-
Ohio .....	93	188,696	188,696	61	103	73
Oklahoma .....	24	5,440	5,440	16	32	32
Oregon .....	215	549,992	543,872	251	481	324
Pennsylvania .....	121	184,554	184,554	110	160	108
Rhode Island .....	6	7,200	7,200	-	-	-
South Carolina .....	18	23,400	23,400	45	46	44
South Dakota .....	4	1,176	1,176	4	1	1
Tennessee .....	99	203,379	198,629	38	54	54
Texas .....	76	128,639	128,639	99	149	149
Utah .....	4	40,000	40,000	33	122	122
Vermont .....	31	63,884	56,492	25	16	16
Virginia .....	34	32,896	31,840	51	64	64
Washington .....	105	306,632	294,296	128	336	332
West Virginia .....	10	47,500	47,500	10	9	9
Wisconsin .....	69	60,581	60,581	75	140	140
Wyoming .....	-	-	-	-	-	-
<b>Water Resources Regions</b>						
Region 01 New England .....	153	324,198	309,966	128	236	236
Region 02 Mid-Atlantic .....	211	331,780	327,124	230	577	374
Region 03 South Atlantic-Gulf .....	410	1,217,154	903,604	632	1,019	952
Region 04 Great Lakes .....	196	532,358	511,758	161	276	193
Region 05 Ohio .....	302	474,857	455,857	186	181	155
Region 06 Tennessee .....	99	285,610	170,929	28	29	29
Region 07 Upper Mississippi .....	116	126,761	117,161	114	126	121
Region 08 Lower Mississippi .....	37	68,452	57,652	38	627	(D)
Region 09 Souris-Red-Rainy .....	-	-	-	5	5	5
Region 10 Missouri .....	75	191,989	191,707	102	(D)	75
Region 11 Arkansas-White-Red .....	61	94,188	94,188	53	73	73
Region 12 Texas-Gulf .....	64	95,939	95,939	87	124	124
Region 13 Rio Grande .....	-	-	-	19	(D)	(D)
Region 14 Upper Colorado .....	-	-	-	27	140	140
Region 15 Lower Colorado .....	8	1,024	1,024	6	4	4
Region 16 Great Basin .....	4	40,000	40,000	25	61	61
Region 17 Pacific Northwest .....	400	915,912	897,456	532	1,161	1,001
Region 18 California .....	158	237,432	214,798	308	1,003	994
Region 19 Alaska .....	5	5,808	5,808	4	4	4
Region 20 Hawaii .....	99	298,628	298,628	166	213	192

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**Table 9. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$10,000 - \$24,999					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	2,842	26,460,781	25,357,055	2,626	21,974	12,445
Alabama .....	19	1,832,000	1,826,000	43	2,123	1,941
Alaska .....	8	36,000	36,000	8	8	8
Arizona .....	8	100,000	100,000	13	62	62
Arkansas .....	40	271,892	271,892	23	77	69
California .....	172	633,573	623,353	210	775	673
Colorado .....	12	9,720	6,600	44	140	136
Connecticut .....	52	275,848	206,848	36	40	40
Delaware .....	28	(D)	(D)	19	72	32
Florida .....	197	9,619,207	9,545,523	291	2,489	2,029
Georgia .....	12	9,000	9,000	81	654	627
Hawaii .....	95	1,741,060	1,643,060	82	148	99
Idaho .....	7	19,600	19,600	15	124	124
Illinois .....	56	254,500	254,500	57	554	78
Indiana .....	36	122,640	122,640	30	74	31
Iowa .....	37	(D)	(D)	22	158	137
Kansas .....	44	100,652	100,652	25	21	21
Kentucky .....	59	460,664	460,664	63	172	161
Louisiana .....	-	-	-	28	46	46
Maine .....	85	239,788	180,292	39	(D)	57
Maryland .....	35	92,932	92,932	29	54	29
Massachusetts .....	38	182,266	170,266	18	(D)	45
Michigan .....	103	643,340	515,340	106	1,170	502
Minnesota .....	40	366,170	366,170	14	11	11
Mississippi .....	14	306,600	306,600	20	21	21
Missouri .....	79	286,440	259,812	61	66	35
Montana .....	37	112,392	111,412	27	34	34
Nebraska .....	21	(D)	(D)	25	554	229
Nevada .....	11	26,325	26,325	12	13	13
New Hampshire .....	26	83,344	75,844	22	20	20
New Jersey .....	85	1,089,380	749,180	85	1,971	1,833
New Mexico .....	6	(D)	(D)	12	252	252
New York .....	117	305,260	300,560	66	161	161
North Carolina .....	139	1,083,338	1,083,338	135	749	422
North Dakota .....	-	-	-	-	-	-
Ohio .....	120	537,286	537,286	77	5,527	130
Oklahoma .....	17	167,000	167,000	17	61	27
Oregon .....	177	1,009,386	927,356	197	998	766
Pennsylvania .....	219	1,011,666	988,638	110	371	153
Rhode Island .....	27	63,184	63,184	6	120	(D)
South Carolina .....	33	110,700	110,700	54	214	214
South Dakota .....	8	16,000	16,000	-	-	-
Tennessee .....	99	527,392	527,392	84	254	152
Texas .....	80	734,196	709,596	63	510	426
Utah .....	4	16,000	16,000	14	180	180
Vermont .....	31	64,992	61,992	25	139	(D)
Virginia .....	60	535,680	479,060	38	117	107
Washington .....	108	335,230	317,178	109	359	202
West Virginia .....	15	169,680	169,680	3	24	12
Wisconsin .....	126	499,670	460,762	68	110	51
Wyoming .....	-	-	-	-	-	-
<b>Water Resources Regions</b>						
Region 01 New England .....	234	856,430	705,434	134	390	187
Region 02 Mid-Atlantic .....	467	2,778,362	2,411,634	311	2,509	2,155
Region 03 South Atlantic-Gulf .....	399	13,123,595	12,993,291	604	6,017	5,304
Region 04 Great Lakes .....	280	1,341,286	1,184,778	178	1,441	711
Region 05 Ohio .....	213	1,125,298	1,125,298	210	6,028	332
Region 06 Tennessee .....	97	560,762	554,762	69	413	108
Region 07 Upper Mississippi .....	216	991,382	961,122	148	809	287
Region 08 Lower Mississippi .....	28	90,880	90,880	25	80	74
Region 09 Souris-Red-Rainy .....	5	50,000	50,000	-	-	-
Region 10 Missouri .....	118	338,256	312,328	101	688	353
Region 11 Arkansas-White-Red .....	94	533,848	530,728	79	115	72
Region 12 Texas-Gulf .....	74	706,548	681,948	63	510	426
Region 13 Rio Grande .....	6	(D)	(D)	12	252	252
Region 14 Upper Colorado .....	6	(D)	(D)	16	40	40
Region 15 Lower Colorado .....	8	100,000	100,000	13	62	62
Region 16 Great Basin .....	15	42,325	42,325	26	193	193
Region 17 Pacific Northwest .....	301	1,379,256	1,278,194	337	1,499	1,110
Region 18 California .....	178	635,493	625,273	210	775	673
Region 19 Alaska .....	8	36,000	36,000	8	8	8
Region 20 Hawaii .....	95	1,741,060	1,643,060	82	148	99

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**Table 9. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$25,000 - \$49,999					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	2,691	31,644,424	30,878,885	2,034	13,534	9,709
Alabama .....	35	199,800	199,800	24	56	56
Alaska .....	20	54,320	54,320	8	12	12
Arizona .....	7	31,500	29,680	21	53	27
Arkansas .....	6	9,600	9,600	17	114	114
California .....	143	3,733,644	3,590,795	188	1,550	1,263
Colorado .....	15	44,600	44,600	35	627	573
Connecticut .....	54	429,300	426,800	37	139	42
Delaware .....	10	35,000	35,000	-	-	-
Florida .....	132	5,828,893	5,828,893	249	1,706	1,574
Georgia .....	54	2,032,068	1,996,068	28	747	571
Hawaii .....	53	1,741,660	1,741,660	60	151	116
Idaho .....	14	53,620	53,620	38	485	445
Illinois .....	38	250,304	243,104	28	289	32
Indiana .....	72	549,636	527,430	36	116	68
Iowa .....	38	258,456	255,456	11	2	2
Kansas .....	19	97,250	92,000	27	66	66
Kentucky .....	92	794,336	778,316	36	59	(D)
Louisiana .....	39	323,608	323,608	44	155	155
Maine .....	40	128,178	118,578	29	178	63
Maryland .....	52	222,486	222,486	53	406	354
Massachusetts .....	57	327,660	316,628	50	136	73
Michigan .....	112	1,165,182	1,160,682	51	1,100	120
Minnesota .....	38	228,200	215,900	26	38	22
Mississippi .....	19	151,000	151,000	11	151	151
Missouri .....	87	428,140	391,300	49	44	30
Montana .....	22	407,600	407,000	11	21	21
Nebraska .....	41	375,920	372,570	30	198	174
Nevada .....	-	-	-	-	-	-
New Hampshire .....	45	134,660	132,410	30	23	22
New Jersey .....	72	846,758	834,566	29	46	45
New Mexico .....	18	113,382	113,382	12	39	39
New York .....	149	798,328	773,584	76	197	128
North Carolina .....	75	734,512	734,512	74	353	294
North Dakota .....	-	-	-	3	61	61
Ohio .....	81	962,615	951,863	37	427	169
Oklahoma .....	42	185,545	185,545	-	-	-
Oregon .....	126	883,790	837,890	82	271	271
Pennsylvania .....	201	1,864,038	1,565,818	121	890	297
Rhode Island .....	18	113,400	96,000	24	(D)	186
South Carolina .....	13	72,600	72,600	26	46	36
South Dakota .....	4	7,200	7,200	4	6	6
Tennessee .....	89	1,340,512	1,338,212	38	325	320
Texas .....	117	1,408,940	1,402,940	113	1,563	1,472
Utah .....	5	30,000	30,000	4	24	24
Vermont .....	72	411,534	411,534	27	(D)	21
Virginia .....	58	687,576	687,576	23	26	26
Washington .....	54	216,240	216,240	45	49	49
West Virginia .....	30	284,500	284,500	10	(D)	(D)
Wisconsin .....	113	646,333	615,619	56	331	65
Wyoming .....	-	-	-	3	(D)	(D)
<b>Water Resources Regions</b>						
Region 01 New England .....	221	1,134,598	1,091,816	177	687	387
Region 02 Mid-Atlantic .....	483	3,807,602	3,478,390	265	1,532	834
Region 03 South Atlantic-Gulf .....	333	9,135,969	9,099,969	413	3,010	2,633
Region 04 Great Lakes .....	257	2,294,548	2,246,350	133	1,308	262
Region 05 Ohio .....	264	2,278,461	2,258,801	95	436	159
Region 06 Tennessee .....	101	1,662,820	1,660,520	48	374	369
Region 07 Upper Mississippi .....	191	1,084,367	1,042,589	103	673	123
Region 08 Lower Mississippi .....	39	323,608	323,608	44	155	155
Region 09 Souris-Red-Rainy .....	6	9,600	9,600	6	2	1
Region 10 Missouri .....	151	1,144,960	1,131,170	123	684	592
Region 11 Arkansas-White-Red .....	85	405,795	370,545	54	979	919
Region 12 Texas-Gulf .....	117	1,408,940	1,402,940	105	888	857
Region 13 Rio Grande .....	12	104,382	104,382	6	18	18
Region 14 Upper Colorado .....	4	4,000	4,000	11	175	175
Region 15 Lower Colorado .....	7	31,500	29,680	34	729	703
Region 16 Great Basin .....	5	30,000	30,000	4	24	24
Region 17 Pacific Northwest .....	199	1,253,650	1,207,750	170	825	785
Region 18 California .....	143	3,733,644	3,590,795	175	873	587
Region 19 Alaska .....	20	54,320	54,320	8	12	12
Region 20 Hawaii .....	53	1,741,660	1,741,660	60	151	116

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**Table 9. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$50,000 - \$99,999					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	3,018	45,125,143	43,515,189	2,388	30,633	18,799
Alabama .....	30	257,520	257,520	15	371	294
Alaska .....	16	71,280	71,280	1	(D)	(D)
Arizona .....	7	245,000	245,000	8	79	79
Arkansas .....	22	178,200	178,200	20	502	277
California .....	207	3,310,237	3,059,507	191	2,099	1,556
Colorado .....	11	81,600	81,600	19	322	302
Connecticut .....	52	1,267,110	1,267,110	33	162	132
Delaware .....	10	350,000	350,000	-	-	-
Florida .....	126	8,787,622	8,785,382	315	5,062	3,610
Georgia .....	37	222,408	190,008	69	571	393
Hawaii .....	83	2,842,070	2,830,870	42	191	191
Idaho .....	-	-	-	8	32	32
Illinois .....	57	558,600	558,600	44	371	211
Indiana .....	84	776,556	769,596	58	662	255
Iowa .....	47	292,000	283,750	26	425	249
Kansas .....	20	106,068	106,068	22	75	75
Kentucky .....	88	1,067,966	1,067,966	47	69	(D)
Louisiana .....	40	286,086	251,086	32	84	63
Maine .....	36	162,048	159,648	12	20	20
Maryland .....	28	513,904	496,404	28	370	318
Massachusetts .....	91	536,700	505,700	72	(D)	(D)
Michigan .....	145	1,976,532	1,940,532	77	1,443	443
Minnesota .....	36	349,380	328,130	33	171	67
Mississippi .....	20	171,500	171,500	14	334	234
Missouri .....	53	451,192	448,192	39	2,703	1,460
Montana .....	33	255,149	202,149	23	189	189
Nebraska .....	16	105,236	105,236	22	323	323
Nevada .....	6	24,000	20,400	6	3	3
New Hampshire .....	42	287,550	260,300	17	(D)	(D)
New Jersey .....	100	1,124,074	1,098,874	65	750	381
New Mexico .....	43	567,136	490,876	13	3	3
New York .....	198	2,022,880	1,962,180	92	1,794	835
North Carolina .....	136	2,363,624	2,363,624	127	1,668	758
North Dakota .....	9	39,600	39,600	-	-	-
Ohio .....	147	1,260,280	1,260,280	80	1,265	226
Oklahoma .....	25	155,920	155,920	33	576	374
Oregon .....	121	1,178,506	1,122,874	113	388	379
Pennsylvania .....	247	3,632,562	3,300,036	121	641	202
Rhode Island .....	27	210,132	198,932	20	8	8
South Carolina .....	38	377,148	377,148	53	1,210	940
South Dakota .....	12	54,936	52,280	13	87	87
Tennessee .....	89	1,465,812	1,424,292	33	351	351
Texas .....	85	1,950,540	1,950,540	91	1,762	1,505
Utah .....	24	194,170	194,170	18	178	178
Vermont .....	7	21,000	21,000	18	183	42
Virginia .....	37	418,840	418,840	25	792	486
Washington .....	74	1,191,500	732,920	63	290	249
West Virginia .....	36	293,210	293,210	13	(D)	52
Wisconsin .....	120	1,069,759	1,065,859	104	1,534	706
Wyoming .....	-	-	-	-	-	-
<b>Water Resources Regions</b>						
Region 01 New England .....	248	2,463,540	2,391,690	154	577	375
Region 02 Mid-Atlantic .....	463	5,915,240	5,706,414	282	4,178	2,151
Region 03 South Atlantic-Gulf .....	365	12,220,182	12,185,542	589	8,912	6,034
Region 04 Great Lakes .....	317	3,514,300	3,433,200	194	3,220	1,245
Region 05 Ohio .....	382	3,948,356	3,759,396	198	1,919	816
Region 06 Tennessee .....	96	1,511,712	1,470,192	40	83	(D)
Region 07 Upper Mississippi .....	219	2,067,087	2,041,937	152	1,383	501
Region 08 Lower Mississippi .....	69	572,886	537,886	32	368	(D)
Region 09 Souris-Red-Rainy .....	14	134,600	134,600	-	-	-
Region 10 Missouri .....	101	707,857	640,951	91	(D)	1,524
Region 11 Arkansas-White-Red .....	61	354,040	354,040	83	2,827	1,300
Region 12 Texas-Gulf .....	79	1,918,500	1,918,500	85	1,761	1,504
Region 13 Rio Grande .....	37	540,736	472,876	13	3	3
Region 14 Upper Colorado .....	12	86,400	78,000	13	262	242
Region 15 Lower Colorado .....	13	269,000	265,400	16	124	124
Region 16 Great Basin .....	24	194,170	194,170	18	178	178
Region 17 Pacific Northwest .....	212	2,482,950	1,968,738	196	822	772
Region 18 California .....	207	3,310,237	3,059,507	189	2,057	1,514
Region 19 Alaska .....	16	71,280	71,280	1	(D)	(D)
Region 20 Hawaii .....	83	2,842,070	2,830,870	42	191	191

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**Table 9. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$100,000 - \$249,999					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	3,851	111,668,352	108,844,757	3,211	63,484	46,280
Alabama .....	52	2,705,400	2,700,600	85	1,767	836
Alaska .....	12	94,116	94,116	4	(D)	(D)
Arizona .....	29	397,300	397,300	28	48	48
Arkansas .....	17	325,800	325,800	13	340	340
California .....	215	9,829,150	9,272,523	273	2,157	1,724
Colorado .....	56	1,071,110	1,048,382	58	1,166	1,077
Connecticut .....	59	1,430,136	1,429,296	32	60	60
Delaware .....	30	955,920	955,920	24	35	35
Florida .....	234	20,354,430	20,230,806	378	7,648	6,839
Georgia .....	38	699,800	594,800	64	3,013	2,637
Hawaii .....	129	4,415,300	4,023,496	76	277	267
Idaho .....	42	653,100	639,100	26	1,768	1,673
Illinois .....	167	3,520,064	3,520,064	106	1,484	1,368
Indiana .....	84	2,186,364	2,165,964	69	1,446	1,218
Iowa .....	42	558,240	558,240	47	76	(D)
Kansas .....	38	425,240	425,240	31	58	58
Kentucky .....	105	2,601,556	2,555,428	47	1,244	464
Louisiana .....	25	594,480	594,480	34	1,207	1,087
Maine .....	63	877,160	825,200	40	828	186
Maryland .....	53	1,732,900	1,732,900	23	427	357
Massachusetts .....	87	1,491,716	1,491,716	47	543	258
Michigan .....	210	5,805,796	5,642,076	118	3,073	1,953
Minnesota .....	98	1,825,265	1,825,265	74	2,224	1,718
Mississippi .....	19	396,000	396,000	24	652	517
Missouri .....	52	862,596	854,316	36	1,907	1,674
Montana .....	22	147,692	147,692	13	167	167
Nebraska .....	5	270,000	270,000	16	1,321	1,018
Nevada .....	-	-	-	1	(D)	(D)
New Hampshire .....	34	267,750	249,750	21	62	47
New Jersey .....	122	6,033,698	6,033,198	88	2,049	1,514
New Mexico .....	6	86,400	69,120	8	128	125
New York .....	164	4,173,950	4,155,550	132	1,491	779
North Carolina .....	120	3,548,851	3,548,851	123	2,225	1,453
North Dakota .....	9	252,000	252,000	-	-	-
Ohio .....	151	6,836,188	6,732,476	93	500	355
Oklahoma .....	34	472,000	472,000	31	791	752
Oregon .....	159	3,026,202	2,954,802	176	3,121	2,505
Pennsylvania .....	298	5,693,308	5,327,840	184	1,686	688
Rhode Island .....	38	556,420	542,420	26	490	249
South Carolina .....	28	821,300	478,300	21	744	569
South Dakota .....	16	119,264	110,816	19	731	381
Tennessee .....	106	2,421,792	2,421,792	67	3,190	1,454
Texas .....	144	4,143,472	4,011,472	119	5,224	4,313
Utah .....	15	682,500	680,000	14	(D)	(D)
Vermont .....	38	369,168	357,168	13	2	2
Virginia .....	60	730,698	711,618	65	1,513	851
Washington .....	62	779,912	752,200	57	813	813
West Virginia .....	26	587,010	587,010	31	(D)	(D)
Wisconsin .....	223	3,561,282	3,401,798	128	2,450	960
Wyoming .....	15	278,556	277,856	8	269	269
<b>Water Resources Regions</b>						
Region 01 New England .....	294	4,727,870	4,631,070	179	1,984	801
Region 02 Mid-Atlantic .....	598	16,463,738	16,365,690	434	6,523	3,658
Region 03 South Atlantic-Gulf .....	445	27,641,798	27,065,374	671	15,937	12,670
Region 04 Great Lakes .....	438	14,237,110	13,928,722	243	4,136	2,627
Region 05 Ohio .....	410	8,964,416	8,581,176	257	4,191	2,364
Region 06 Tennessee .....	127	2,914,895	2,914,895	78	1,719	(D)
Region 07 Upper Mississippi .....	409	7,157,295	7,050,079	293	7,656	5,441
Region 08 Lower Mississippi .....	47	1,072,080	1,072,080	29	1,343	1,103
Region 09 Souris-Red-Rainy .....	6	90,000	90,000	6	1	1
Region 10 Missouri .....	143	2,840,692	2,808,816	116	(D)	2,809
Region 11 Arkansas-White-Red .....	116	1,797,696	1,789,416	96	1,215	1,175
Region 12 Texas-Gulf .....	124	3,522,272	3,390,272	112	5,215	4,304
Region 13 Rio Grande .....	5	60,000	60,000	10	298	298
Region 14 Upper Colorado .....	15	227,110	209,830	24	586	526
Region 15 Lower Colorado .....	34	847,300	847,300	28	48	48
Region 16 Great Basin .....	10	232,500	230,000	15	(D)	(D)
Region 17 Pacific Northwest .....	274	4,533,014	4,419,902	267	5,864	5,153
Region 18 California .....	215	9,829,150	9,272,523	273	2,157	1,724
Region 19 Alaska .....	12	94,116	94,116	4	(D)	(D)
Region 20 Hawaii .....	129	4,415,300	4,023,496	76	277	267

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**Table 9. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$250,000 - \$499,999					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	1,999	135,011,360	122,384,618	1,923	83,553	55,162
Alabama .....	52	2,957,159	2,957,159	68	2,578	2,221
Alaska .....	4	160,000	160,000	4	1	1
Arizona .....	10	264,000	264,000	28	503	478
Arkansas .....	6	55,200	55,200	19	2,515	1,995
California .....	212	18,399,930	14,636,203	212	5,905	4,554
Colorado .....	27	1,021,460	950,660	25	1,149	1,042
Connecticut .....	37	6,980,580	2,711,700	22	219	59
Delaware .....	9	72,000	63,000	-	-	-
Florida .....	123	40,028,874	39,035,224	188	6,483	5,264
Georgia .....	25	3,317,224	2,974,312	50	2,871	2,238
Hawaii .....	46	1,092,448	1,092,448	30	172	172
Idaho .....	10	6,550	6,550	3	150	90
Illinois .....	52	995,736	875,736	52	3,022	1,306
Indiana .....	30	920,400	884,400	30	381	266
Iowa .....	17	517,800	517,800	17	1,062	1,017
Kansas .....	24	3,399,696	3,399,696	16	1,949	949
Kentucky .....	34	2,006,500	2,006,500	28	2,446	636
Louisiana .....	26	961,240	961,240	35	792	736
Maine .....	36	542,256	542,256	31	340	128
Maryland .....	29	603,930	551,220	23	1,018	1,012
Massachusetts .....	91	2,653,480	2,609,480	67	387	364
Michigan .....	147	7,703,060	7,678,060	88	6,524	4,062
Minnesota .....	30	859,610	859,610	32	680	647
Mississippi .....	30	943,760	847,510	30	903	662
Missouri .....	31	736,000	722,168	45	3,128	1,418
Montana .....	12	270,000	270,000	14	(D)	(D)
Nebraska .....	25	407,000	385,955	15	825	742
Nevada .....	-	-	-	-	-	-
New Hampshire .....	37	762,020	742,020	16	12	12
New Jersey .....	88	6,335,258	6,167,258	94	4,155	2,796
New Mexico .....	7	8,750,000	7,000,000	1	(D)	(D)
New York .....	92	2,314,832	2,257,332	60	1,738	1,114
North Carolina .....	74	2,087,725	2,087,725	60	2,767	1,358
North Dakota .....	-	-	-	-	-	-
Ohio .....	66	2,390,720	2,390,720	35	656	221
Oklahoma .....	16	640,000	640,000	19	4,489	2,617
Oregon .....	77	1,747,485	1,599,485	116	3,238	2,457
Pennsylvania .....	82	2,384,468	1,789,032	64	1,799	432
Rhode Island .....	-	-	-	2	(D)	(D)
South Carolina .....	10	350,775	350,775	19	2,059	1,957
South Dakota .....	4	140,000	140,000	2	(D)	(D)
Tennessee .....	41	1,580,720	1,580,720	57	6,928	3,199
Texas .....	27	1,945,000	1,945,000	49	4,143	3,353
Utah .....	19	528,570	528,570	10	(D)	(D)
Vermont .....	37	504,194	486,194	24	(D)	(D)
Virginia .....	58	1,858,000	1,858,000	53	408	243
Washington .....	22	651,080	651,080	21	357	211
West Virginia .....	5	75,000	75,000	-	-	-
Wisconsin .....	51	1,881,000	1,881,000	35	2,381	866
Wyoming .....	11	208,620	196,620	14	378	378
<b>Water Resources Regions</b>						
Region 01 New England .....	218	10,690,330	6,339,450	149	1,416	1,014
Region 02 Mid-Atlantic .....	322	12,853,488	11,982,842	260	8,800	5,432
Region 03 South Atlantic-Gulf .....	284	48,535,272	47,198,710	394	16,530	12,810
Region 04 Great Lakes .....	260	11,820,490	11,747,490	171	8,033	4,868
Region 05 Ohio .....	103	3,707,240	3,707,240	102	5,771	2,081
Region 06 Tennessee .....	50	1,896,965	1,896,965	42	5,145	(D)
Region 07 Upper Mississippi .....	139	3,615,296	3,481,464	120	5,907	2,983
Region 08 Lower Mississippi .....	58	2,128,440	2,032,190	69	1,584	1,327
Region 09 Souris-Red-Rainy .....	-	-	-	-	-	-
Region 10 Missouri .....	87	4,621,100	4,588,055	93	(D)	3,737
Region 11 Arkansas-White-Red .....	29	1,299,056	1,228,256	35	9,608	6,679
Region 12 Texas-Gulf .....	27	1,945,000	1,945,000	47	3,303	2,513
Region 13 Rio Grande .....	-	-	-	1	(D)	(D)
Region 14 Upper Colorado .....	-	-	-	-	-	-
Region 15 Lower Colorado .....	17	9,014,000	7,264,000	28	503	478
Region 16 Great Basin .....	19	528,570	528,570	10	(D)	(D)
Region 17 Pacific Northwest .....	124	2,703,735	2,555,735	156	3,950	2,962
Region 18 California .....	212	18,399,930	14,636,203	212	5,905	4,554
Region 19 Alaska .....	4	160,000	160,000	4	1	1
Region 20 Hawaii .....	46	1,092,448	1,092,448	30	172	172

--continued

**Table 9. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$500,000 - \$999,999					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	1,588	152,299,283	149,504,903	1,424	100,224	68,027
Alabama .....	14	568,154	568,154	20	3,749	2,879
Alaska .....	4	72,000	72,000	-	-	-
Arizona .....	24	4,364,200	4,364,200	9	84	84
Arkansas .....	-	-	-	-	-	-
California .....	144	11,372,998	11,235,704	110	3,739	3,589
Colorado .....	19	1,360,300	1,360,300	31	3,502	3,502
Connecticut .....	27	1,212,750	1,211,750	27	3,100	130
Delaware .....	-	-	-	3	1,780	1,780
Florida .....	141	43,322,120	41,939,040	172	9,417	7,712
Georgia .....	11	324,432	324,432	31	4,582	4,192
Hawaii .....	12	2,513,120	2,513,120	12	(D)	200
Idaho .....	10	262,000	262,000	12	1,963	1,963
Illinois .....	25	645,560	645,560	22	4,356	2,227
Indiana .....	36	1,534,680	1,534,680	27	1,017	987
Iowa .....	1	(D)	(D)	3	988	(D)
Kansas .....	7	238,000	238,000	7	7	7
Kentucky .....	31	2,921,500	2,911,132	27	1,894	306
Louisiana .....	44	1,705,552	1,705,552	50	1,235	630
Maine .....	18	739,500	739,500	19	(D)	171
Maryland .....	32	2,378,685	2,287,235	53	2,702	1,145
Massachusetts .....	25	682,000	682,000	13	10	10
Michigan .....	132	14,427,910	13,914,802	64	3,875	2,170
Minnesota .....	36	2,344,500	2,344,500	22	3,064	864
Mississippi .....	11	2,487,360	2,487,360	12	756	626
Missouri .....	12	696,000	696,000	20	869	756
Montana .....	6	240,000	192,000	8	(D)	(D)
Nebraska .....	18	492,000	492,000	18	726	516
Nevada .....	-	-	-	2	(D)	(D)
New Hampshire .....	26	667,600	667,600	31	(D)	60
New Jersey .....	42	6,938,550	6,938,550	47	4,889	3,141
New Mexico .....	6	(D)	(D)	9	(D)	(D)
New York .....	74	3,120,690	3,090,690	53	3,158	1,226
North Carolina .....	57	2,084,928	2,084,928	59	2,578	1,718
North Dakota .....	9	451,026	451,026	-	-	-
Ohio .....	96	6,623,350	6,523,600	31	805	665
Oklahoma .....	8	630,560	630,560	11	2,978	2,595
Oregon .....	92	3,266,570	3,225,770	100	6,417	4,200
Pennsylvania .....	73	3,803,696	3,738,776	61	1,793	663
Rhode Island .....	17	408,260	408,260	16	1,077	879
South Carolina .....	15	602,078	591,578	14	2,124	1,750
South Dakota .....	4	151,360	151,360	1	(D)	(D)
Tennessee .....	26	1,185,296	1,114,160	43	4,551	2,673
Texas .....	74	16,943,644	16,880,644	53	7,189	6,278
Utah .....	5	4,000,000	4,000,000	3	374	374
Vermont .....	13	109,440	109,440	7	126	7
Virginia .....	33	1,014,374	834,800	37	1,139	1,019
Washington .....	18	1,348,000	1,348,000	14	1,204	1,204
West Virginia .....	10	282,500	282,500	10	1,020	130
Wisconsin .....	46	1,548,440	1,528,040	25	2,311	463
Wyoming .....	4	137,600	137,600	5	(D)	(D)
<b>Water Resources Regions</b>						
Region 01 New England .....	119	3,764,110	3,763,110	106	4,582	1,249
Region 02 Mid-Atlantic .....	249	16,742,435	16,376,491	245	12,752	7,736
Region 03 South Atlantic-Gulf .....	249	49,389,072	47,995,492	310	23,805	19,477
Region 04 Great Lakes .....	205	18,806,750	18,273,242	110	6,905	2,731
Region 05 Ohio .....	138	7,734,726	7,624,608	70	6,143	2,019
Region 06 Tennessee .....	8	588,000	568,800	17	(D)	908
Region 07 Upper Mississippi .....	89	4,531,260	4,531,260	79	9,302	4,340
Region 08 Lower Mississippi .....	47	2,071,552	2,019,616	57	3,285	2,134
Region 09 Souris-Red-Rainy .....	9	451,026	451,026	-	-	-
Region 10 Missouri .....	58	2,930,960	2,852,960	67	4,266	3,838
Region 11 Arkansas-White-Red .....	26	1,082,560	1,082,560	32	4,060	3,677
Region 12 Texas-Gulf .....	74	16,943,644	16,880,644	53	7,189	6,278
Region 13 Rio Grande .....	6	(D)	(D)	9	1,470	1,306
Region 14 Upper Colorado .....	2	(D)	(D)	6	400	400
Region 15 Lower Colorado .....	24	4,364,200	4,364,200	11	258	258
Region 16 Great Basin .....	5	4,000,000	4,000,000	3	420	420
Region 17 Pacific Northwest .....	115	4,774,570	4,733,770	122	9,676	7,459
Region 18 California .....	149	11,474,998	11,337,704	115	3,746	3,597
Region 19 Alaska .....	4	72,000	72,000	-	-	-
Region 20 Hawaii .....	12	2,513,120	2,513,120	12	(D)	200

--continued

**Table 9. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2008 - Con.**

[Totals may not add due to rounding. Excludes abnormal operations. For meaning of abbreviations and symbols, see introductory text]

Geographic area	\$1,000,000 or more					
	Under protection			In the open		
	Operations	Square feet	Square feet irrigated	Operations	Acres	Acres irrigated
United States .....	2,223	916,127,254	883,911,809	2,340	472,586	364,387
Alabama .....	28	11,269,240	11,269,240	42	14,563	11,943
Alaska .....	-	-	-	-	-	-
Arizona .....	18	36,470,880	36,470,880	35	7,176	6,674
Arkansas .....	7	3,510,000	3,510,000	12	4,917	4,598
California .....	391	191,641,560	178,783,951	411	40,507	38,532
Colorado .....	26	3,532,312	3,412,312	36	6,668	5,136
Connecticut .....	26	10,106,960	10,073,960	23	3,154	1,883
Delaware .....	1	(D)	(D)	-	-	-
Florida .....	287	214,028,015	212,721,403	298	50,864	44,930
Georgia .....	60	17,252,832	16,565,732	85	26,600	25,815
Hawaii .....	45	14,627,648	14,606,648	26	(D)	557
Idaho .....	9	1,272,000	1,272,000	23	6,221	6,094
Illinois .....	75	38,701,139	38,688,639	78	21,886	12,036
Indiana .....	27	1,037,056	993,376	21	5,519	4,432
Iowa .....	28	13,759,800	13,759,800	14	2,724	1,448
Kansas .....	18	3,107,442	2,767,442	20	2,308	1,900
Kentucky .....	18	3,282,264	3,282,264	18	728	(D)
Louisiana .....	36	6,060,720	6,060,720	46	3,284	2,644
Maine .....	16	4,420,400	4,209,263	15	675	625
Maryland .....	45	5,376,558	5,375,808	52	6,373	5,546
Massachusetts .....	22	3,886,520	3,646,520	10	(D)	(D)
Michigan .....	81	32,334,485	31,764,485	63	19,417	7,530
Minnesota .....	41	14,496,512	13,776,512	41	7,917	3,815
Mississippi .....	14	1,662,080	1,662,080	18	2,627	1,917
Missouri .....	26	10,773,500	10,773,500	22	3,124	1,896
Montana .....	-	-	-	9	602	602
Nebraska .....	1	(D)	(D)	3	1,107	887
Nevada .....	-	-	-	1	(D)	(D)
New Hampshire .....	11	1,864,500	1,864,500	8	(D)	(D)
New Jersey .....	80	22,596,405	22,591,430	89	16,299	11,504
New Mexico .....	6	(D)	(D)	6	720	720
New York .....	78	8,729,300	8,729,300	69	6,584	4,504
North Carolina .....	56	21,691,682	21,691,682	74	19,853	14,795
North Dakota .....	-	-	-	-	-	-
Ohio .....	53	18,336,160	18,336,160	49	9,515	5,400
Oklahoma .....	18	607,221	607,221	27	14,825	13,439
Oregon .....	132	34,585,424	34,301,640	147	44,311	41,776
Pennsylvania .....	112	56,352,018	47,640,018	46	9,961	1,573
Rhode Island .....	-	-	-	4	855	629
South Carolina .....	15	4,708,825	4,708,669	41	14,786	12,908
South Dakota .....	-	-	-	-	-	-
Tennessee .....	27	1,028,840	997,840	31	9,547	3,845
Texas .....	117	72,060,118	67,505,078	140	30,562	27,637
Utah .....	17	3,136,728	2,886,728	15	3,019	2,759
Vermont .....	10	1,725,000	1,725,000	-	-	-
Virginia .....	46	10,431,852	9,747,400	67	9,329	5,489
Washington .....	63	13,799,980	13,291,180	74	16,989	16,111
West Virginia .....	6	179,000	179,000	1	(D)	(D)
Wisconsin .....	30	1,606,614	1,591,764	30	24,051	8,291
Wyoming .....	-	-	-	-	-	-
<b>Water Resources Regions</b>						
Region 01 New England .....	82	20,803,380	20,319,243	60	5,896	4,036
Region 02 Mid-Atlantic .....	309	79,612,297	70,210,120	280	38,598	27,294
Region 03 South Atlantic-Gulf .....	460	267,684,754	265,990,886	574	130,601	113,481
Region 04 Great Lakes .....	155	52,526,759	51,956,759	121	31,523	10,475
Region 05 Ohio .....	112	29,199,004	29,124,324	89	21,456	10,087
Region 06 Tennessee .....	23	6,873,600	6,573,600	23	(D)	1,875
Region 07 Upper Mississippi .....	172	62,744,507	61,997,157	156	55,802	26,193
Region 08 Lower Mississippi .....	23	2,276,240	2,276,240	36	3,026	2,292
Region 09 Souris-Red-Rainy .....	-	-	-	3	480	105
Region 10 Missouri .....	44	17,681,114	17,554,114	56	9,247	7,244
Region 11 Arkansas-White-Red .....	41	7,182,221	6,842,221	56	23,996	21,291
Region 12 Texas-Gulf .....	117	72,060,118	67,505,078	135	28,712	26,137
Region 13 Rio Grande .....	6	32,400	32,400	6	720	720
Region 14 Upper Colorado .....	4	1,916,640	1,916,640	10	71	71
Region 15 Lower Colorado .....	18	36,470,880	36,470,880	35	7,176	6,674
Region 16 Great Basin .....	17	3,136,728	2,886,728	16	3,369	3,109
Region 17 Pacific Northwest .....	204	49,657,404	48,864,820	246	67,051	63,512
Region 18 California .....	391	191,641,560	178,783,951	412	41,209	39,235
Region 19 Alaska .....	-	-	-	-	-	-
Region 20 Hawaii .....	45	14,627,648	14,606,648	26	(D)	557



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# Appendix A.

## Statistical Methodology

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### THE SURVEY POPULATION

#### Sample Design

The target population for the 2008 Farm and Ranch Irrigation Survey (FRIS) was composed of all farms irrigating in the reference year 2008. From the 2007 Census of Agriculture, 217,604 records were identified for the U.S. level FRIS population on the basis of having irrigation activity on their farm or ranch. This excluded 1,063 institutional, research, or experimental farms from the total number of irrigators that reported in the 2007 census.

The population was divided into two groups. The first group consisted of all 32,568 operations that reported any sales of irrigated horticultural commodities. The remaining 185,036 operations comprised the general FRIS group. Each record in both sub-groups was assigned to a specific strata based on acres or area irrigated.

For the general FRIS sample, a State level sample was drawn for all 50 States. This sample design targeted a U.S. level sample size of 25,000. A certainty stratum, with farms selected with probability one, was included in each State to ensure that the major irrigators in each State were sampled. The remaining strata were sampled systematically by acreage. The stratification boundaries varied among the States and were dependent on the distribution of total acres irrigated within the State. A final sample of 23,089 operations was selected. The stratified design ensured that the sample was reflective of the general FRIS sub-population and achieved the appropriate coefficients of variation (CV) levels at both the U.S. and State levels. The stratified design also incorporated an allowance for the expected national response rate of 70 percent.

The horticulture sample was also drawn from a stratified design in all 50 States. The stratified design

targeted a U.S. level sample size of 10,000. There were two certainty strata, with farms selected with probability one, included in each State to ensure that the major irrigators with horticultural activity in each State were sampled. The remaining strata were sampled systematically by acreage. The stratification boundaries were consistent across all States and were dependent on the distribution of horticulture irrigated within the State. A final sample of 9,996 operations was selected. The design ensured that the horticulture sample was reflective of the general horticulture population.

The final national sample size was 33,085 farms; 2,738 of these farms were selected from the certainty strata and the remaining 30,347 farms were systematically selected from the noncertainty strata. Table A provides the State sample counts for the general FRIS, including acres associated with those counts, final reports processed and tabulated both unexpanded and expanded, and 2007 census counts.

### DATA COLLECTION

#### Method of Enumeration

The 2008 Farm and Ranch Irrigation Survey was conducted primarily by mail. It was supplemented with Electronic Data Reporting (EDR) via the Internet, telephone calls, and personal enumeration. With the exception of EDR, enumeration methods used in the 2008 survey were similar to those used in the 2003 survey.

#### Report Forms

Two report forms were developed. A 16-page 2008 Farm and Ranch Irrigation Survey report form was designed to collect data from irrigated farm and ranch operations. Its design was similar to the form used in the 2003 survey with the addition of one new

section. See Appendix B for changes. The 8-page 2008 Horticultural Irrigation Survey report form is new. It was designed to collect data from operations with horticulture that irrigated. This report form can be found in Appendix B.

## **Report Form Mailings and Respondent Follow-up**

The initial mailout took place in January 2009. Mail packets were mailed to approximately 23,100 farm and ranch operations and 10,000 horticultural operations. The initial mail packets included a labeled report form, an instruction sheet, a letter requesting a prompt response, and a return envelope. Mailout packet preparation, initial mailout, and one follow-up mailing to nonrespondents were handled by the Census Bureau's National Processing Center (NPC) in Jeffersonville, IN. Telephone follow-up from a NASS Data Collection Center began April 2009 to nonrespondents who were mailed a report form from NPC.

Data were collected for a select group of operations by the NASS field offices. To minimize the number of agency contacts, operations were included in this group if they were scheduled for contact by NASS for other agricultural surveys. Report forms were labeled at NPC and sent to the field offices in January. Field office staff collected data by personal enumeration or by phone from January 2009 through May 2009. For a description of the adjustment for nonresponse, see Estimation.

## **REPORT FORM PROCESSING**

### **Data Capture**

All report forms returned to NPC were immediately checked in, using bar codes printed on the mailing label, and this check-in process removed it from follow-up mailings. All forms were reviewed prior to data keying to identify inconsistencies and ensure that the data could be keyed. Major inconsistencies, respondent remarks, blank report forms, and large irrigation cases were reviewed by analysts and adjusted prior to data keying as needed. All forms with any data were scanned and an image was created for each page of a report form.

## **Data Editing and Analysis**

Data from each report form were processed through a computer edit which flagged inconsistent entries. Each flagged entry was reviewed by staff. Reported data that were obviously incorrect due to misinterpretation of a question were either corrected or deleted prior to the computer edit. In some cases, respondents may have failed to provide all of the information requested, only indicating the presence of an item but not the amount. For those data that would not be machine imputed they were estimated by the analyst based on other responses in the geographic area and by similarly sized farms. After the initial edit, an imputation program supplied missing data and made adjustments based on responses of similarly sized farms within the same geographic area. Data entries of large magnitude and data items that were changed significantly in the computer edit process were reviewed and verified by analysts.

Prior to publication, tabulated totals were reviewed to identify and resolve remaining inconsistencies and potential coverage problems. Comparisons were made to 2007 census data, 2003 Farm and Ranch Irrigation Survey data, and other available check data. The data were processed through a disclosure program to prevent data from being published that could be sourced back to an individual operation.

### **Imputation**

After the initial edit, imputations were made for missing data on individual crop yields and quantity of water used, maintenance and repair costs, expenditures, cost of water received from off-farm water suppliers, well and pump characteristics, energy cost of well pumps, area of horticulture crops, horticulture water sources, and value of sales.

### **ESTIMATION**

Estimates were produced for the Nation as a whole, for each of the 50 States, and for the geographic domains known as Water Resources Regions (WRR) (see Appendix B for detailed description). The estimation methodology consisted of two weighting components that made up the total FRIS weight. The first component was the fully adjusted weight



pulled in from the 2007 Census of Agriculture. This weight accounted for any list incompleteness and undercoverage from the 2007 census. The second component was the sampling rate used for the FRIS. This expansion factor was the inverse of the selection probability for the sample farms in a stratum. This expansion factor was reweighted at the stratum level to account for whole-farm nonresponse. The nonresponse adjustment factor used to reweight the expansion factor was the ratio of the number of sample farms in a stratum to the number of sample farms that responded to the survey in that stratum. The assumption underlying this weighting approach to survey nonresponse was that survey respondents and nonrespondents within a stratum constitute a homogeneous population, thus allowing respondents to represent nonrespondents. An expanded data value for a sample record was obtained by multiplying the data value by the total FRIS weight. State totals for a characteristic were estimated by summing the expanded data values from all responding sample records across all strata within the State. National estimates were obtained by summing across all States. The WRR estimates were obtained by summing the expanded data values for the portion of the sample falling into the WRR.

## **RESPONDENT CONFIDENTIALITY**

In keeping with the provisions of Title 7 of the United States Code, no data are published that would disclose information about the operations of an individual farm or ranch. All tabulated data are subjected to an extensive disclosure review prior to publication. Any tabulated item that identifies data reported by a respondent or allows a respondent's data to be accurately estimated or derived, was suppressed and coded with a 'D'. However, the number of farms reporting an item is not considered confidential information and is provided even though other information is withheld.

## **DATA COMPARABILITY**

The 2008 Farm and Ranch Irrigation Survey data were weighted for incompleteness of the mail list. The State level general FRIS data are not comparable between the 2008 and 2003 surveys. In the 2003 survey, the data included operations that reported horticultural production with sales less than

\$10,000 during the previous census year. In 2008 data for these operations are included in a separate set of horticultural data tables. To provide a measure of comparability, published 2003 U.S. level data were adjusted by removing operations that reported horticultural production with sales less than \$10,000.

Differences exist between the expanded results of the 2008 Farm and Ranch Irrigation Survey and published data from the 2007 Census of Agriculture. Some of these are as follows:

1. The survey includes data only for operations that irrigated in both 2007 and 2008. Operations in some areas, especially the eastern States, irrigate intermittently according to moisture needs. Operations with irrigation capabilities may not irrigate depending on the amount of rainfall for a particular year or geographic area. The number of operations that irrigated in 2007 but discontinued irrigation in 2008 is tabulated in Table 43 by reason of discontinuance.
2. Some operators reported that they had been misclassified as irrigators and did not irrigate in either 2007 or 2008. An estimated 10,058 operations with 749,291 acres irrigated were misclassified as irrigated in the 2007 Census of Agriculture. This is estimated by expanding reports in the farm and ranch irrigation survey where the respondents reported that they did not irrigate in 2008 or in 2007. In addition to errors in processing census data, some operators misreported or misinterpreted the questions. Most of the operators misreporting irrigation in the 2007 census reported irrigation of small acreages of vegetables, fruits and nuts, tobacco, field crops, or berries.
3. Some respondents indicated they had retired, moved, sold or rented the land, etc., since 2007. After analytical review of the 2008 receipts, an estimated 12,322 operations accounting for 1,976,622 acres irrigated in 2007, after expansion, were dropped from processing because they were no longer farming. Special care was taken with large operations to ensure that they were not erroneously dropped due to reorganization or

name change rather than discontinuing agricultural operations.

4. New irrigators in 2008 (not included in the 2007 census) did not have a chance of being selected in the sample and, therefore, were excluded from the survey. It is believed that the impact of new irrigators is probably minimal. This conclusion is supported by comparisons between the 2002 and 2007 Census of Agriculture irrigation data which show little change in acres of irrigated cropland harvested.

Table B shows acres irrigated in the 2008 general FRIS (expanded) compared with U.S. totals from the 2007 Census of Agriculture. The expanded survey accounts for 97.1 percent of all land reported as irrigated in the 2007 census and all irrigation characteristics associated with that land.

## MEASURES OF SURVEY QUALITY

The statistics in this report are estimates derived from a sample survey. There are two types of errors possible in an estimate-based sample survey: sampling and nonsampling. Sampling error is the error caused by observing only a sample instead of the entire population. The sampling error is subject to sample-to-sample variation. Nonsampling errors include all other errors and can arise from many different sources. These sources may include respondent or enumerator error or incorrect data keying, editing, or imputing for missing data. Nonsampling error due to mail list incompleteness and duplication, as well as misclassification of records on the mail list, is referred to as coverage error.

Undercoverage existed in the frame population to the extent that there were farms that either erroneously reported not irrigating in the 2007 census, started irrigating in 2008, or had succeeding irrigators in 2008 (i.e., an operator who, since 2007, took over control of an irrigating farm through sales, rental, or other arrangements). Overcoverage existed in the frame because some operations were misclassified as irrigated and did not irrigate in 2007 or had either stopped farming or irrigating in 2008. Farms in these groups that were selected into the sample were

identified during the survey and estimates of their number and acres irrigated are provided above under Data Comparability, items 2 and 3.

## MEASURES OF PRECISION

The survey sample was one of a large number of possible samples of the same size that could have been selected using the same sample design. Survey estimates derived from the different samples will differ from each other.

The relative standard error is used as an indicator of the precision in the survey estimates and is reported for major survey items in Table C and Table D. The relative standard error expresses the standard error of an estimate as a percent of the estimated value. The standard error of a survey estimate is a measure of the variation among the estimates from all possible samples. It is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples.

The relative standard errors given in Table C and Table D can be used to construct confidence intervals for the major survey items. Confidence intervals are another way to express the precision of an estimate by calculating the upper and lower bounds for a level of confidence. This confidence interval is designed to contain the true value being estimated. If all possible samples were selected, each of the samples were surveyed under essentially the same conditions, and an estimate and its standard error were calculated from each sample, then:

1. Approximately 67 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average value of all possible samples.
2. Approximately 90 percent of the intervals from 1.65 standard errors below the estimate to 1.65 standard errors above the estimate would include the average value of all possible samples.

The computations necessary to construct the confidence intervals associated with these statements are illustrated in the following example: Assume that

the estimated number of irrigated acres of a certain item is 669,813 and the relative standard error of the estimate is 1.6 percent (0.016). Multiplying 669,813 by 0.016 yields 10,717, the standard error. Therefore, a 67-percent confidence interval is 659,096 to 680,530 (i.e., 669,813 + 10,717). If corresponding confidence intervals were constructed

for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly, a 90-percent confidence interval is 652,130 to 687,496 (i.e., 669,813 + 1.65 x 10,717).

**Table A. Irrigated Farms: 2008 General FRIS and the 2007 Census of Agriculture**

Geographic area	2008 general FRIS						2007 census			
	Sample counts		Final reports processed and tabulated				Published totals		Sample universe <sup>1</sup>	
			Unexpanded		Expanded					
	Farms	2007 census acres	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States .....	23,089	21,337,704	14,503	16,277,815	206,834	54,929,915	301,028	56,599,305	185,036	47,620,963
Alabama .....	552	72,030	238	51,013	665	75,023	2,035	112,819	1,022	77,498
Alaska .....	33	3,042	15	1,553	23	1,589	184	3,730	52	3,078
Arizona .....	487	663,067	313	511,070	2,997	861,496	5,094	876,158	3,601	798,293
Arkansas .....	737	1,382,195	516	1,112,272	4,119	4,493,435	5,393	4,460,682	4,026	3,769,187
California .....	1,144	2,566,099	699	1,701,225	45,136	7,329,245	53,400	8,016,159	34,078	7,183,651
Colorado .....	615	742,044	458	587,130	12,778	2,865,840	15,774	2,867,957	11,249	2,427,969
Connecticut .....	67	3,004	33	1,693	147	2,337	789	9,901	161	3,408
Delaware .....	212	87,505	149	72,383	309	104,620	560	104,562	294	91,706
Florida .....	557	965,954	348	788,084	5,250	1,222,797	12,868	1,552,118	6,145	1,202,604
Georgia .....	746	513,765	368	297,409	3,584	1,007,763	5,716	1,017,773	3,144	763,304
Hawaii .....	280	46,627	164	59,090	1,077	99,577	2,810	58,635	863	48,167
Idaho .....	694	1,261,457	531	1,053,363	13,834	3,319,827	16,124	3,299,889	10,938	2,938,063
Illinois .....	599	325,731	407	264,834	1,091	457,078	2,388	474,454	1,172	385,192
Indiana .....	585	258,318	393	217,501	1,089	404,399	2,391	397,113	1,298	323,764
Iowa .....	469	145,653	285	115,433	527	162,838	1,287	189,518	687	152,330
Kansas .....	534	807,073	356	598,583	4,508	2,570,003	5,957	2,762,748	4,543	2,384,538
Kentucky .....	441	38,716	170	15,986	822	32,380	2,980	58,730	1,407	47,871
Louisiana .....	794	656,972	486	503,837	1,692	932,712	3,218	954,353	1,979	763,539
Maine .....	68	17,262	36	15,028	196	18,151	901	20,994	222	17,780
Maryland .....	307	68,180	206	56,446	597	85,552	1,326	92,805	569	71,729
Massachusetts .....	103	9,133	73	7,357	677	17,421	1,630	23,133	610	14,914
Michigan .....	613	347,839	427	334,642	2,121	531,927	5,078	500,428	2,419	426,711
Minnesota .....	685	342,620	430	262,654	1,546	504,330	2,918	506,357	1,702	413,128
Mississippi .....	826	1,221,050	558	979,767	1,277	1,451,652	2,284	1,368,661	1,539	1,288,152
Missouri .....	847	856,070	515	655,503	1,877	1,232,354	3,613	1,199,981	2,198	1,006,991
Montana .....	598	571,890	437	449,698	8,507	1,947,159	10,457	2,013,167	7,911	1,665,858
Nebraska .....	588	940,783	421	769,917	14,812	8,365,545	17,128	8,558,559	13,062	6,748,579
Nevada .....	407	514,178	287	381,871	1,734	685,261	2,054	691,030	1,490	626,057
New Hampshire .....	66	585	32	357	86	720	505	2,482	104	681
New Jersey .....	298	48,326	202	40,899	608	59,412	2,055	95,277	631	51,461
New Mexico .....	518	448,839	348	368,581	8,878	835,639	10,167	830,048	5,869	669,075
New York .....	256	29,514	105	9,978	596	20,158	3,036	68,010	915	39,907
North Carolina .....	336	91,968	150	47,620	1,975	148,999	5,788	232,075	2,784	177,458
North Dakota .....	393	190,598	238	145,626	601	248,070	795	236,138	585	207,308
Ohio .....	241	18,916	106	12,928	379	18,548	2,402	37,959	629	20,390
Oklahoma .....	555	371,197	296	252,171	1,454	461,235	3,026	534,768	1,877	449,164
Oregon .....	680	742,108	485	564,447	12,156	1,758,602	16,792	1,845,194	10,216	1,457,086
Pennsylvania .....	321	15,314	180	8,415	1,090	17,359	3,958	37,786	1,190	20,221
Rhode Island .....	37	604	20	424	61	681	313	4,306	61	657
South Carolina .....	305	86,682	168	72,501	712	104,091	2,030	132,439	1,034	95,227
South Dakota .....	384	198,109	261	150,218	1,165	360,071	1,627	373,842	1,199	306,570
Tennessee .....	493	52,375	215	60,491	582	72,862	2,453	81,405	1,043	54,275
Texas .....	1,010	1,451,163	602	1,025,548	12,673	5,356,876	19,713	5,010,416	13,440	4,348,699
Utah .....	549	347,138	419	252,674	10,876	1,068,929	12,492	1,134,144	8,649	879,863
Vermont .....	47	634	19	234	66	488	523	2,295	79	714
Virginia .....	228	38,743	102	24,377	657	44,818	2,347	82,187	1,127	56,332
Washington .....	733	841,821	503	665,657	12,712	1,675,898	15,492	1,735,917	9,545	1,490,232
West Virginia .....	63	1,041	28	592	90	906	457	2,189	122	1,172
Wisconsin .....	513	308,994	355	284,732	1,261	396,123	2,907	377,291	1,307	344,974
Wyoming .....	475	624,778	350	424,003	5,164	1,497,119	5,793	1,550,723	4,249	1,305,436

<sup>1</sup> Excludes institutional, research, and experimental farms and farms with horticulture.

**Table B. Farms with Irrigation by Acres Irrigated – 2008 General FRIS Compared with 2007 Census of Agriculture**

Item	2007 census			2008 general FRIS		
	United States totals	United States totals (expanded)	Percent of 2007 census totals	Item	2007 census	2008 general FRIS
					United States totals	United States totals (expanded)
Farms .....	301,028	206,834	68.7	200 to 499 acres .....	29,207	26,699
acres .....	56,599,305	54,929,915	97.1	acres .....	9,143,515	8,370,607
1 to 49 acres .....	190,382	111,103	58.4	500 to 999 acres .....	16,569	15,778
acres .....	2,018,479	1,455,383	72.1	acres .....	11,498,297	11,077,737
50 to 99 acres .....	25,467	17,735	69.6	1,000 acres or		
acres .....	1,761,170	1,217,958	69.2	more .....	13,588	14,175
100 to 199 acres .....	25,815	21,344	82.7	acres .....	28,632,206	29,800,427
acres .....	3,545,638	3,007,803	84.8			

**Table C. Relative Standard Error (percent) for Selected Irrigation Data – General FRIS: 2008**

[Excludes institutional, research, and experimental farms and farms with horticulture. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Irrigated farms	Land in farms	Acres irrigated				Acre-feet of water applied, all sources	Wells used in 2008	Pumps, all types	Expenses for irrigation		
			Total	Cropland harvested	By sprinkler systems	By gravity flow				Energy used for pumping	For wells, pumps, equipment, and facilities	Maintenance and repair
United States .....	1.1	3.8	0.9	0.9	1.5	1.5	1.1	2.5	2.0	1.6	3.0	2.8
Alabama .....	4.7	5.0	3.2	3.2	3.3	16.4	3.7	8.0	4.7	4.8	12.2	8.3
Alaska .....	17.7	4.1	1.7	(D)	1.6	(D)	2.5	15.4	14.1	8.2	7.6	16.9
Arizona .....	9.9	44.1	2.0	2.1	7.7	2.8	2.8	11.4	9.3	5.6	10.9	6.4
Arkansas .....	3.6	4.9	2.6	2.6	8.0	3.0	3.5	3.1	3.2	4.8	8.6	7.9
California .....	3.0	16.0	2.3	2.4	9.1	4.4	3.1	7.0	4.5	4.4	8.4	6.4
Colorado .....	4.3	7.7	3.3	3.4	5.8	5.7	4.4	6.7	17.8	6.7	12.4	12.2
Connecticut .....	15.1	14.0	7.4	7.4	10.6	-	8.2	30.9	14.3	13.0	24.2	31.2
Delaware .....	4.5	4.3	2.3	2.3	2.4	-	4.2	3.9	3.7	3.8	15.9	6.0
Florida .....	9.8	5.8	2.2	2.2	10.3	3.4	3.4	9.2	8.0	4.8	15.5	8.1
Georgia .....	5.0	5.5	3.5	3.6	4.0	21.8	4.9	7.0	5.8	4.5	17.0	8.4
Hawaii .....	5.0	16.7	25.6	21.7	18.0	30.0	31.7	21.5	17.0	15.8	55.4	15.9
Idaho .....	4.5	7.7	2.9	2.7	3.5	7.8	3.3	10.6	6.2	3.9	9.1	11.7
Illinois .....	3.6	2.9	2.6	2.7	2.8	43.8	2.8	2.9	2.9	6.3	9.4	6.3
Indiana .....	4.3	3.1	2.9	2.9	3.0	34.5	3.7	4.2	3.7	4.3	10.7	6.6
Iowa .....	3.5	3.8	2.3	2.3	2.5	25.5	3.5	2.8	2.7	3.8	9.7	10.8
Kansas .....	3.7	8.4	3.0	3.0	3.4	12.6	3.6	3.5	3.3	4.4	11.8	7.6
Kentucky .....	6.1	9.1	6.0	6.0	6.4	27.9	7.8	12.3	7.7	12.8	19.6	21.5
Louisiana .....	7.1	3.7	2.7	2.8	7.0	3.1	3.6	3.7	3.2	3.9	8.9	6.7
Maine .....	21.4	9.9	6.6	(D)	4.4	-	2.3	34.6	21.7	9.2	11.9	23.1
Maryland .....	7.0	3.9	2.7	2.8	2.8	58.3	4.0	5.1	5.2	3.4	7.7	7.2
Massachusetts .....	10.4	8.6	6.4	(D)	6.8	47.7	15.2	32.1	7.3	9.0	17.3	24.9
Michigan .....	5.4	5.1	2.3	2.3	2.2	76.1	2.9	5.1	4.0	3.6	7.7	6.1
Minnesota .....	4.0	4.6	3.5	3.5	3.7	17.0	3.8	3.4	3.2	4.1	14.0	6.2
Mississippi .....	8.1	4.1	1.7	1.7	3.5	1.9	2.0	1.8	1.8	2.0	3.9	3.7
Missouri .....	5.8	4.4	5.6	5.6	4.8	7.5	6.5	5.1	4.8	5.7	8.4	5.0
Montana .....	4.4	10.3	2.8	3.1	5.3	5.1	4.3	21.4	8.6	8.8	22.1	7.2
Nebraska .....	3.1	18.5	2.8	2.8	3.4	8.3	4.2	3.8	3.7	4.4	11.1	7.9
Nevada .....	5.4	9.0	3.0	3.1	5.7	4.5	4.0	7.4	7.9	6.4	12.7	14.6
New Hampshire .....	11.2	18.1	21.9	21.9	31.6	52.4	18.4	21.9	14.1	16.3	37.8	35.9
New Jersey .....	6.0	5.2	2.5	2.5	3.5	20.4	4.5	5.9	4.6	3.4	16.9	8.8
New Mexico .....	5.2	28.7	4.4	4.6	7.0	6.6	8.4	8.8	9.5	4.8	15.0	10.4
New York .....	13.4	9.5	7.3	7.4	13.5	37.6	11.8	18.6	14.5	12.8	17.0	12.7
North Carolina .....	10.0	12.0	6.0	6.1	6.3	52.3	10.6	25.7	9.6	9.4	23.4	14.2
North Dakota .....	3.3	5.9	2.7	2.7	3.6	9.6	4.3	5.2	4.1	4.8	11.4	6.9
Ohio .....	9.5	9.5	8.2	8.3	9.5	24.7	8.6	15.1	8.9	7.9	10.5	9.2
Oklahoma .....	8.0	7.5	3.4	2.9	3.8	10.7	3.6	5.7	5.3	7.4	10.7	7.2
Oregon .....	4.7	7.0	5.0	6.2	6.8	5.7	4.7	12.8	6.1	7.5	9.9	20.1
Pennsylvania .....	7.8	7.6	5.7	5.8	8.8	33.9	11.6	14.6	8.7	8.6	17.8	10.6
Rhode Island .....	14.3	10.9	10.7	10.8	11.7	87.9	7.5	25.3	21.5	11.5	32.8	29.7
South Carolina .....	13.6	5.8	3.4	3.4	3.7	14.8	4.0	16.8	11.9	5.5	10.7	8.4
South Dakota .....	4.9	14.2	5.4	5.4	6.5	10.5	4.5	9.3	6.9	9.0	15.6	12.5
Tennessee .....	6.9	3.1	2.9	(D)	3.3	7.4	3.0	7.4	5.7	5.7	7.4	6.9
Texas .....	6.6	8.2	5.9	5.6	7.5	9.1	4.2	10.9	10.3	5.0	11.0	11.9
Utah .....	3.1	12.9	3.2	3.7	5.8	5.9	4.1	20.2	11.5	8.6	17.9	10.3
Vermont .....	15.8	22.3	15.9	15.9	33.7	87.3	24.0	30.0	21.1	28.8	29.1	31.1
Virginia .....	14.3	11.3	4.9	5.0	5.4	39.3	5.7	28.4	13.7	7.1	12.9	14.9
Washington .....	3.3	18.9	2.8	2.8	3.5	10.5	3.0	12.9	5.1	3.9	7.3	5.8
West Virginia .....	14.1	25.9	10.8	10.6	9.6	(D)	40.1	25.6	15.3	13.9	36.5	37.7
Wisconsin .....	4.3	3.8	1.6	1.6	1.8	22.8	3.9	2.6	3.7	4.1	12.1	8.0
Wyoming .....	3.1	13.4	4.5	4.4	8.0	5.6	5.5	24.5	19.8	11.1	23.3	11.7
<b>Water Resources Regions</b>												
Region 01 New England .....	7.3	6.4	4.2	(D)	3.6	43.9	10.2	17.0	6.1	7.7	10.9	20.6
Region 02 Mid-Atlantic .....	4.6	2.7	1.5	1.5	1.7	15.1	2.3	4.0	3.7	2.0	7.5	4.2
Region 03 South Atlantic-Gulf .....	4.8	3.6	1.8	1.8	3.0	3.7	2.6	5.7	4.2	2.9	10.2	5.3
Region 04 Great Lakes .....	4.6	4.0	2.2	2.2	2.2	30.4	2.8	4.1	3.3	3.2	6.7	4.8
Region 05 Ohio .....	4.9	3.9	4.0	4.0	4.1	30.0	4.0	5.5	4.5	5.8	10.2	7.8
Region 06 Tennessee .....	9.2	7.6	6.3	(D)	6.7	(D)	6.8	15.8	11.7	10.0	16.3	10.1
Region 07 Upper Mississippi .....	2.8	2.6	1.9	1.9	2.0	13.4	2.4	2.0	2.2	2.9	7.6	4.4
Region 08 Lower Mississippi .....	3.0	2.0	2.0	2.0	4.1	2.3	2.9	2.3	2.4	3.0	5.1	5.2
Region 09 Souris-Red-Rainy .....	9.3	6.5	5.6	5.5	5.9	20.7	8.2	6.9	6.3	6.1	12.8	10.0
Region 10 Missouri .....	2.8	7.6	2.0	2.0	2.6	4.2	2.7	3.3	4.0	3.5	7.4	5.6
Region 11 Arkansas-White-Red .....	7.0	14.5	3.5	3.4	4.0	7.1	4.1	4.5	4.5	4.3	10.5	5.5
Region 12 Texas-Gulf .....	8.4	8.0	8.7	8.3	11.4	10.4	5.7	13.9	13.0	7.8	13.9	16.0
Region 13 Rio Grande .....	8.9	23.5	7.0	7.2	8.8	9.8	8.7	9.5	10.2	10.2	16.5	14.7
Region 14 Upper Colorado .....	8.3	9.3	6.2	6.9	10.5	7.3	6.8	47.9	17.8	15.1	23.3	11.8
Region 15 Lower Colorado .....	9.8	41.5	2.5	2.5	7.4	3.2	3.0	10.8	8.8	5.7	10.4	6.2
Region 16 Great Basin .....	6.5	8.7	4.0	4.4	7.0	4.9	4.3	11.3	9.0	6.4	11.2	23.1
Region 17 Pacific Northwest .....	2.8	7.4	2.1	2.2	2.5	4.5	2.2	7.1	3.5	2.7	5.1	5.9
Region 18 California .....	3.0	15.6	2.3	2.4	8.6	4.4	3.1	6.9	4.5	4.4	8.4	6.4
Region 19 Alaska .....	17.7	4.1	1.7	(D)	1.6	(D)	2.5	15.4	14.1	8.2	7.6	16.9
Region 20 Hawaii .....	5.0	16.7	25.6	21.7	18.0	30.0	31.7	21.5	17.0	15.8	55.4	15.9

**Table D. Relative Standard Error (percent) for Selected Horticultural Irrigation Data: 2008**

Geographic area	Horticultural operations	Irrigated area		Geographic area	Horticultural operations	Irrigated area	
		Square feet under protection	Acres in the open			Square feet under protection	Acres in the open
United States .....	0.8	4.6	1.3	Oklahoma .....	10.0	28.2	6.3
Alabama .....	6.7	20.8	6.7	Oregon .....	3.3	10.5	2.5
Alaska .....	12.1	30.4	39.8	Pennsylvania .....	3.2	27.6	13.4
Arizona .....	11.0	38.3	6.5	Rhode Island .....	9.0	22.2	12.8
Arkansas .....	9.6	66.9	4.3	South Carolina .....	8.2	29.0	5.2
California .....	2.6	9.5	5.0	South Dakota .....	12.4	35.8	27.6
Colorado .....	7.0	30.5	10.2	Tennessee .....	4.6	15.3	6.0
Connecticut .....	6.0	19.8	11.0	Texas .....	4.4	24.9	3.7
Delaware .....	17.8	39.5	52.8	Utah .....	8.6	45.4	4.6
Florida .....	2.6	11.1	2.5	Vermont .....	7.2	31.5	26.2
Georgia .....	5.2	27.1	5.1	Virginia .....	6.1	22.1	10.7
Hawaii .....	5.6	22.6	17.4	Washington .....	5.4	19.0	5.9
Idaho .....	8.7	51.9	11.3	West Virginia .....	9.3	18.7	42.0
Illinois .....	5.0	46.7	5.9	Wisconsin .....	3.9	13.7	25.8
Indiana .....	5.3	15.3	31.3	Wyoming .....	15.0	26.9	22.8
Iowa .....	7.6	25.4	16.2	<b>Water Resources Regions</b>			
Kansas .....	8.9	33.6	13.8	Region 01 New England .....	3.0	12.6	6.7
Kentucky .....	5.2	23.7	17.1	Region 02 Mid-Atlantic .....	2.4	9.6	5.7
Louisiana .....	6.4	29.9	19.6	Region 03 South Atlantic-Gulf .....	2.0	9.3	2.1
Maine .....	6.6	39.5	9.1	Region 04 Great Lakes .....	3.1	9.1	5.3
Maryland .....	6.1	21.9	11.4	Region 05 Ohio .....	3.6	28.2	13.8
Massachusetts .....	6.1	20.8	16.3	Region 06 Tennessee .....	6.9	21.2	7.7
Michigan .....	3.1	10.1	5.2	Region 07 Upper Mississippi .....	3.4	27.1	8.5
Minnesota .....	5.4	28.7	6.0	Region 08 Lower Mississippi .....	7.9	16.0	10.9
Mississippi .....	10.0	42.3	23.2	Region 09 Souris-Red-Rainy .....	31.9	59.0	71.1
Missouri .....	6.7	52.0	11.9	Region 10 Missouri .....	4.7	28.7	7.2
Montana .....	6.7	22.5	5.6	Region 11 Arkansas-White-Red .....	6.6	29.8	5.0
Nebraska .....	6.7	25.5	11.8	Region 12 Texas-Gulf .....	4.7	25.1	3.9
Nevada .....	27.7	49.4	18.8	Region 13 Rio Grande .....	18.2	38.8	29.7
New Hampshire .....	5.9	30.2	40.0	Region 14 Upper Colorado .....	16.6	76.1	24.2
New Jersey .....	4.5	13.6	10.5	Region 15 Lower Colorado .....	10.9	35.1	9.5
New Mexico .....	13.9	82.6	31.2	Region 16 Great Basin .....	10.2	47.7	5.5
New York .....	3.8	15.5	6.6	Region 17 Pacific Northwest .....	2.7	9.1	2.5
North Carolina .....	4.1	23.8	6.0	Region 18 California .....	2.6	9.5	4.9
North Dakota .....	39.9	58.8	70.7	Region 19 Alaska .....	12.1	30.4	39.8
Ohio .....	4.7	18.2	10.7	Region 20 Hawaii .....	5.6	22.6	17.4

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## Appendix B.

# General Explanation and Report Form

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### DEVELOPMENT OF THE REPORT FORMS

Planning for the survey started in 2004 with the closeout of the 2003 Farm and Ranch Irrigation Survey (FRIS). Extensive correspondence, discussions, and meetings took place with representatives of the Economic Research Service (ERS) regarding 2008 survey content. Evaluations from NASS staff of the 2003 survey were reviewed. The decision was made to incorporate a separate report form into the survey to collect irrigation data from operations with any horticultural sales in the previous census year. No significant changes were recommended for the general FRIS report form.

Report form drafts were developed in headquarters. NASS staff in selected field offices reviewed the drafts and solicited input from various data users in their respective States. Letters were sent to individuals in water-related government organizations, industry, and academic positions to solicit their comments on report form content and design.

Pretesting was limited to the horticultural operations report form since the general FRIS report form remained mostly unchanged. Participating field offices evaluated the results of their findings, identified flaws discovered during the interview process, and submitted recommendations to headquarters. All responses were reviewed and categorized to evaluate data collection feasibility and priority needs. Results of the pretest lead to a redesign of the horticultural operations report form.

### DATA CHANGES

In 2008 the general FRIS tables exclude operations that reported any horticulture sales in the previous census year. In 2003 horticultural operations that reported less than \$10,000 in sales in the previous census year were included in the 2003 FRIS

publication. For data comparability, operations that reported any horticultural sales in the previous census year were sampled and the data were collected on a horticulture version of the FRIS report form. Some report form changes affected some of the general FRIS publication tables. A few tables were affected by improvements in the way some data items were calculated. Following are descriptions of those changes.

- Additional programs were added to the government programs section to make the descriptions more inclusive. Data are comparable.
- Questions for on farm use of recycled and reclaimed water were added. Data are published in a new table.
- In 2003 the percent of sales from livestock was asked. In 2008 the question was changed to the percent of sales from non-irrigated crop or livestock sales. The 2008 data in Table 35 for non-irrigated crop or livestock sales are not comparable with 2003.
- The formula for cost per acre was improved. The previous calculation divided the sum of the off-farm water expense by the total acre-feet of off-farm water used, regardless if there was a fee for the acre-feet used. The 2008 calculation only uses the acre-feet in the denominator of the formula if there was a fee for the producer.
- In Table 25 for 2008, hired labor average expense per acre irrigated is the sum of hired irrigation labor reported in Section 14, item 1a regardless of the value of item 2a, contract labor; divided by the sum of total acres irrigated in Section 2, column 2, item 5. In 2003 hired labor average expense per acre irrigated was the sum of hired irrigation labor reported in Section 14,

item 1a when an individual report form's item 1a was greater than zero and item 1b, contract labor, was zero; divided by the sum of total acres irrigated in Section 2, column 2, item 5. Data are not comparable.

Similarly, in 2008 hired contract irrigation labor average expense per acre irrigated is the sum of Section 14, item 1b regardless of the value reported in item 1a, hired irrigation labor; divided by the sum of total acres irrigated in Section 2, column 2, item 5. In 2003, hired contract irrigation labor average expense per acre irrigated was the sum of hired contract irrigation labor reported in Section 14, item 1b when an individual report form's item 1b was greater than zero and item 1a, hired irrigation labor, was zero; divided by the sum of total acres irrigated in Section 2, column 2, item 5. Data are not comparable.

- In 2008 potato acres are included with Land in vegetables in Tables 27 - 29. Irrigated yield and non-irrigated yield are not published in 2008. Potato acres were not included in Land in vegetables in 2003. Data are not comparable. All other potato data are comparable with 2003.
- In Table 28 for crops with only two methods of distribution, the 2003 column header "Sprinkler system only" was changed to "Pressure systems" to match the system code categories listed on the report form. In 2008 pressure systems includes data for system codes 01 through 14. For crops with three primary methods of distribution, the 2003 column header "Sprinkler system only" was changed to "Sprinkler system" to improve the description. The data include system codes 01 through 12 and 14. System code 13 is summarized separately.

## DEFINITIONS AND EXPLANATIONS

This section provides definitions and explanations of specific terms and phrases used on the reports forms or in the tables. Items in the publication tables that carry the note "see text" also are explained.

**Acre-feet of water.** An acre-foot of water is the quantity of water required to cover one acre to a

depth of one foot. This is equivalent to 43,560 cubic feet or 325,851 gallons.

**Acres and quantity harvested.** If two or more crops were harvested from the same land during the year (double cropping), the acres were counted for each crop. Therefore, the total acres of all crops harvested generally exceeded the acres of cropland harvested. An exception to this procedure was hay crops.

When more than one cutting of hay was taken from the same acres, the acres were counted only once, but the quantity harvested includes all cuttings. For interplanted crops or "skip-row" crops, acres were reported according to the portion of the field occupied, whether by a crop or whether it was idle land.

If a crop was interplanted in an orchard or vineyard and harvested, then the entire orchard or vineyard acreage was reported under land in bearing and non-bearing fruit orchards, citrus or other groves, vineyards, and nut trees and the interplanted estimated crop acreage was reported under the appropriate crop.

Acres of land in bearing and non-bearing fruit orchards, citrus or other groves, vineyards, and nut trees were included in cropland harvested whether the crop was harvested or not.

**Acres irrigated.** Acres or area irrigated are the acres of agricultural land to which water was applied by any artificial or controlled means such as sprinklers, flooding, furrows, or ditches, gated pipe, hand watered, capillary mats, trough irrigation, ebb-and-flood irrigation, subirrigation, and spreader dikes including preplanted, partial, and supplemental irrigation. Land flooded was to be included as irrigated only if the water was diverted to agricultural land by dams, canals, or other works. Chapter 1, Table 1 provides a comparison with the 2008 general FRIS data and the 2007 Census of Agriculture data. Table A in this appendix also provides census data for the leading irrigation States for 1997, 2002, and 2007.

**All other crops.** Data relate to any non-vegetable crops not having a specified code on the 2008 Farm



and Ranch Irrigation report form. Crops such as grass seed, sunflower seed, sugarcane, etc. were included in other field crops. Data are comparable.

**All other land.** This category includes farmsteads, buildings, livestock facilities, ponds, roads, ditches, wasteland, etc. It includes those acres in the farm operation not classified as cropland, woodland, pastureland, or rangeland.

**Application of commercial fertilizers or pesticides in irrigation water.** This inquiry was intended to measure the number of farms and acres on which fertilizer and pesticides were distributed through irrigation systems. Review of the 2008 data suggests that some operators may have missed the question on the report form and left it blank while others reported the entire acreage on which fertilizer and pesticides were applied, not just the acres on which fertilizer and pesticides were distributed through irrigation systems.

**Area under protection - square feet irrigated.** In Chapter 2 irrigated square feet is the total area used to grow horticultural crops under protection, whether harvested or not.

**Area in the open - Acres irrigated.** In Chapter 2 acres in the open irrigated is the total area irrigated for horticultural crops grown in the open, whether harvested or not.

**Artesian wells.** Artesian or flowing wells are wells which flow freely and provide water used for irrigation without pumping during the irrigation season. All flowing or artesian wells were excluded from data for pumped wells in Tables 15 and 16. This should be taken into consideration when using data from these two tables since the depths, capacities, pressures, engine size, and hours operated for pumped wells used in 2008 exclude artesian wells. Data are comparable with 2003 data.

**Average hours of operation.** The average hours of operation for pumped wells was calculated from the reported hours operated for up to three individual wells and the average hours for the remaining wells, if any. Artesian wells were not included in the average hours calculation. Some data collected exceeded 8,760 hours, the maximum number of

hours in a year, meaning that some respondents entered their total pump operating hours rather than the average hours used. Records exceeding the 8,760 hour threshold were edited by the analyst to a lower value or imputed.

**Average operating pressure.** The average operating pressure for pumped wells was reported for up to three individual wells and as the average operating pressure for the remaining wells, if any. Artesian wells are not included as wells pumped. The average operating pressure was calculated using these reported data.

**Average pumping capacity.** The average pumping capacity for pumped wells was reported for up to three individual wells and as the average pumping capacity for the remaining wells, if any. Artesian wells are not included as wells pumped. The average pumping capacity was calculated using these reported data.

**Barriers to making improvements to reduce energy use or conserve water.** This item shows the barriers to implementing improvements that might reduce energy and/or conserve water. Respondents were asked to report for the period covering 2004 to 2008. The information was tabulated as reported. No imputation was made for a blank response.

**Cropland harvested.** This category includes land from which crops were harvested and hay was cut, land used to grow short-rotation woody crops, and land in orchards, citrus groves, Christmas trees, vineyards, nurseries, and greenhouses. Land from which two or more crops were harvested was counted only once. Land in tapped maple trees was included in woodland.

**Cropland used only for pasture or grazing.** This category includes land used only for pasture or grazing that could have been used for crops without additional improvement. Also included are acres of crops hogged or grazed but not harvested prior to grazing. However, cropland that was pastured before or after crops were harvested was included as harvested cropland rather than cropland for pasture or grazing.

**Crops unit of measurement.** Crop units were

preprinted on the report forms and respondents were instructed to report crops in these units.

**Discharge capacity.** See Average operating pressure.

**Discharge operating pressure.** See Average pumping capacity.

**Estimated quantity of water applied.** Most water used for irrigation is not metered or measured accurately. The quantity of water data are based on the best estimates provided by irrigators. Generally, in areas with water shortages, such as southern California and Arizona, irrigators are more likely to provide actual quantities of water used than in Mountain States where water shortages may be less of a problem or precise measuring methods are not readily available. In the Mountain States where water from snow-melt is diverted for use in season, the amount of water used may be a rough estimate, seldom a measured figure.

**Expenditures for irrigation equipment, facilities, land improvement, and computer technology and Expenses for maintenance and repairs of irrigation equipment and facilities.** Some respondents found it difficult to separate expenses for new and replacement irrigation construction, facilities, and equipment requested on the report form in Section 7 from expenses for maintenance and repairs of irrigation equipment and facilities requested in Section 13. Data were reviewed for consistency versus the size of the operation. Users are reminded that the distinction between the two expenditure categories was left to the respondent.

**Farms using off-farm water.** Respondents were asked to report the amount (none, some, all, or unknown) of off-farm water supplied by the U.S. Bureau of Reclamation, other federal agencies, and all other suppliers. However, many respondents did not answer this question. Instead, the computer edit set the entry to unknown. The number of farms using water from U.S. Bureau of Reclamation, other federal agencies, and all other suppliers may be understated.

**Flowing wells.** See Artesian wells.

**Gross value of agricultural products sold.** See Market value of agricultural products sold.

**Horticultural crops.** In Chapter 2 the horticultural data are published in the following categories:

*Christmas trees and short rotation woody crops.* Includes all trees to be cut in 2008 or later years. Irrigated live Christmas trees were reported in nursery crops.

*Floriculture and bedding crops.* Includes annual bedding/garden plants, herbaceous perennials, cut flowers and cut cultivated greens, foliage plants for indoor or patio use, potted flowering plants, and other floriculture type crops.

*Food crops grown under protection.* Includes all food crops that were grown in a greenhouse or under some sort of structure that regulated light, shade, temperature, etc. No food crops grown in open fields were reported for this crop type.

*Mushroom crops.* Includes all mushroom species that were irrigated in 2008. Logs were converted to and reported in square feet.

*Nursery crops.* Includes deciduous shade and flowering trees, broadleaf and coniferous evergreens, live Christmas trees for sale as potted trees or balled and burlapped, fruit and nut plants, ornamental grasses, palms for landscaping, shrubs, vines, aquatic plants, and other woody ornamentals.

*Propagative materials.* Includes dry bulbs, corms, tubers, and rhizomes; cuttings, seedlings, liners, and plugs; flower seeds; vegetable seeds; vegetable transplants; and tobacco transplants.

*Sod.* Includes all irrigated sod, sprigs, or plugs.

*Other horticultural crops.* Other horticultural crops includes all crops that are primarily considered ornamental or horticultural and are not listed anywhere in the general version or the horticulture version of the FRIS. Fruit, nut, and vegetable crops grown in the open are not considered horticultural crops and the irrigation data for these crops are presented in Chapter 1.

**Improvements to irrigation systems that reduce energy and/or conserve water used in irrigation.**

This item shows the results farms experienced after implementing new resource-conserving irrigation systems. Respondents were asked to respond for the period covering 2004 to 2008. The information was tabulated as reported. No imputation was made for a blank response.

**Institutional, research, and experimental farms.**

In the 2007 and 2002 Censuses of Agriculture, data for these farms were combined with American Indian reservation farms into one category. However, in the 2008 and 2003 Farm and Ranch Irrigation Surveys, only American Indian reservation farms were included in the sample while institutional, research, and experimental farms were excluded.

**Irrigated farms.** Irrigated farms or ranches are those with any agricultural land irrigated by any artificial or controlled means in the specific calendar year. The acreage irrigated may vary from a very small portion of the total acreage in the farm or ranch to irrigation of all agricultural land in the farm or ranch. This includes reclaimed water and livestock lagoon wastewater distributed by sprinkler or flood systems.

**Irrigated land.** Irrigated land is defined as “all land watered by artificial or controlled means.” No attempt was made to define the degree or intensity of irrigation. Therefore, the data for irrigated land include land with as little as one-half inch of water applied as well as land with several acre-feet of water applied.

**Irrigation pumps.** The inventory data for number of irrigation pumps reported in Tables 17 and 18 include reserve pumps not actually used in the survey year.

**Land in farms.** The acreage designated as “land in farms” consists primarily of agricultural land used for crops, pasture, or grazing. It also includes woodland and wasteland not actually under cultivation or used for pasture or grazing, provided it was part of the farm operator’s total operation. Large acreages of woodland or wasteland held for nonagricultural purposes were removed from

individual reports during the data review process. Land in farms includes idle cropland, cropland not harvested, and land in government conservation programs.

Land in farms is an operating unit concept and includes land owned and operated as well as land rented from others. Land used rent free was reported as land rented from others. All grazing land, except land used under government permits on a per-head basis (AUM), was included as land in farms provided it was part of a farm or ranch. All land in American Indian reservations used for growing crops or grazing livestock was included as land in farms. Land in reservations not reported by individual American Indians or non-Native Americans was reported in the name of the cooperative group that used the land. In some instances, an entire American Indian reservation was reported as one farm.

**Market value of agricultural products sold.** This category represents the gross market value before taxes and production expenses of all agricultural products sold or removed from the place during the survey year, regardless of who received the payment. It includes sales by the operators as well as the value of any shares received by partners, landlords, contractors, or others associated with the operation. It represents the sum of all crops, including nursery products, and livestock and poultry and their products. Market value of agricultural products sold does not include payments received for participation in federal farm programs. Also, it does not include income from farm-related sources such as customwork and other agricultural services, or income from nonfarm sources.

**Nonirrigated crop yields.** The nonirrigated crop yield averages in Table 27 are for nonirrigated crops harvested from irrigated farms and are not comparable with nonirrigated crop yield averages for total farms in the State.

Yields for sweet corn, tomatoes, lettuce, and potatoes were asked. However, some respondents left yields blank which required that the yield be imputed. In many cases, yields that were reported covered an extremely large range indicating respondents did not always use the hundredweight unit requested on the form. Therefore it was decided

that yields for these four crops would not be published.

**North American Industry Classification System.**

The North American Industry Classification System (NAICS) classifies economic activities. It was jointly developed by Mexico, Canada, and the U.S. The NAICS makes it possible to produce comparable industrial statistics for Mexico, Canada, and the U.S. Farms were classified by NAICS code based on their 2007 census report(s). Establishments primarily engaged in crop production are classified in major group 111. Establishments primarily engaged in production of livestock and animal specialties are classified in major group 112. Establishments are further classified into the appropriate six-digit code for the commodity or commodities which account for one-half of the establishment's agricultural production.

**Off-farm water supply.** Off-farm water supply is water from off-farm water suppliers, such as the U.S. Bureau of Reclamation; irrigation districts; mutual, private, cooperative, or neighborhood ditches; commercial companies; or community water systems.

**On-farm surface supply.** On-farm surface supply is water from a surface source not controlled by a water supply organization. It includes sources such as streams, drainage ditches, lakes, ponds, reservoirs, and on-farm livestock lagoons on or adjacent to the operated land.

**Other cropland.** Other cropland includes cropland not harvested and not grazed. This includes land for cover crops or soil-improvement crops, land on which all crops failed, land in cultivated summer fallow, idle cropland, and land planted in crops that were to be harvested after the survey year.

**Other pastureland and rangeland.** This land use category encompasses all grazable land that does not qualify as cropland pasture. It may be irrigated or dry land. In some areas, it can be a high quality pasture that could not be cropped without improvements. In other areas, it is barely grazable and is only marginally better than wasteland.

**Pumps by average operating pressure.** See

Average operating pressure.

**Primary source of funding assistance.**

Respondents were instructed to only report the primary source of funding assistance. Nonresponses to this item were summarized as "No funding assistance."

**Reason for discontinuance of irrigation since 2007.**

These data reflect the expanded number of operations that irrigated in 2007 but not in 2008 and the acres or area irrigated in the previous census year. The data also show the reason for discontinuance. Some respondents reported multiple reasons, while others gave no specific reason. No imputation was made for a blank response.

**Reclaimed water.** Reclaimed water is wastewater that has been treated for non-potable reuse purposes. Sources include municipal, industrial, or livestock operations.

**Recycled water.** Recycled water is the reuse of surface or ground water that has already been used to irrigate a crop on the operation.

**Solar pumps.** The data were not published at the State level because of low data reliability at the State level. There are few operations with solar pumps in the population.

**Sources of irrigation information.** These data show which sources were used by farmers to help them make irrigation decisions. The information for this item was tabulated as reported. No imputation was made for a blank response.

**Sprinkler systems.** Sprinkler irrigation is divided into four areas to reflect current trends in irrigation. The center pivot and mechanical-move methods are classified as either high-pressure delivery with water delivered at 60 psi or more, medium pressure delivery with water delivered at 30 to 59 psi, or low pressure delivery with water delivered at less than 30 psi. The mechanical-move systems are classified as either linear move, side roll, wheel move, or big gun where the sprinkler device is moved across the field either by self-propelled methods or by tractor. Since all big guns operate at high pressure, pressure was not asked.

Hand move systems include distribution systems laid out in the spring, moved through the field as needed during the season by hand labor, and removed at the end of the season. This includes other sprinkler systems which are moved without mechanical assistance.

Solid set and permanent systems are sprinklers placed in the ground permanently and used mostly for perennial crops.

**Tailwater pits.** Irrigation water is captured after the initial application of irrigation water. The water drains into a collection pit and is returned through an irrigation system to irrigate the same field or other fields.

**Total cropland.** This category includes cropland harvested, cropland used only for pasture or grazing, cropland idle or used for cover crops or soil improvement but not harvested and not pastured or grazed, cropland on which all crops failed or were abandoned, and cropland in cultivated summer fallow.

**Water management practices.** These practices refer to gravity irrigation systems only. The respondent reported whether they used any of the 10 techniques listed on the report form and the number of acres on which they applied this technique to save water or improve efficiency. Some respondents answered “Yes” to the screening question, item 1 in Section 17, but did not indicate which technique they used or the number of acres for any technique. No imputation was made for a blank response.

**Water Resources Regions (WRR).** Data from FRIS were tabulated by WRR. Boundaries of these areas are shown on the map on page 1. Geographic descriptions of the areas used to approximate water resources region are as follows:

*01 New England Region.* The drainage within the United States that ultimately discharges into the Bay of Fundy and the Atlantic Ocean. These points of discharge are located within and between Maine and Connecticut; Long Island Sound and the St. Francis River, a tributary of the St. Lawrence River.

*02 Middle Atlantic Region.* The drainage within the

United States that ultimately discharges into the Atlantic Ocean, whose point of discharge is located within and between New York and Virginia, and the Richelieu River, a tributary of the St. Lawrence River.

*03 South Atlantic-Gulf Region.* The drainage that ultimately discharges into the Atlantic Ocean, whose point of discharge is located within and between North Carolina and Florida; and the Gulf of Mexico, whose point of discharge is located within and between Florida and Mississippi, including the Pearl River.

*04 Great Lakes Region.* The drainage within the United States that discharges into the Great Lakes system, including the Lakes’ surfaces; and the St. Lawrence River as far east as, but excluding the Richelieu River.

*05 Ohio Region.* The drainage of the Ohio River, excluding that of the Tennessee River.

*06 Tennessee Region.* The drainage of the Tennessee River.

*07 Upper Mississippi Region.* The drainage of the Mississippi River above the mouth of the Ohio River, excluding drainage of the Missouri River above a point immediately below the mouth of the Gasconade River.

*08 Lower Mississippi River.* The drainage of the Mississippi River below the mouth of the Ohio River, but excluding the drainage of the Arkansas, White, and Red Rivers and above the points of highest backwater affects of the Mississippi River in those parts; and the coastal streams, other than the Mississippi River, that discharge into the Gulf of Mexico from the boundaries of, but excluding the Pearl and Sabine Rivers.

*09 Souris-Red-Rainy Region.* The drainage within the United States of the Souris, Red, and Rainy Rivers.

*10 Missouri Region.* The drainage within the United States of the Missouri River above a point immediately below the mouth of the Gasconade River and the Saskatchewan River.

*11 Arkansas-White-Red Region.* The drainage of the Arkansas River above the point of highest backwater affect of the Mississippi River, the Red River above the point of highest backwater affect of the Mississippi River, and the White River above the point of highest backwater affect of the Mississippi River near Peach Orchard Bluff, AR.

*12 Texas-Gulf Region.* The drainage that discharges into the Gulf of Mexico from and including Sabine Pass to, but excluding, the Rio Grande and the Lower Rio Grande Valley.

*13 Rio Grande Region.* The drainage within the United States of the Rio Grande; the San Luis Valley, North Plains, San Augustine Plains, Mimbres, Estancia Jonado del Muerto, Tularosa, Salt, and various smaller closed basins; and the Lower Rio Grande Valley.

*14 Upper Colorado Region.* The drainage of the Colorado River above the Lee Ferry Compact Point, which is about 1 mile below the mouth of the Paria River; and the Great Divide closed basin.

*15 Lower Colorado Region.* The drainage within the United States of the Colorado River below the Lee Ferry Compact Point, which is about 1 mile below the mouth of the Paria River; the Rios Yaqui, Magdalena, Sonoita, and other lesser streams that ultimately discharge into the Gulf of California; and the Animas Valley, Wilcox Playa, El Dorado Valley, and other smaller closed basins.

*16 Great Basin Region.* The drainage of the Great Basin that ultimately discharges into Utah and Nevada.

*17 Pacific-Northwest Region.* The drainage within the United States that ultimately discharges into the Straits of Georgia and Juan de Fuca and the Pacific Ocean. The point of discharge is within Washington and Oregon, including the Columbia river.

*18 California Region.* The drainage within the United States that ultimately discharges into the Pacific Ocean, whose point of discharge is within California, which includes the Central Valley; and that portion of the Great Basin and other closed basins in California.

*19 Alaska.* Entire State.

*20 Hawaii.* Entire State.

**Woodland.** Woodland includes natural or planted woodlots or timber tracts and cutover and deforested land with young growth which has or will have value for wood products and woodland pastured. Land covered by sagebrush or mesquite was reported as Other pastureland and rangeland or Other land. Land planted for Christmas tree production and short rotation woody crops was reported in Cropland harvested and land in tapped maple trees was reported as Woodland.

**Table A. Leading Irrigation States: 2007, 2002, and 1997 Censuses**

[For meaning of abbreviations and symbols, see introductory text]

Geographic area	Acres irrigated			Rank			2007 cumulative percent of United States total
	2007	2002	1997	2007	2002	1997	
United States .....	56,599,305	55,311,236	56,289,172	(X)	(X)	(X)	100.0
20 Leading States .....	51,745,677	50,812,487	52,266,055	(X)	(X)	(X)	91.4
Nebraska .....	8,558,559	7,625,170	7,065,556	1	2	2	15.1
California .....	8,016,159	8,709,353	8,886,693	2	1	1	29.3
Texas .....	5,010,416	5,074,638	5,764,295	3	3	3	38.1
Arkansas .....	4,460,682	4,149,766	3,785,338	4	4	4	46.0
Idaho .....	3,299,889	3,288,522	3,543,805	5	5	5	51.8
Colorado .....	2,867,957	2,590,654	3,374,233	6	7	6	56.9
Kansas .....	2,762,748	2,678,277	2,695,816	7	6	7	61.8
Montana .....	2,013,167	1,976,111	2,101,548	8	8	8	65.4
Oregon .....	1,845,194	1,907,627	1,963,478	9	9	9	68.6
Washington .....	1,735,917	1,823,155	1,787,120	10	10	11	71.7
Florida .....	1,552,118	1,815,174	1,873,823	11	11	10	74.4
Wyoming .....	1,550,723	1,541,688	1,749,908	12	12	12	77.2
Mississippi .....	1,368,661	1,175,530	1,110,145	13	13	14	79.6
Missouri .....	1,199,981	1,032,973	921,113	14	15	17	81.7
Utah .....	1,134,144	1,091,011	1,218,474	15	14	13	83.7
Georgia .....	1,017,773	870,810	773,066	16	18	19	85.5
Louisiana .....	954,353	938,841	960,831	17	16	16	87.2
Arizona .....	876,158	931,735	1,075,336	18	17	15	88.7
New Mexico .....	830,048	844,799	851,735	19	19	18	90.2
Nevada .....	691,030	746,653	763,742	20	20	20	91.4

**Table B. Estimated Total Acres Irrigated and Total Water Applied for All Irrigated General FRIS Farms and Horticultural Operations: 2008**

[Totals may not add due to rounding. Excludes institutional, research, and experimental farms. For meaning of abbreviations and symbols, see introductory text]

Geographic area	Total			General FRIS (Chapter 1)			Horticultural operations (Chapter 2)		
	Farms and operations	Acres irrigated	Acre-feet applied	Farms	Acres irrigated	Acre-feet applied	Operations	Acres irrigated <sup>1</sup>	Acre-feet applied <sup>2</sup>
United States .....	235,715	55,540,978	91,956,721	206,834	54,929,915	91,235,036	28,881	611,063	721,685
Alabama .....	1,040	95,647	62,153	665	75,023	42,512	375	20,624	19,641
Alaska .....	101	1,631	335	23	1,589	327	78	42	8
Arizona .....	3,172	869,908	4,656,299	2,997	861,496	4,622,309	175	8,412	33,990
Arkansas .....	4,312	4,500,947	8,637,450	4,119	4,493,435	8,631,781	193	7,512	5,669
California .....	47,702	7,387,214	22,719,227	45,136	7,329,245	22,599,659	2,566	57,969	119,568
Colorado .....	13,121	2,877,839	4,562,868	12,778	2,865,840	4,541,276	343	11,999	21,592
Connecticut .....	526	5,093	4,417	147	2,337	1,536	379	2,756	2,881
Delaware .....	422	106,513	76,007	309	104,620	74,379	113	1,893	1,628
Florida .....	8,044	1,303,172	1,798,674	5,250	1,222,797	1,701,120	2,794	80,375	97,554
Georgia .....	4,204	1,044,858	908,631	3,584	1,007,763	876,884	620	37,095	31,747
Hawaii .....	1,938	102,030	456,197	1,077	99,577	453,547	861	2,453	2,650
Idaho .....	14,140	3,330,598	6,236,396	13,834	3,319,827	6,228,403	306	10,771	7,993
Illinois .....	1,708	475,381	239,187	1,091	457,078	231,390	617	18,303	7,797
Indiana .....	1,598	411,828	201,691	1,089	404,399	198,880	509	7,429	2,811
Iowa .....	794	166,372	80,329	527	162,838	78,939	267	3,534	1,390
Kansas .....	4,738	2,573,242	3,148,730	4,508	2,570,003	3,146,607	230	3,239	2,123
Kentucky .....	1,476	34,595	17,081	822	32,380	15,698	654	2,215	1,383
Louisiana .....	2,042	938,341	975,932	1,692	932,712	972,164	350	5,629	3,768
Maine .....	575	19,635	8,184	196	18,151	6,946	379	1,484	1,238
Maryland .....	1,001	94,563	60,147	597	85,552	55,259	404	9,011	4,888
Massachusetts .....	1,196	19,083	19,450	677	17,421	18,894	519	1,662	556
Michigan .....	3,493	550,255	307,294	2,121	531,927	298,440	1,372	18,328	8,854
Minnesota .....	2,007	511,948	338,027	1,546	504,330	333,669	461	7,618	4,358
Mississippi .....	1,507	1,455,963	1,404,384	1,277	1,451,652	1,402,099	230	4,311	2,285
Missouri .....	2,330	1,239,948	1,000,897	1,877	1,232,354	996,875	453	7,594	4,022
Montana .....	8,776	1,948,960	2,662,184	8,507	1,947,159	2,660,677	269	1,801	1,507
Nebraska .....	15,060	8,369,512	6,702,173	14,812	8,365,545	6,699,545	248	3,967	2,628
Nevada .....	1,762	686,091	1,438,347	1,734	685,261	1,436,932	28	830	1,415
New Hampshire .....	366	1,526	736	86	720	193	280	806	543
New Jersey .....	1,416	81,841	61,966	608	59,412	45,305	808	22,429	16,661
New Mexico .....	9,000	838,497	1,898,710	8,878	835,639	1,896,349	122	2,858	2,361
New York .....	1,691	29,414	17,534	596	20,158	14,800	1,095	9,256	2,734
North Carolina .....	3,134	170,710	102,527	1,975	148,999	83,847	1,159	21,711	18,680
North Dakota .....	631	248,148	224,557	601	248,070	224,462	30	78	95
Ohio .....	1,377	26,634	14,064	379	18,548	9,398	998	8,086	4,666
Oklahoma .....	1,725	481,137	540,729	1,454	461,235	524,638	271	19,902	16,091
Oregon .....	13,692	1,812,325	3,394,583	12,156	1,758,602	3,276,679	1,536	53,723	117,904
Pennsylvania .....	2,661	22,955	16,699	1,090	17,359	13,000	1,571	5,596	3,699
Rhode Island .....	232	3,094	2,243	61	681	674	171	2,413	1,569
South Carolina .....	1,038	122,663	96,463	712	104,091	86,236	326	18,572	10,227
South Dakota .....	1,232	361,048	272,134	1,165	360,071	271,274	67	977	860
Tennessee .....	1,321	85,129	51,060	582	72,862	42,271	739	12,267	8,789
Texas .....	13,727	5,404,180	6,879,099	12,673	5,356,876	6,819,783	1,054	47,304	59,316
Utah .....	11,049	1,073,723	2,439,180	10,876	1,068,929	2,430,148	173	4,794	9,032
Vermont .....	355	748	428	66	488	235	289	260	193
Virginia .....	1,153	53,442	32,560	657	44,818	24,796	496	8,624	7,764
Washington .....	13,456	1,695,474	3,819,879	12,712	1,675,898	3,781,371	744	19,576	38,508
West Virginia .....	249	1,289	1,318	90	906	975	159	383	343
Wisconsin .....	2,221	407,909	326,579	1,261	396,123	322,377	960	11,786	4,202
Wyoming .....	5,204	1,497,926	3,040,984	5,164	1,497,119	3,039,481	40	807	1,503

<sup>1</sup> Irrigated square feet under protection were converted to acres and added to irrigated horticultural crop acreage in the open.

<sup>2</sup> Total gallons applied were converted to acre-feet.



# 2008 FARM AND RANCH IRRIGATION SURVEY

Form Number: 08-A621  
(12/03/08)



National Agricultural  
Statistics Service

Please return your  
completed report to:

Census of Agriculture  
1201 East 10th Street  
Jeffersonville, IN 47132

**OFFICE USE ONLY**

0009	0010	0011

08-A621

*Please make corrections to name, address, and ZIP code if necessary.*

Everyone who receives a form must return one by mail or via the Internet at [www.agcensus.nass.usda.gov](http://www.agcensus.nass.usda.gov). Your report is due by **February 17, 2009**. To fill out the paper form, use a black or blue ballpoint pen. **Duplicate forms?** If you received extra report forms for the SAME farming operation, return all report forms in the same envelope with this completed report.

Questions? Call us toll-free at **1-888-424-7828**. Thank you for your cooperation.

## SECTION 1 ACREAGE IN 2008

Report land owned, rented, or used by you, your spouse, or by the partnership, corporation, or organization named on the label above. Include ALL LAND, REGARDLESS OF LOCATION OR USE - cropland, Conservation Reserve Program (CRP) and Wetlands Reserve Program (WRP) land, pastureland, rangeland, woodland, idle land, farmsteads, etc.

	None	Number of Acres
1. All land owned.....	<input type="checkbox"/>	0025
2. All land rented or leased <b>from others</b> , including land worked by you on shares, used rent free, in exchange for services, payment of taxes, etc. Include federal, state and railroad land leased on a per-acre basis. Exclude all land (i.e., private, federal, state, railroad, etc.) used on a per-head or animal unit month (AUM) basis under a grazing permit.....	<input type="checkbox"/> +	0026
3. All land rented or leased <b>to others</b> , including land worked on shares by others and land subleased.....	<input type="checkbox"/> -	0027
4. <b>TOTAL ACRES</b> in this operation (Items 1 + 2 - 3 = item 4).....	=	0028

**PENALTY FOR FAILURE TO REPORT**

**NOTICE:** Response to this inquiry is required by law (Title 7, U.S. Code). By the same law, YOUR REPORT IS CONFIDENTIAL and it will only be used for statistical purposes. Your report CANNOT be used for purposes of taxation, investigation, or regulation. The law also provides that copies retained in your files are immune from legal process.

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**SECTION 2 LAND IN 2008**

Report all acres in this operation (SECTION 1, item 4) in column 1. If the same land had more than one use in 2008, report that land only once in the first use listed below that applies.

For column 2, report all irrigated land in this operation for items 1 and 3. In addition to fully irrigated land, report as irrigated any land to which partial, supplemental, or semi-irrigation was applied. Also include any acreage which received only preplant irrigation (watered before planting). Hayland, pastureland, or rangeland should be reported as irrigated if spring flood water was spread by canals, ditches, spreader dikes, pipes, or other works.

1. Cropland – Report acres only once in one of the following categories:

	None	Column 1 Number of Acres	None	Column 2 Acres Irrigated
a. Cropland harvested – Include all land from which crops were harvested or hay was cut, all land in orchards, citrus groves, vineyards, berries, nursery and greenhouse crops, Christmas trees, and short-rotation woody crops . . . . .	<input type="checkbox"/>	0029	<input type="checkbox"/>	0030
b. Cropland used only for pasture or grazing – Include rotation pasture and grazing land that could have been used for crops without additional improvements. . . . .	<input type="checkbox"/>	0031	<input type="checkbox"/>	0032
c. Other cropland – Include cropland used for cover crops, cropland on which all crops failed, cropland in cultivated summer fallow, and cropland idle . . . . .	<input type="checkbox"/>	0033	<input type="checkbox"/>	0034
2. Woodland – Include woodland pastured and woodland not pastured. . . . .	<input type="checkbox"/>	0035		
3. Other pastureland and rangeland – Include any pastureland other than cropland and woodland pastured . . . . .	<input type="checkbox"/>	0037	<input type="checkbox"/>	0038
4. All other land – Include land in farmsteads, buildings, livestock facilities, ponds, roads, wasteland, etc . . . . .	<input type="checkbox"/>	0039		
5. TOTAL ACRES – Add acres in each column and enter the totals. (Column 1 total should be the same as SECTION 1, item 4.) . . . . .		0041		0042

NOTE: If the total acres irrigated in item 5, column 2 is "0", go to SECTION 21.

6. For this operation, what state and county had the most irrigated acres?

State	County
0951	0950

**SECTION 3 GOVERNMENT PROGRAMS IN 2008**

1. During 2008, did this operation receive direct payments, counter-cyclical payments, loan deficiency payments, or marketing loan gains or participate in any quota programs or buy-out programs?

0691 1  Yes 3  No

2. Does this operation currently participate, or has it participated in the past five years, in a government payment program or technical assistance program for irrigation and/or drainage improvements? Payment programs may include cost-share or incentive payments or only technical assistance for system design or on-farm management.

0795 1  Yes – Continue 3  No – Go to SECTION 4

a. Mark (X) all programs that apply –

- 0698
- 1  USDA – Environmental Quality Incentive Program (EQIP) – Please check program →
  - 2  Other USDA conservation payment programs (CSP, CRP, WRP, FWP, GRP, etc.)
  - 3  USDA-NRCS Conservation Technical Assistance program
  - 4  Non-USDA Federal programs – Include EPA, Bureau of Reclamation, or other programs
  - 5  State programs (including CREP), local water management programs, or supply district programs
  - 6  Other – Specify →

0794

- 1  EQIP – general
- 2  Klamath River Basin
- 3  Ground and Surface Water Conservation



**SECTION 4 METHOD OF WATER DISTRIBUTION ON THIS OPERATION IN 2008**

Report acres irrigated by each type of ON FIELD distribution or delivery system listed below. If the same land was irrigated by more than one method of distribution, report acres irrigated by each method used.

DO NOT report information for the delivery system used to convey water from the source to the field. Report information for the field distribution system.

Acres Irrigated by Gravity System (Field Water Conveyance System)						
	Total	Open Un-lined Ditch	Open Lined Ditch	Poly Tubing (or other single-year-use, lay-flat tubing)	Above-Ground pipe (except poly-tubing) <sup>1</sup>	Under-Ground Pipe <sup>2</sup>
1. Gravity irrigation						
None	0855	0859	0857	0056	0057	0858
a. Down rows or furrows . . . . .	<input type="checkbox"/>					
b. Controlled flooding (between borders or within basins) . . . . .	<input type="checkbox"/>	0865	0869	0867	0066	0067
c. Uncontrolled flooding (rangeland, pastureland, etc.) . . . . .	<input type="checkbox"/>	0875	0879	0877	0076	0077
d. Other . . . . .	<input type="checkbox"/>	0885	0889	0887	0086	0087

<sup>1</sup> Include gated-pipe and riser or hydrant systems connected to above-ground pipe.  
<sup>2</sup> Include riser or hydrant systems connected to underground pipe.

Acres Irrigated by Sprinkler System				
	Very Low Pressure (Under 15 PSI)	Low Pressure (15 to 29 PSI)	Medium Pressure (30 to 59 PSI)	High Pressure (60 PSI or more)
2. Sprinkler irrigation – Inlet pressure				
None	0569	0576	0575	0570
a. Center pivot systems (circle) . . . . .	<input type="checkbox"/>			
b. Linear move tower systems (and other linear continuous move drive systems) . . . . .	<input type="checkbox"/>	0571	0577	0578
c. Solid set and permanent systems (except low-flow micro systems) . . . . .	<input type="checkbox"/>	0568	0565	0566
d. Mechanical move systems –				
(i) Side roll, wheel move, or other mechanical move systems and other discrete move systems . . . . .	<input type="checkbox"/>			Acres Irrigated (All pressures) 0240
(ii) Big gun or traveler systems . . . . .	<input type="checkbox"/>			0241
e. Hand-move systems . . . . .	<input type="checkbox"/>			0242
3. Drip, trickle, or low-flow micro irrigation – except poly and lay-flat tubing				
a. Surface drip (on or above ground) . . . . .	<input type="checkbox"/>			Acres Irrigated (All pressures) 0248
b. Sub-surface drip (root zone) . . . . .	<input type="checkbox"/>			0246
c. Low-flow micro sprinklers, sprays (apply water at low pressure and are not self-propelled or easily moved) . . . . .	<input type="checkbox"/>			0247
4. Subirrigation – Water seepage, or use of a drainage system to maintain aquifer water table at a predetermined depth. Exclude methods reported above . . . . .	<input type="checkbox"/>			Acres Irrigated 0249





**SECTION 5 ACRES IRRIGATED, ESTIMATED QUANTITY OF WATER USED, AND OFF-FARM SUPPLIED WATER USED ON THIS OPERATION BY SOURCE IN 2008**

Report quantity of water in the unit or units of measure used most on this operation. If exact measurements are not available, give your best estimate for quantity of water used. If total or average acre-feet cannot be estimated, give combined pumping capacity and duration in days, or total depth of water applied, or flow quantities and duration of flow in days.

1. Acres irrigated – Include cropland and pastureland . . . . .
2. Estimated quantity of water used on this operation in 2008. Report for only one of the following options, items a through e, in the unit used most on this operation
  - a. Total acre-feet . . . . .
  - OR
  - b. Average acre-feet per acre irrigated (One acre-foot covers one acre one foot deep) . . . . .
  - OR
  - c. Average inches applied per acre . . . . .
  - OR
  - d. Average gallons of water applied per minute (GPM) . . . . .
  - OR
  - (i) Total number of 24-hour day equivalents water was applied . . . . .
  - OR
  - e. Average flow in cubic feet per second (CFS) . . . . .
  - OR
  - (i) Total number of 24-hour day equivalents water flow was applied . . . . .

Water Source		
Ground Water (from wells)	Surface Water	
	On Farm	Off-Farm (All Suppliers)
0444 acres	0449 acres	0454 acres

Total Acre-Feet		
0955	0960	0965

Acre-Feet Per Acre		
0445	0450	0966

Inches Per Acre		
0448	0453	0967

GPM		
0446	0451	0968

Duration		
0447 days	0452 days	0969 days

CFS		
0956	0961	0970

Duration		
0957 days	0962 days	0971 days

3. Did this operation receive any water from an off-farm source?  
0457 1  **Yes** – Continue    3  **No** – Go to SECTION 6

- a. Was there a fee for the off-farm water received on this operation?  
0675 1  **Yes** – Continue    3  **No** – Go to item 4 below

Dollars	
0456	\$ .00

- b. Total cost of off-farm supplied water . . . . .
- (i) Did the cost per unit of water (check one) –  
0667 1  Increase as the amount of off-farm supplied water used increased?  
2  Remain the same as the amount of off-farm supplied water used increased?  
3  Decrease as the amount of off-farm supplied water used increased?

4. Supplier of off-farm water – How much of this operation's off-farm water was supplied, delivered, or transferred through a project financed, constructed, or managed by –
  - a. U.S. Bureau of Reclamation? Include reclamation water delivered through a local district . . . . .
  - b. Other Federal agencies such as the U.S. Army Corp of Engineers, Bureau of Indian Affairs, USDA small watershed project, etc.? . . . .
  - c. All other suppliers? – Specify →  . . . . .

0664	1 <input type="checkbox"/> None
	2 <input type="checkbox"/> Some
	3 <input type="checkbox"/> All
	4 <input type="checkbox"/> Unknown
0665	1 <input type="checkbox"/> None
	2 <input type="checkbox"/> Some
	3 <input type="checkbox"/> All
	4 <input type="checkbox"/> Unknown
0666	1 <input type="checkbox"/> None
	2 <input type="checkbox"/> Some
	3 <input type="checkbox"/> All
	4 <input type="checkbox"/> Unknown

**SECTION 6 WATER TRANSFERS IN 2008**

Report water leased or rented on an annual or multi-year basis for use off this operation when the permanent right to the water was maintained by the operator. Include water rented or leased directly by this operation or this operation's irrigation provider.

1. Did this operation rent or lease water to others for use off this operation in 2008? Include both agricultural and non-agricultural purposes.

0531 1  **Yes** – Continue      3  **No** – Go to SECTION 7

2. Report the quantity of water transferred to others in 2008 for each source listed –

- a. Ground water from on-farm wells .....
- b. Surface water from on-farm sources .....
- c. Water normally received from an off-farm supplier .....

Water Quantity (Acre-Feet)	
None	0532
	0533
	0534

3. Mark (X) below all uses or recipients of transferred water –

- 0535 1  Other agricultural producers
- 2  Municipal or industrial water users
- 3  Environmental uses (water quality, in-stream flow, habitat improvement)
- 4  Unknown use of transferred water – If unknown, check Item (a) or (b) below

- 0536 1  (a) Water was part of a pool used by several producers
- 2  (b) Water rented or leased was arranged by this operation's irrigation provider

**SECTION 7 EXPENDITURES FOR IRRIGATION FACILITIES AND EQUIPMENT ON THIS OPERATION IN 2008**

Report expenditures, purpose, and sources of funding assistance in 2008 for the construction of irrigation facilities on this operation and purchase of irrigation equipment and machinery for this operation. Include estimates of expenditures made by or shared with others (landlords or government agencies), including programs such as Environmental Quality Incentive Program (EQIP). Report the cost of maintenance and repairs in SECTION 13.

	Total Expenditures (Dollars)	Principal Purpose of Expenditures (Mark (X) principal purpose only)	Primary Source of Funding Assistance (Mark (X) primary source only)
1. Purchase of new or replacement irrigation equipment and machinery – Include sprinklers, pipes, siphons, nozzles, pumps, motors, engines, etc. Do not include computers ..... <input type="checkbox"/>	0511 \$ .00	0512 1 <input type="checkbox"/> Replacement 2 <input type="checkbox"/> Water conservation 3 <input type="checkbox"/> New expansion	0513 1 <input type="checkbox"/> No funding assistance 2 <input type="checkbox"/> EQIP 3 <input type="checkbox"/> Other USDA cost-share program 4 <input type="checkbox"/> Non-USDA cost-share program
2. New well construction or deepening of existing wells – Include drilling costs, cost of casing, and any costs to prepare well for installation of pump. Do not include cost of pumps or motors ..... <input type="checkbox"/>	0515 \$ .00	0516 1 <input type="checkbox"/> Replacement 2 <input type="checkbox"/> Water conservation 3 <input type="checkbox"/> New expansion	0517 1 <input type="checkbox"/> No funding assistance 2 <input type="checkbox"/> EQIP 3 <input type="checkbox"/> Other USDA cost-share program 4 <input type="checkbox"/> Non-USDA cost-share program
3. Construction or improvement of permanent storage and distribution systems – Include dams, ponds, reservoirs, permanent ditches, canals, flumes, etc. .... <input type="checkbox"/>	0519 \$ .00	0520 1 <input type="checkbox"/> Replacement 2 <input type="checkbox"/> Water conservation 3 <input type="checkbox"/> New expansion	0521 1 <input type="checkbox"/> No funding assistance 2 <input type="checkbox"/> EQIP 3 <input type="checkbox"/> Other USDA cost-share program 4 <input type="checkbox"/> Non-USDA cost-share program
4. Land clearing and leveling for irrigation purposes. .... <input type="checkbox"/>	0523 \$ .00	0524 1 <input type="checkbox"/> Replacement 2 <input type="checkbox"/> Water conservation 3 <input type="checkbox"/> New expansion	0525 1 <input type="checkbox"/> No funding assistance 2 <input type="checkbox"/> EQIP 3 <input type="checkbox"/> Other USDA cost-share program 4 <input type="checkbox"/> Non-USDA cost-share program
5. Computers, control panels, and software for irrigation water management. .... <input type="checkbox"/>	0544 \$ .00	0545 1 <input type="checkbox"/> Replacement 2 <input type="checkbox"/> Water conservation 3 <input type="checkbox"/> New expansion	0546 1 <input type="checkbox"/> No funding assistance 2 <input type="checkbox"/> EQIP 3 <input type="checkbox"/> Other USDA cost-share program 4 <input type="checkbox"/> Non-USDA cost-share program

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**SECTION 8 ACRES HARVESTED, CROP YIELDS, AND PASTURE ON THIS OPERATION IN 2008**

For each crop listed, report separately irrigated land and non-irrigated land. Report acreage as irrigated if any water was artificially applied either before planting or during the growing season in 2008.

Crops and Pastureland	Irrigated Land Include preplant and supplemental or semi-irrigation					Non-Irrigated Land	
	Irrigated Acres Harvested	Average Yield Per Irrigated Acre	Average Estimated Quantity of Water Applied Per Acre			Non-Irrigated Acres Harvested	Average Yield Per Non-Irrigated Acre
			Acre-Feet Per Acre	OR	Inches Per Acre		
1. Corn for grain or seed – Exclude popcorn and sweet corn <input type="checkbox"/>	0050	0051 Bu.	0052	or	0053	0054	0055 Bu.
2. Corn for silage or greenchop – Exclude popcorn and sweet corn <input type="checkbox"/>	0060	0061 Tons	0062	or	0063	0064	0065 Tons
3. Sorghum for grain or seed <input type="checkbox"/>	0070	0071 Bu.	0072	or	0073	0074	0075 Bu.
4. Wheat for grain or seed <input type="checkbox"/>	0080	0081 Bu.	0082	or	0083	0084	0085 Bu.
5. Barley for grain or seed <input type="checkbox"/>	0090	0091 Bu.	0092	or	0093	0094	0095 Bu.
6. Soybeans for beans <input type="checkbox"/>	0106	0101 Bu.	0102	or	0103	0104	0105 Bu.
7. Beans, dry edible <input type="checkbox"/>	0110	0111 Cwt.	0112	or	0113	0114	0115 Cwt.
8. Rice <input type="checkbox"/>	0120	0121 Cwt.	0122	or	0123		
9. Other small grains (oats, rye, etc.) <input type="checkbox"/>	0130		0132	or	0133	0134	
10. Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage) <input type="checkbox"/>	0140	0141 Tons, dry	0142	or	0143	0144	0145 Tons, dry
11. All other hay, including small grain, other tame, and wild hay (dry hay, greenchop, and silage) <input type="checkbox"/>	0150	0151 Tons, dry	0152	or	0153	0154	0155 Tons, dry

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**SECTION 8** Continued –

Crops and Pastureland	Irrigated Land Include preplant and supplemental or semi-irrigation					Non-Irrigated Land	
	Irrigated Acres Harvested	Average Yield Per Irrigated Acre	Average Estimated Quantity of Water Applied Per Acre			Non-Irrigated Acres Harvested	Average Yield Per Non-Irrigated Acre
			Acre-Feet Per Acre	OR	Inches Per Acre		
12. Peanuts . . . . . <input type="checkbox"/> None	0550	0551	0552	or	0553	0554	0555
		Lbs.	_____				Lbs.
13. Cotton . . . . . <input type="checkbox"/>	0160	0161	0162	or	0163	0164	0165
		Lbs. lint	_____				Lbs. lint
14. Sugarbeets for sugar . . . . . <input type="checkbox"/>	0170	0171	0172	or	0173	0174	0175
		Tons	_____				Tons
15. Tobacco, all types . . . . . <input type="checkbox"/>	0180	0181	0182	or	0183	0184	0185
	_____	Lbs.	_____			_____	Lbs.
16. All land from which vegetables, potatoes, and melons were harvested . . . . . <input type="checkbox"/>	0186		0187	or	0188	0189	
	_____		_____			_____	
Report for selected vegetable crops:							
a. Sweet corn . . . . . <input type="checkbox"/>	0850	0851	0852	or	0853	0854	0975
	_____	Cwt.	_____			_____	Cwt.
b. Tomatoes in the open . . . . . <input type="checkbox"/>	0860	0861	0862	or	0863	0864	0985
	_____	Cwt.	_____			_____	Cwt.
c. Lettuce and romaine . . . . . <input type="checkbox"/>	0870	0871	0872	or	0873	0874	0995
	_____	Cwt.	_____			_____	Cwt.
d. Potatoes – Exclude sweet potatoes . . . . . <input type="checkbox"/>	0190	0191	0192	or	0193	0194	0195
	_____	Cwt.	_____			_____	Cwt.
17. All berries . . . . . <input type="checkbox"/>	0560		0562	or	0563	0564	
	_____		_____			_____	
18. Land in bearing and non-bearing fruit orchards, citrus or other groves, vineyards, and nut trees . . . . . <input type="checkbox"/>	0210		0212	or	0213	0214	
	_____		_____			_____	
19. All other crops – Specify <input type="checkbox"/>	0220		0222	or	0223	0224	
<input type="text"/>			_____				
20. Pastureland, all types . . . . . <input type="checkbox"/>	0230		0232	or	0233	0234	
			_____				

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**SECTION 9 PRIMARY METHOD OF WATER DISTRIBUTION, APPLICATION OF AGRICULTURAL CHEMICALS IN IRRIGATION WATER, AND WATER SOURCE BY IRRIGATED ACRES HARVESTED ON THIS OPERATION IN 2008**

Report only irrigated acres harvested. Report separately the primary distribution method, chemigation, and water source. Refer to the Pressure and Gravity Irrigation Systems ID codes listed below for column 1.

**PRESSURE AND GRAVITY IRRIGATION SYSTEMS ID CODES FOR COLUMN 1 BELOW**

Pressure Systems	Gravity Systems
01 = Hand-move System	15 = Siphon-Tube System (from unlined ditches)
02 = Solid or Permanent Set System	16 = Siphon-Tube System (from lined ditches)
03 = Side Roll or Wheel Line System	17 = Portal- or Ditch-Gate System (from unlined ditches)
04 = Big Gun System	18 = Portal- or Ditch-Gate System (from lined ditches)
05 = Linear Move System (PSI less than 15)	19 = Poly-Pipe or Lay-Flat Tubing System
06 = Linear Move System (PSI 15 to 29)	20 = Gated-Pipe System (not poly-pipe)
07 = Linear Move System (PSI equal to or greater than 30 and less than 60)	21 = Improved Gated-Pipe (surge flow or cablegation system, but not poly-pipe)
08 = Linear Move System (PSI equal to or greater than 60)	22 = Subirrigation
09 = Center Pivot System (PSI less than 15)	23 = Open Discharge from well or pump
10 = Center Pivot System (PSI 15 to 29)	24 = Other Gravity System – Specify type ↴
11 = Center Pivot System (PSI equal to or greater than 30 and less than 60)	
12 = Center Pivot System (PSI equal to or greater than 60)	
13 = Low-Flow Irrigation (drip, trickle, or micro sprinkler systems)	
14 = Other Pressure System – Specify type ↴	

Irrigated Crops and Pastureland	Primary Method of Water Distribution (Enter Irrigation System ID Code from above.)		Chemigation Using Irrigation System		Water Source (Column totals may exceed irrigated crop acres reported in Section 8 when more than one water source was used.)		
	Column 1 System ID Code	Percent of Irrigated Crop Using This System	Commercial Fertilizer (Acres)	Pesticide Application (Acres)	Ground Water from Wells (Acres)	On-Farm Surface Water (Acres)	Water from Off-Farm Suppliers <sup>1</sup> (Acres)
1. Corn for grain or seed – Exclude popcorn and sweet corn <input type="checkbox"/>	0250	0251	0252	0253	0255	0254	0256
2. Corn for silage or greenchop – Exclude popcorn and sweet corn <input type="checkbox"/>	0260	0261	0262	0263	0265	0264	0266
3. Sorghum for grain or seed <input type="checkbox"/>	0270	0271	0272	0273	0275	0274	0276
4. Wheat for grain or seed <input type="checkbox"/>	0280	0281	0282	0283	0285	0284	0286
5. Barley for grain or seed <input type="checkbox"/>	0290	0291	0292	0293	0295	0294	0296
6. Soybeans for beans <input type="checkbox"/>	0300	0301	0302	0303	0305	0304	0306
7. Beans, dry edible <input type="checkbox"/>	0310	0311	0312	0313	0315	0314	0316
8. Rice <input type="checkbox"/>	0320	0321	0322	0323	0325	0324	0326
9. Other small grains (oats, rye, etc.) <input type="checkbox"/>	0330	0331	0332	0333	0335	0334	0336
10. Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage) <input type="checkbox"/>	0340	0341	0342	0343	0345	0344	0346
11. All other hay, including small grain, other tame, and wild hay (dry hay, greenchop, and silage) <input type="checkbox"/>	0350	0351	0352	0353	0355	0354	0356

<sup>1</sup> Off-farm water supplies may include water purchased from the U.S. Bureau of Reclamation; a state, county, or local district; mutual, private, cooperative, or neighborhood ditches; or commercial or municipal water systems.





**SECTION 9** Continued –

**PRESSURE AND GRAVITY IRRIGATION SYSTEMS ID CODES FOR COLUMN 1 BELOW**

**Pressure Systems**

- 01 = Hand-move System
- 02 = Solid or Permanent Set System
- 03 = Side Roll or Wheel Line System
- 04 = Big Gun System
- 05 = Linear Move System (PSI less than 15)
- 06 = Linear Move System (PSI 15 to 29)
- 07 = Linear Move System (PSI equal to or greater than 30 and less than 60)
- 08 = Linear Move System (PSI equal to or greater than 60)
- 09 = Center Pivot System (PSI less than 15)
- 10 = Center Pivot System (PSI 15 to 29)
- 11 = Center Pivot System (PSI equal to or greater than 30 and less than 60)
- 12 = Center Pivot System (PSI equal to or greater than 60)
- 13 = Low-Flow Irrigation (drip, trickle, or micro sprinkler systems)
- 14 = Other Pressure System – Specify type

**Gravity Systems**

- 15 = Siphon-Tube System (from unlined ditches)
- 16 = Siphon-Tube System (from lined ditches)
- 17 = Portal- or Ditch-Gate System (from unlined ditches)
- 18 = Portal- or Ditch-Gate System (from lined ditches)
- 19 = Poly-Pipe or Lay-Flat Tubing System
- 20 = Gated-Pipe System (not poly-pipe)
- 21 = Improved Gated-Pipe (surge flow or cablegation system, but not poly-pipe)
- 22 = Subirrigation
- 23 = Open Discharge from well or pump
- 24 = Other Gravity System – Specify type

Irrigated Crops and Pastureland	Primary Method of Water Distribution (Enter Irrigation System ID Code from above.)		Chemigation Using Irrigation System		Water Source (Column totals may exceed irrigated crop acres reported in Section 8 when more than one water source was used.)		
	Column 1 System ID Code	Percent of Irrigated Crop Using This System	Commercial Fertilizer (Acres)	Pesticide Application (Acres)	Ground Water from Wells (Acres)	On-Farm Surface Water (Acres)	Water from Off-Farm Suppliers <sup>1</sup> (Acres)
None <input type="checkbox"/>	0580	0581	0582	0583	0585	0584	0586
12. Peanuts <input type="checkbox"/>	ID	%					
13. Cotton <input type="checkbox"/>	0360	0361	0362	0363	0365	0364	0366
14. Sugarbeets for sugar <input type="checkbox"/>	ID	%					
15. Tobacco, all types <input type="checkbox"/>	0370	0371	0372	0373	0375	0374	0376
16. All land from which vegetables, potatoes, and melons were harvested <input type="checkbox"/>	ID	%					
16. All land from which vegetables, potatoes, and melons were harvested <input type="checkbox"/>	0380	0381	0382	0383	0385	0384	0386
16. All land from which vegetables, potatoes, and melons were harvested <input type="checkbox"/>	ID	%					
16. All land from which vegetables, potatoes, and melons were harvested <input type="checkbox"/>	0474	0475	0476	0477	0479	0478	0480
16. All land from which vegetables, potatoes, and melons were harvested <input type="checkbox"/>	ID	%					
Report for selected vegetable crops:	0900	0901	0902	0903	0905	0904	0906
a. Sweet corn <input type="checkbox"/>	ID	%					
b. Tomatoes in the open <input type="checkbox"/>	0910	0911	0912	0913	0915	0914	0916
b. Tomatoes in the open <input type="checkbox"/>	ID	%					
c. Lettuce and romaine <input type="checkbox"/>	0920	0921	0922	0923	0925	0924	0926
c. Lettuce and romaine <input type="checkbox"/>	ID	%					
d. Potatoes – Exclude sweet potatoes <input type="checkbox"/>	0390	0391	0392	0393	0395	0394	0396
d. Potatoes – Exclude sweet potatoes <input type="checkbox"/>	ID	%					
17. All berries <input type="checkbox"/>	0590	0591	0592	0593	0595	0594	0596
17. All berries <input type="checkbox"/>	ID	%					
18. Land in bearing and non-bearing fruit orchards, citrus or other groves, vineyards, and nut trees <input type="checkbox"/>	0410	0411	0412	0413	0415	0414	0416
18. Land in bearing and non-bearing fruit orchards, citrus or other groves, vineyards, and nut trees <input type="checkbox"/>	ID	%					
19. All other crops – Specify <input type="text"/> <input type="checkbox"/>	0420	0421	0422	0423	0425	0424	0426
19. All other crops – Specify <input type="text"/> <input type="checkbox"/>	ID	%					
20. Pastureland, all types <input type="checkbox"/>	0430	0431	0432	0433	0435	0434	0436
20. Pastureland, all types <input type="checkbox"/>	ID	%					

<sup>1</sup> Off-farm water supplies may include water purchased from the U.S. Bureau of Reclamation; a state, county, or local district; mutual, private, cooperative, or neighborhood ditches; or commercial or municipal water systems.

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**SECTION 10 NUMBER OF IRRIGATION WELLS ON THIS OPERATION IN 2008, INCLUDING WELL DEPTH AND PUMPING CAPACITY**

1. Did this operation irrigate with water from wells in 2008?  
 0760 1  **Yes** – Continue      3  **No** – Go to SECTION 11

Number
0460

2. How many wells were used in 2008? .....

Well #	Depth of Well (Feet)	Depth to Water at Start of Irrigation Season (Feet)	Depth to Bowls or Impellers (Feet)	Pump Capacity – Discharge From Well (GPM)	Operating Pressure at Well Head (PSI)	Size of Engine for All Motors, Including Electric (HP)	Total Hours Operated For the Season
a. Report for the first 3 primary wells pumped in 2008 →							
1 . . . . .	0461	0462	0463	0464	0676	0761	0762
2 . . . . .	0465	0466	0467	0468	0677	0763	0764
3 . . . . .	0469	0470	0471	0472	0678	0765	0766
	Average Depth of Well (Feet)	Average Depth to Water at Start of Irrigation Season (Feet)	Average Depth to Bowls or Impellers (Feet)	Average Pump Capacity – Discharge From Well (GPM)	Average Operating Pressure at Well Head (PSI)	Average Size of Engine for All Motors, Including Electric (HP)	Average Hours Operated For the Season
b. Report for all other wells pumped in 2008	0481	0482	0483	0484	0681	0767	0768

3. How many pumping stations (wells from item 2 above with associated piping systems) used backflow prevention devices (check valves) in 2008? .....

Number
None <input type="checkbox"/> 0770

a. In 2008, how many acres were irrigated with these (item 3) wells? .....

Acres
0771

4. How many wells from item 2 above had flow meters or other flow measurement devices? .....

Number
0683

a. In 2008, how many acres were irrigated with these (item 4) systems? .....

Acres
0772

5. Has the average depth to water for the wells supplying this operation changed in the last five years?  
 0773 1  **Yes** – Continue      3  **No** – Go to item 6 below

a. If yes, check one. . . . . 0487 1  Increased depth      2  Decreased depth

Number
None <input type="checkbox"/> 0486

6. How many of the wells used in 2008 are free flowing (artesian wells)? .....

Number
0485

7. How many wells were not used in 2008, but were capable of being used? Exclude abandoned wells. ....



**SECTION 11 PUMPS, OTHER THAN WELL PUMPS, USED FOR IRRIGATION ON THIS OPERATION IN 2008**

Report for all surface water pumps on this operation, whether or not they were used in 2008.

	Number of Pumps	Vertical Lift (Average Feet)	Discharge Capacity (Average GPM)	Discharge Operating Pressure (Average PSI)
1. Tailwater pits . . . . . <input type="checkbox"/> None	0490	0774	0491	0687
2. Ponds, lakes, reservoirs, rivers, canals, etc. . . . . <input type="checkbox"/>	0492	0775	0493	0688
3. Relifting or boosting water within system . . . . . <input type="checkbox"/>	0494	0776	0777	0778

**SECTION 12 ENERGY USE ON THIS OPERATION IN 2008 FOR PUMPING WATER BY POWER SOURCE**

Report the expenditures for fuel and power used in 2008 for irrigation pumping by each type of energy used on this operation. Include the cost of any additional charges such as a fuel adjustment charge or any other type of charge which was based on the amount of power or fuel purchased. Include landlord's share.

Power Source	Number of Pumps	Total Cost of Energy Used (Dollars)	Acres Irrigated by Water Source	
			Ground Water From <sup>1</sup> Wells (Acres)	On-Farm Surface <sup>2</sup> Water (Acres)
1. Electricity . . . . . <input type="checkbox"/> None	0495	0496 \$ .00	0497	0781
2. Natural gas . . . . . <input type="checkbox"/>	0498	0499 \$ .00	0500	0782
3. LP gas, propane, or butane . . . . . <input type="checkbox"/>	0501	0502 \$ .00	0503	0783
4. Diesel and biodiesel fuel . . . . . <input type="checkbox"/>	0504	0505 \$ .00	0506	0784
5. Gasoline and gasohol – Include ethanol blends <input type="checkbox"/>	0507	0508 \$ .00	0509	0785
6. Solar and other renewable . . . . . <input type="checkbox"/>	0779		0780	0786

<sup>1</sup> Include only acres for wells reported in Section 10, items 2a and 2b.  
<sup>2</sup> Include only acres for pumps reported in Section 11.

**SECTION 13 MAINTENANCE AND REPAIR COSTS FOR IRRIGATION EQUIPMENT AND FACILITIES ON THIS OPERATION IN 2008**

Report all expenses in 2008 for keeping irrigation equipment and facilities in working order. Include expenses for tune-ups, oil changes, ditch and canal cleanout, repairs to pumps, motors, pipes, canals, and sprinkler systems, etc. Exclude construction or improvement costs reported in SECTION 7.

1. Amount spent for maintenance and repairs of irrigation equipment and facilities in 2008 including maintenance of on-farm ditches. Include payments made by landlords. Give estimate if actual figures are not available . . . . . <input type="checkbox"/> None	Dollars
	0510 \$ .00

**SECTION 14 LABOR COSTS FOR IRRIGATION ON THIS OPERATION IN 2008**

Report gross cash payments to employees, including family members, before deductions for social security, taxes, insurance premiums, etc. and payments for contract labor. Exclude customwork.

1. Wages paid for –	Dollars
a. Hired irrigation labor . . . . . <input type="checkbox"/> None	0787 \$ .00
b. Contract irrigation labor . . . . . <input type="checkbox"/>	0788 \$ .00



**SECTION 15 IRRIGATION PRACTICES IN 2008**

1. How did this operation decide when to schedule water use in 2008? Mark (X) all that apply –

- 0527
- 1  Condition of crop (observation)
- 2  Feel of the soil
- 3  Use of soil moisture-sensing devices such as moisture blocks or tensionmeters
- 4  Use of plant moisture-sensing devices such as pressure (chamber) bombs or infrared (IR) thermometer
- 5  Use of irrigation scheduling service, including commercial and government
- 6  Reports on daily crop-water evapo-transpiration (ET) use (Internet, newspapers, radio, TV, fax, and email)
- 7  Water delivered by irrigation organization in turn (no choice by water user)
- 8  Personal calendar schedule
- 9  Computer simulation models (not from a commercial service)
- 10  When neighbors began to irrigate
- 11  Other – Specify →

2. Did this operation have to discontinue irrigation during 2008 long enough to affect crop yields?

- 0669 1  **Yes** – Continue      3  **No** – Go to SECTION 16

a. Mark (X) all reasons that apply –

- 0670
- 1  Shortage of surface water (water from reservoirs, lakes, streams, water supply organizations, etc.)
- 2  Shortage of ground water (lowering water level of wells or depletion of ground water)
- 3  Irrigation equipment failure
- 4  Energy price increases or energy shortage
- 5  Poor water quality
- 6  Loss of water rights not due to voluntary transfers
- 7  Cost of purchased water
- 8  Other – Specify →

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**SECTION 16 OTHER USES OF IRRIGATION WATER ON THIS OPERATION IN 2008**

1. Report irrigation used for any of the following purposes –

	None	Acres on Which Applied
a. Prevent freeze damage .....	<input type="checkbox"/>	0440
b. Crop cooling to delay early budding, blooming, or to reduce heat stress (cool crop canopy) .....	<input type="checkbox"/>	0441
c. Leaching to remove salts from the soil (salinity control) .....	<input type="checkbox"/>	0442
d. Disposal of liquid livestock waste .....	<input type="checkbox"/>	0488
e. To provide wildlife or waterfowl habitat .....	<input type="checkbox"/>	0439
f. Other – Specify → <input type="text"/> .....	<input type="checkbox"/>	0443

**SECTION 17 WATER MANAGEMENT PRACTICES FOR GRAVITY IRRIGATION SYSTEMS**

1. Did this operation use gravity irrigation systems to irrigate any of the acres on this operation (SECTION 4, item 1) in 2008?

0671 1  **Yes** – Continue      3  **No** – Go to SECTION 18

2. On how many acres did you use the following techniques?

	None	Number of Acres
a. Irrigation water captured for further use (tailwater pits) .....	<input type="checkbox"/>	0672
b. Water restricted from running off by diking end of field .....	<input type="checkbox"/>	0789
c. Surge flow or cablegation technique .....	<input type="checkbox"/>	0673
d. Shortening of furrow length .....	<input type="checkbox"/>	0684
e. Limited irrigation set time or number of irrigations, to reduce water applied .....	<input type="checkbox"/>	0685
f. Alternate row irrigation .....	<input type="checkbox"/>	0686
g. Water-soluble polyacrylamide (PAM) .....	<input type="checkbox"/>	0699
h. Mulch or other types of row covers .....	<input type="checkbox"/>	0790
i. Gravity system with laser leveling .....	<input type="checkbox"/>	0791
j. Special furrowing techniques, such as wide-spaced bed furrowing, compacted furrowing, or furrow diking – Specify technique used → <input type="text"/> .....	<input type="checkbox"/>	0674

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### SECTION 18 IMPROVEMENTS TO IRRIGATION SYSTEMS ON THIS OPERATION SINCE 2003 THAT REDUCED ENERGY USE AND/OR CONSERVED WATER

Consider as an improvement changes in equipment or management practices. For example, retrofitting a sprinkler system for low pressure operation or adopting irrigation scheduling as a management practice.

1. Has this operation implemented improvements to its irrigation system on existing irrigated acres since 2003?

<sup>0693</sup> 1  **Yes** – Continue      3  **No** – Go to item 3 below

2. What were the results of these improvements on a per-acre basis? Mark (X) all that apply –

<sup>0694</sup> 1  Improved crop yield or quality

2  Reduced energy costs

3  Reduced water applied

4  Reduced labor costs

5  Reduced fertilizer or pesticide losses

6  Reduced soil erosion

7  Reduced tailwater

8  Other – Specify →

3. What are barriers to implementing improvements that might reduce energy and/or conserve water in this operation's irrigation system? Mark (X) all that apply –

<sup>0695</sup> 1  Investigating improvements is not a priority at this time

2  Risk of reduced yield or poorer quality crop yields from not meeting water needs

3  Physical field/crop conditions limit system improvements

4  Improvement(s) will reduce costs, but not enough to cover installation costs

5  Cannot finance improvements

6  Landlord(s) will not share cost of improvements

7  Uncertainty about future availability of water

8  Will not be farming this operation long enough to justify new improvements

9  Other – Specify →

### SECTION 19 SOURCES OF IRRIGATION INFORMATION

1. What sources of information does this operation rely on for guidance in reducing irrigation costs or to conserve water used for irrigation? Mark (X) all that apply –

<sup>0696</sup> 1  Extension agents or university specialists

2  Private irrigation specialists or crop consultants hired by owner or operator

3  Irrigation equipment dealers

4  Local irrigation district employees or others hired by the water supplier

5  Government specialists from the Natural Resources Conservation Service, local conservation district, Bureau of Reclamation, or other federal and state agencies

6  Media reports or information in the press

7  Neighboring farmers

8  Electronic information services (Internet, DTN, Internet links to private or public data sources, etc.)

9  Other – Specify →

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**SECTION 20 RECYCLED AND/OR RECLAIMED WATER USE ON THIS OPERATION IN 2008**

Report recycled and reclaimed water use in 2008 separately. **Recycled water** is the reuse of surface or groundwater that has already been used to irrigate a crop on the operation (i.e. water recycled from a tailwater reuse pit). **Reclaimed water** is wastewater that has been treated for non-potable reuse purposes. Include any reclaimed water used from livestock operations or from off-farm wastewater sources such as municipal or industrial wastewater.

**RECYCLED WATER**

1. Did this operation use recycled water to irrigate any crops in 2008?

0600 1  **Yes** – Continue      3  **No** – Go to item 2 below

a. How many acres on this operation were irrigated with one or more applications of recycled water during 2008? .....

Acres
0601

**RECLAIMED WATER**

2. Did this operation use reclaimed water to irrigate any crops in 2008?

0603 1  **Yes** – Continue      3  **No** – Go to SECTION 22

a. How many acres on this operation were irrigated with one or more applications of reclaimed water during 2008? .....

Acres
0604

b. How much reclaimed water was used on this operation for irrigation during 2008? .....

Acre-Feet	or	Gallons
0605		0606

3. Identify the sources of reclaimed water used on this operation in 2008. Mark (X) all that apply –

- 0607 1  Municipal  
 2  Industrial  
 3  On-farm livestock operation  
 4  Off-farm livestock operation  
 5  Other – Specify →

4. Was any reclaimed water purchased for use on this operation in 2008?

0608 1  **Yes** – Continue      3  **No** – Go to item 5 below

a. How much reclaimed water was purchased in 2008? .....

Acre-Feet	or	Gallons
0609		0610

b. What was the average price **paid** for reclaimed water in 2008? .....

Dollars Per Acre-Foot	or	Dollars Per 1,000 Gallons
0611 \$ .00		0612 \$ .00

5. Did this operation receive payment for reclaimed water used on this operation in 2008?

0613 1  **Yes** – Continue      3  **No** – Go to SECTION 22

a. How much reclaimed water did this operation receive payment for in 2008? .....

Acre-Feet	or	Gallons
0614		0615

b. What was the average price **received** for using reclaimed water in 2008? .....

Dollars Per Acre-Foot	or	Dollars Per 1,000 Gallons
0616 \$ .00		0617 \$ .00





**SECTION 21 IRRIGATED LAND IN 2007**

Complete this section ONLY if you DID NOT irrigate any land in 2008

1. Was any land irrigated on this operation in 2007?  
 0528 1  **Yes** – Continue 3  **No** – Go to SECTION 22

2. Reasons for not irrigating in 2008 – Mark (X) all that apply

- 0529
- 1  Sufficient soil moisture – no irrigation needed
  - 2  Surplus soil moisture or flooding
  - 3  Shortage of surface water (water from reservoirs, lakes, streams, water supply organizations, etc.)
  - 4  Shortage of ground water (lowering water level of wells or depletion of ground water)
  - 5  Irrigation uneconomical due to high fuel and power costs and/or low commodity prices
  - 6  Abandoned irrigation because of land degradation (soil erosion, soil salinity, etc.)
  - 7  Loss of water rights (not due to voluntary transfers)
  - 8  Restrictions on water use
  - 9  Sold or leased water rights or annual water allocation
  - 10  Converted to non-agricultural use
  - 11  Converted to an agricultural enterprise not requiring irrigation
  - 12  Available surface water too salty due to drought conditions
  - 13  Other – Specify →

3. Do you consider the discontinuance of irrigation on this operation to be permanent?  
 0530 1  **Yes** 3  **No**

**SECTION 22 VALUE OF SALES IN 2008**

1. What was the gross value of all agricultural products sold from this operation in 2008? Include landlord's share. Mark (X) only one –

0980 1  \$0 - \$9,999 2  \$10,000 - \$24,999 3  \$25,000 - \$49,999 4  \$50,000 - \$99,999

5  \$100,000 - \$249,999 6  \$250,000 - \$499,999 7  \$500,000 - \$999,999 8  \$1,000,000 and over

2. What percent of total sales were from **irrigated** crop sales? .....

Percent
0981

3. What percent of total sales were from **non-irrigated** crop or livestock sales? .....

0982
<b>100%</b>

**SECTION 23 PERSON COMPLETING THIS FORM – Please print**

Name <input style="width: 95%; height: 25px;" type="text"/>	Date (MM-DD-YYYY) 9910 <input style="width: 95%; height: 25px;" type="text"/>	Telephone with Area Code <input style="width: 95%; height: 25px;" type="text"/>
--	---	--

Would you like to receive a free copy of the results of this survey in the mail? .....

0099 1  **Yes** 3  **No**

The survey results will also be available on the Internet at <http://www.nass.usda.gov> in the fall of 2009.

**Thank you for your response**

OFFICE USE						
Response	Respondent	Mode	Enum.	Eval.	Optional Use	
1-Comp 2-R 3-Inac	9901 1-Op/Mgr 2-Sp 3-Acct/Bkpr 4-Partner 9-Oth	9902 1-Mail 2-Tel 3-Face-to-Face 4-CATI 5-Web	9903 0098	0100	0002	0003

S/E Name

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The time to complete this information collection is estimated to average 45 minutes per response.





# 2008 HORTICULTURAL IRRIGATION SURVEY

Form Number: 08-A622  
(12/03/08)



National Agricultural  
Statistics Service

Please return your  
completed report to:

Census of Agriculture  
1201 East 10th Street  
Jeffersonville, IN 47132

**OFFICE USE ONLY**

0009	0010	0011

08-A622

*Please make corrections to name, address, and ZIP code if necessary.*

Everyone who receives a form must return one by mail or via the Internet at [www.agcensus.nass.usda.gov](http://www.agcensus.nass.usda.gov). Your report is due by **February 17, 2009**. To fill out the paper form, use a black or blue ballpoint pen. **Duplicate forms?** If you received extra report forms for the SAME farming operation, return all report forms in the same envelope with this completed report.

Questions? Call us toll-free at **1-888-424-7828**. Thank you for your cooperation.

## SECTION 1 HORTICULTURE OPERATION

1. Were any nursery, floriculture, or greenhouse crops, including ornamental plants, mushrooms, aquatic plants, Christmas trees, short rotation woody crops, vegetable or tobacco transplants, sod, food crops under protection, vegetable seeds, flower seeds, or other propagative materials grown for sale on this operation in 2008?  
 0001 1  **Yes** – Continue                      3  **No** – Go to SECTION 9
2. Did retail and wholesale sales (total gross sales) of horticultural crops grown or produced on this operation total \$10,000 or more during 2008?  
 0004 1  **Yes** – Continue                      3  **No** – Go to SECTION 9
3. Did this operation IRRIGATE or WATER any horticultural crops in 2008?  
 0005 1  **Yes** – Please complete this report form    3  **No** – Go to SECTION 8

**PENALTY FOR FAILURE TO REPORT**

**NOTICE:** Response to this inquiry is required by law (Title 7, U.S. Code). By the same law, YOUR REPORT IS CONFIDENTIAL and it will only be used for statistical purposes. Your report CANNOT be used for purposes of taxation, investigation, or regulation. The law also provides that copies retained in your files are immune from legal process.



**SECTION 2 IRRIGATION AREA, METHODS, AND WATER APPLIED TO HORTICULTURAL CROPS GROWN UNDER PROTECTION IN 2008**

1. Were any irrigated nursery, greenhouse, floriculture, mushrooms, propagative materials, or other horticultural crops grown under protection on this operation in 2008?

0627 1  **Yes** – Continue 3  **No** – Go to SECTION 4

Square Feet Under Protection	
Total Area	Irrigated Area
0628	0629

2. Report total area and irrigated area for horticultural crops grown under protection.

3. For horticultural crops under protection, enter the total area and irrigated area by horticultural crop category on this operation in 2008.

Horticultural Crops	None	1	2
		Total Area (Square Feet)	Irrigated Area (Square Feet)
a. Floriculture and bedding crops	<input type="checkbox"/>	0630	0631
b. Nursery crops	<input type="checkbox"/>	0632	0633
c. Propagative materials	<input type="checkbox"/>	0636	0637
d. Food crops grown under protection	<input type="checkbox"/>	0638	0639
e. Mushroom crops	<input type="checkbox"/>	0640	0641
f. Other – Specify → <input type="text"/>	<input type="checkbox"/>	0642	0643

4. For horticultural crops under protection, report area irrigated or watered in 2008 by method used. If more than one method was used, report all that apply. Report quantity of water in the unit or units of measure most used on this operation. If total quantity of water (column 2a) and the unit of measure (column 2b) are known, then skip column 3.

Irrigation Methods	None	1	2		3		
		Total Area Irrigated or Watered (Square Feet)	a. Quantity of Water Applied	b. Unit of Measure [Enter unit code] 1 Acre Feet 2 Gallons 3 Gallons/Sq Feet 4 Inches/Sq Feet 5 Other – Specify → <input type="text"/>	a. Average Flow Rate (Gallons per Minute)	b. Number of Hours per Week Method Used	c. Number of Weeks Method Used
a. Hand watered	<input type="checkbox"/>	0701	0702	0703	0704	0705	0706
b. Gravity irrigation	<input type="checkbox"/>	0707	0708	0709	0710	0711	0712
c. Sprinkler	<input type="checkbox"/>	0713	0714	0715	0716	0717	0718
d. Drip, trickle, or low-flow micro irrigation	<input type="checkbox"/>	0719	0720	0721	0722	0723	0724
e. Subirrigation	<input type="checkbox"/>	0725	0726	0727	0728	0729	0730

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**SECTION 3 IRRIGATION OF HORTICULTURAL CROPS GROWN UNDER PROTECTION BY WATER SOURCE IN 2008**

1. For each method used to irrigate or water horticultural crops grown under protection, report water sources by percent of source applied. If more than one source was used, report all that apply. For example, if the only source for hand watered crops was ground water, then report 100 percent in column a. If this operation applied ground water by gravity half the time and surface from on-farm by gravity the other, then report 50 percent in column a, row b and 50 percent in column b, row b.

Irrigation Methods	Water Source		
	a. Ground Water From Wells  (Percent)	Surface Water	
		b. On-Farm  (Percent)	c. Off-Farm (All Suppliers)  (Percent)
None <input type="checkbox"/>	0646	0647	0648
a. Hand watered <input type="checkbox"/>	0649	0650	0651
b. Gravity irrigation <input type="checkbox"/>	0652	0653	0654
c. Sprinkler <input type="checkbox"/>	0655	0656	0657
d. Drip, trickle, or low-flow irrigation <input type="checkbox"/>	0658	0659	0660
e. Subirrigation <input type="checkbox"/>			

For each irrigation method used, columns a + b + c must equal 100 percent.



**SECTION 4 IRRIGATION AREA, METHODS, AND WATER APPLIED TO HORTICULTURAL CROPS GROWN IN THE OPEN IN 2008**

1. Were any irrigated nursery, greenhouse, floriculture, sod, propagative materials, or other horticultural crops grown in the open (including natural shade) on this operation in 2008?

0751 1  **Yes** – Continue 3  **No** – Go to SECTION 6

Acres In The Open	
Total Acres (Nearest Tenth)	Irrigated Acres (Nearest Tenth)
0737	0738

2. Report total acres and irrigated acres for horticultural crops grown in the open (including natural shade).

3. For horticultural crops in the open, enter the total acres and irrigated acres by horticultural crop category on this operation in 2008.

Horticultural Crops	None	1	2
		Total Acres (Tenth Acre)	Irrigated Acres (Tenth Acre)
a. Floriculture and bedding crops	<input type="checkbox"/>	0739	0740
b. Nursery crops	<input type="checkbox"/>	0741	0742
c. Sod	<input type="checkbox"/>	0743	0744
d. Propagative materials	<input type="checkbox"/>	0745	0746
e. Christmas trees and short rotation woody crops	<input type="checkbox"/>	0747	0748
f. Other – Specify → <input type="text"/>	<input type="checkbox"/>	0749	0750

4. For horticultural crops in the open, report acres irrigated or watered in 2008 by method used. If more than one method was used, report all that apply. Report quantity of water in the unit or units of measure most used on this operation. If total quantity of water (column 2a) and the unit of measure (column 2b) are known, then skip column 3.

Irrigation Methods	None	1	2		3		
		Total Acres Irrigated or Watered (Tenth Acre)	a. Quantity of Water Applied	b. Unit of Measure [Enter unit code] 1 Acre Feet 2 Gallons 3 Inches/Acre 4 Other – Specify	a. Average Flow Rate (Gallons per Minute)	b. Number of Hours per Week Method Used	c. Number of Weeks Method Used
a. Hand watered	<input type="checkbox"/>	0796	0797	0798	0799	0800	0801
b. Gravity irrigation	<input type="checkbox"/>	0802	0803	0804	0805	0806	0807
c. Sprinkler	<input type="checkbox"/>	0808	0809	0810	0811	0812	0813
d. Drip, trickle, or low-flow micro irrigation	<input type="checkbox"/>	0814	0815	0816	0817	0818	0819
e. Subirrigation	<input type="checkbox"/>	0820	0821	0822	0823	0824	0825

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**SECTION 5 IRRIGATION OF HORTICULTURAL CROPS GROWN IN THE OPEN BY WATER SOURCE IN 2008**

1. For each method used to irrigate or water horticultural crops grown in the open, report water sources by percent of source applied. If more than one source was used, report all that apply. For example, if the only source for hand watered crops was ground water, then report 100 percent in column a. If this operation applied ground water by gravity half the time and surface from on-farm by gravity the other, then report 50 percent in column a, row b and 50 percent in column b, row b.

Irrigation Methods	Water Source		
	a. Ground Water From Wells  (Percent)	Surface Water	
		b. On-Farm  (Percent)	c. Off-Farm (All Suppliers)  (Percent)
None <input type="checkbox"/>	0832	0833	0834
a. Hand watered <input type="checkbox"/>	0835	0836	0837
b. Gravity irrigation <input type="checkbox"/>	0838	0839	0840
c. Sprinkler <input type="checkbox"/>	0841	0842	0843
d. Drip, trickle, or low-flow micro irrigation <input type="checkbox"/>	0844	0845	0846
e. Subirrigation <input type="checkbox"/>			

For each irrigation method used, columns a + b + c must equal 100 percent.





**SECTION 6 RECYCLED AND/OR RECLAIMED WATER USE IN 2008**

Report recycled and reclaimed water use in 2008 separately. **Recycled water** is the reuse of surface or groundwater that has already been used to irrigate a crop on the operation (i.e. water recycled from a tailwater reuse pit). **Reclaimed water** is wastewater that has been treated for non-potable reuse purposes. Include any reclaimed water used from livestock operations or from off-farm wastewater sources such as municipal or industrial wastewater.

**RECYCLED WATER**

1. Did this operation use recycled water to irrigate any horticultural crops in 2008?

0935 1  **Yes** – Continue      3  **No** – Go to item 2 below

a. How much of the horticultural area on this operation was irrigated with one or more applications of recycled water during 2008? .....

Area Under Protection (Square Feet)	Acres In The Open (Nearest Tenth)
0936	0937

**RECLAIMED WATER**

2. Did this operation use reclaimed water to irrigate horticultural crops in 2008?

0939 1  **Yes** – Continue      3  **No** – Go to SECTION 7

a. How much of the horticultural area on this operation was irrigated with one or more applications of reclaimed water during 2008? .....

Area Under Protection (Square Feet)	Acres In The Open (Nearest Tenth)
0940	0941

b. How much reclaimed water was used to irrigate horticultural crops on this operation during 2008? .....

Total Gallons
0938

3. Identify the sources of the reclaimed water used on this operation for horticultural crops during 2008. Mark (X) all that apply.

- 0942 1  Municipal  
 2  Industrial  
 3  On-farm livestock operation  
 4  Off-farm livestock operation  
 5  Other – Specify →

4. Was any reclaimed water purchased for horticultural crops on this operation in 2008?

0943 1  **Yes** – Continue      3  **No** – Go to item 5

a. How much reclaimed water was purchased in 2008? .....

Total Gallons
0944

b. What was the average price **paid** for reclaimed water in 2008? .....

Dollars Per 1,000 Gallons
0945
\$ .00

5. Did this operation receive payment for reclaimed water used on this operation for horticultural crops in 2008?

0946 1  **Yes** – Continue      3  **No** – Go to SECTION 7

a. How much reclaimed water did this operation receive payment for in 2008? .....

Total Gallons
0947

b. What was the average price **received** for using reclaimed water in 2008? .....

Dollars Per 1,000 Gallons
0948
\$ .00



**SECTION 7 OTHER USES OF IRRIGATION WATER ON THIS OPERATION IN 2008**

Area On Which Applied

1. Report the horticultural areas on this operation that were irrigated for the following purposes:

	None	Area Under Protection (Square Feet)	None	Acres In The Open (Nearest Tenth)
a. Prevent freeze damage . . . . .	<input type="checkbox"/>	0619	<input type="checkbox"/>	0620
b. Crop cooling to delay early budding, blooming, or to reduce heat stress (cool crop canopy) . . . . .	<input type="checkbox"/>	0621	<input type="checkbox"/>	0622
c. Leaching to remove salts from the soil (salinity control) . . . . .	<input type="checkbox"/>	0623	<input type="checkbox"/>	0624
d. Other – Specify → <input style="width: 200px;" type="text"/>	<input type="checkbox"/>	0625	<input type="checkbox"/>	0626

2. Skip Section 8 and go to Section 9.

**SECTION 8 IRRIGATED LAND IN 2007**

Complete this section ONLY if you DID NOT irrigate or water any horticultural crops in 2008.

1. Was any land used to grow horticultural crops, irrigated on this operation in 2007?  
 0528 1  **Yes** – Continue      3  **No** – Go to SECTION 9

2. Reasons for not irrigating horticultural crops in 2008 – Mark (X) all that apply.  
 0529

- 1  Sufficient soil moisture – no irrigation needed
- 2  Surplus soil moisture or flooding
- 3  Shortage of surface water (water from reservoirs, lakes, streams, water supply organizations, etc.)
- 4  Shortage of ground water (lowering water level of wells or depletion of ground water)
- 5  Irrigation uneconomical due to high fuel and power costs and/or low commodity prices
- 6  Abandoned irrigation because of land degradation (soil erosion, soil salinity, etc.)
- 7  Loss of water rights (not due to voluntary transfers)
- 8  Restrictions on water use
- 9  Sold or leased water rights or annual water allocation
- 10  Converted to non-agricultural use
- 11  Converted to an agricultural enterprise not requiring irrigation
- 12  Available surface water too salty due to drought conditions
- 13  Other – Specify →

3. Do you consider the discontinuance of irrigation of horticultural crops on this operation to be permanent?  
 0530 1  **Yes** – Continue      3  **No** – Continue



**SECTION 9 VALUE OF SALES IN 2008**

1. What was the gross value of all agricultural products sold from this operation in 2008? Include landlord's share. Mark (X) only one –

0980 1  \$0 - \$9,999  
 2  \$10,000 - \$24,999  
 3  \$25,000 - \$49,999  
 4  \$50,000 - \$99,999  
 5  \$100,000 - \$249,999  
 6  \$250,000 - \$499,999  
 7  \$500,000 - \$999,999  
 8  \$1,000,000 and over

Percent
0983
0984
<b>100%</b>

2. What percent of total sales were from irrigated horticultural crop sales? .....

3. What percent of total sales were from all other crop or livestock sales? Include non-irrigated horticultural sales .....

**SECTION 10 PERSON COMPLETING THIS FORM – Please print**

Name  Date (MM-DD-YYYY)  Telephone with Area Code

0099 Would you like to receive a free copy of the results of this survey in the mail? ..... 1  Yes 3  No

The survey results will also be available on the Internet at <http://www.nass.usda.gov> in the fall of 2009.

**Thank you for your response**

OFFICE USE								
Response	Respondent	Mode	Enum.	Eval.	Optional Use			
1-Comp 2-R 3-Inac	9901 1-Op/Mgr 2-Sp 3-Acct/Bkpr 4-Partner 9-Oth	9902 1-Mail 2-Tel 3-Face-to-Face 4-CATI 5-Web	9903	0098	0100	0002	0003	
S/E Name <input style="width: 90%;" type="text"/>								

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The time to complete this information collection is estimated to average 20 minutes per response.

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## INSTRUCTION SHEET 2008 FARM AND RANCH IRRIGATION SURVEY (FRIS)

### Completing the 2008 FRIS Questionnaire

Make all entries clear and easy to read. Use a **blue** or **black** ball point pen.

#### General

Refer to the instructions below for completing your questionnaire. The enclosed census follow-on questionnaire was mailed to producers and growers throughout the United States. Because it is meant for use in all parts of the country, it may contain items and inquiries which do not apply to your operation. In this case, mark the "No" or "None" box and go on to the next item or section.

If you did not irrigate or water any cropland, pastureland, or rangeland in 2008, go to Section 21 on the back page and complete the remainder of the questionnaire. If you operated no land in 2008, go to Section 23 on the back page and complete the remainder of the questionnaire.

#### Partial Year Operation

If you stopped farming at any time during 2008, complete the questionnaire for the portion of 2008 that you did farm. Write "Stopped farming in 2008" and the date you stopped farming below the address area. Mail the completed questionnaire in the return envelope.

#### If You Receive More Than One Questionnaire for the Same Operation

Return any duplicate questionnaires in the same envelope with the completed questionnaire(s). In the address area of the questionnaire(s) you complete, write the 11-digit ID number from the label of the extra questionnaire(s).

#### Partnership Operations

Complete only ONE questionnaire for a partnership operation and include all partners' shares on the same questionnaire. If two or more questionnaires were received for the partnership, see instruction on "If You Receive More Than One Questionnaire For The Same Operation" above.

#### How to Enter Your Responses on the Questionnaire

Please enter your answers in the proper spaces and in the units requested, i.e., number of acres, dollars, percent, etc. Mark all applicable Yes/No boxes with an "X".

#### Instructions by Section

##### Section 1 - Acreage in 2008

Report land owned, rented, or used by the respondent, spouse, partnership, corporation, or organization identified on the questionnaire. **Include** all land, regardless of location or use; Conservation Reserve Program (CRP), Wetlands Reserve Program (WRP) land, Farmable Wetlands Program (FWP), Conservation Reserve Enhancement Program (CREP), cropland, pastureland, rangeland, woodland, idle land, house lots, etc. **Exclude** land used under a grazing permit. All responses in this section should be rounded to whole acres. Small horticulture operations less than one acre should be reported as one acre.

**Item 1** - Report all land owned in 2008 by you and/or your spouse, or by the partnership, corporation, or organization named on the questionnaire. Include all fields and tracts of cropland, pastureland, woodland, wasteland, idle land, farmsteads, etc.

**Item 2** - Report all land rented or leased from others on shares, cash rent, used rent-free, in exchange for services, for taxes, etc., regardless of location, even if used for part of the year. **Exclude** land used on a per head basis under a grazing permit or animal unit (AUM) basis.

**Item 3** - Report all land rented or leased to others for cash or for a share of the crops, if the acres were part of the acreage reported in items 1 or 2.

**Item 4** - The acres in item 4 should equal item 1 plus item 2 minus item 3. All responses to this questionnaire should refer to these **total acres in this operation**. It is necessary that this number is correct as it is used in editing to establish consistency throughout the questionnaire. The acreage of this operation must equal the acreage reported later in Section 2, item 5, column 1.

##### Section 2 - Land in 2008

Distribute all acres in **this operation** in column 1 and all irrigated land in **this operation** in column 2. If the same land had more than one use in 2008, report that land only once in the first use listed that applies.

In addition to fully irrigated land, in column 2 report as irrigated any land to which partial, supplemental, or semi-irrigation was applied. Also include any acreage which received only preplant irrigation (watered before planting). Hayland, pastureland or rangeland should be reported as irrigated if spring flood water was spread by man-made canals, ditches, spreader dikes, pipes, or other water works. Include acres where lagoon wastewater from livestock operations was distributed by a sprinkler or flood system.

Report 2008 conservation program land such as CRP, WRP, FWP, and CREP use as follows. If the operator was allowed to cut conservation program land for hay, then this land should be considered cropland harvested; if it was grazed it is cropland used for pasture. Except for disaster designation uses, almost all conservation program land will be reported in item 1c, other cropland.

**Item 1a** - Include land from which crops, including hay and forage, were harvested and land in groves, vineyards, berries, orchards, Christmas trees (whether harvested in 2008 or not), short rotation woody crops, nursery and greenhouse crops.

For winter wheat, report the 2008 acres harvested.

For double cropped acres if more than one crop was harvested from the same land in 2008, report those acres only once as cropland harvested. If all or part of your crop acreage was double cropped, the sum of acres of crops harvested and irrigated crops harvested in sections 8 and 9 may exceed item codes 0029 and 0030, respectively.

**Item 1b** - Include rotation pasture and grazing land that could have been used for crops without additional improvements. Exclude land used under a grazing permit.

**Item 1c** - Include cropland used for cover crops, cropland on which all crops failed, idle cropland, cropland in summer fallow, and cropland in government programs, including conservation program land unless used for grazing, hay, or forage. Most conservation program land should be reported here in item 1c, but conservation program land cut for hay or forage should be in item 1a, and those acres that were grazed should be reported in item 1b. Report conservation program acres in only one category in Section 2.

Land on which sugarcane and pineapples were grown but not harvested in 2008, are reported as other cropland, item 1c.

**Item 2** - Include woodland pastured and woodland not pastured. Report the acres in Christmas trees and short rotation woody crops that were cut in 2008 and will be cut in later years as "cropland harvested." A short rotation woody crop is a tree that is harvested in 10 years or less. These trees are used by the paper or pulp industry or as engineered wood.

**Item 3** - Include any pastured land other than cropland and woodland pastured.

**Item 4** - Any land that does not fit into one of the above categories. Include land in roads, buildings, farmsteads, wasteland etc.

**Item 5** - This should equal the sum of all land uses listed in items 1 through 4. Also, Section 2, item 5 acres must equal acres in "this operation" reported in Section 1, item 4.

Anyone who irrigated any land in 2008 should complete the entire report form. **Note:** If acres irrigated in column 2, item 5, equals zero, skip to Section 21.

**Item 6** - Report the state and county with the largest amount of irrigated land for "this operation." If you irrigate in more than one county and the amount irrigated happens to be the same, then report the county that includes your farmstead.

### Section 3 - Government Programs in 2008

If you received any government payment, you should answer this section for those questions that apply.

### Section 4 - Method of Water Distribution on this Operation in 2008

This section refers to the method used to distribute irrigation water. Report the acres of land irrigated by each of the distribution systems listed. If the same land was irrigated by more than one method, then report acres irrigated by each method used.

**Note:** Do not report information for the delivery system used to convey water from the source to the field. Report the method only for the field distribution system.

**Item 1** - Gravity irrigation refers to the free flowing application of water across a field. The water is distributed across a field using either pipes or open ditches near the head of the field from which water is released to flow down furrows or to flood the field.

**Item 1a** - Row crops are generally irrigated by water flowing down furrows.

**Item 1b** - Report the controlled flooding acreage for crops such as rice or cranberries which are flooded across the entire field with the water contained within borders or basins.

**Item 1c** - Uncontrolled flooding is often used to water pasture or rangeland. Water is directed to the area by artificial or controlled means but there are no furrows or borders within the field when uncontrolled flooding is used.

**Item 1d** - Report acreage here if not reported in any of the above categories.

**Item 2** - Sprinkler irrigation is separated into five categories: center pivot, linear move tower, solid set and permanent systems, mechanical move systems, and hand move systems. Report the pressure at the nozzle.

**Item 2a** - A center pivot system uses a boom half the width of the field. It is anchored at the center of the field and sweeps in a circle.

**Item 2b** - Linear move tower systems and other linear continuous move drive systems are self-propelled systems that travel in straight lines across the field.

**Item 2c** - Report for solid set and permanent systems. Exclude low-flow micro systems.

**Item 2di** - Mechanical move systems include side roll, wheel move, other mechanical move systems, and other discrete move systems.

**Item 2dii** - Big gun or Traveler systems use large pulsating sprinklers and travel across the area being watered.

**Item 2e** - Hand move systems are any non-self-propelled system which must be moved manually.

**Item 3** - Drip, trickle or low-flow micro irrigation water is generally distributed by tubes or tapes which meter out small amounts of water at low pressure near the plant's roots.

**Item 3a** - Report acres which on or above ground surface drip irrigation was used.

**Item 3b** - Report acres which sub-surface, root zone, drip was used.

**Item 3c** - Report acres which low-flow micro sprinklers were used. This refers to micro sprinklers that apply water at low pressure and are not self-propelled or easily moved.

**Item 4** - Subirrigation is sometimes referred to as water seepage. It is used to maintain a water table at a predetermined depth. These systems may be permanently in place below the rootline. Water is usually applied by using emitters. Subirrigation includes ebb and flow, trough, flooded floor, or other hydroponic methods.

The total acres, by method of water distribution, should be equal to or greater than Section 2, column 2, item 5, total acres irrigated, code 0042. Every acre reported as irrigated in Section 2 needs to be reported by method of irrigation in Section 4. If you use multiple methods of water distribution for the same acres, this sum may be larger than item code 0042.

### Section 5 - Acres Irrigated, Estimated Quantity of Water Used, and Off-farm Supplied Water Used on This Operation by Source in 2008

One method of estimating pumped water is to multiply the hours recorded on the pump engine by the gallons per minute (G.P.M.). Estimate, if exact figures are not known.

Water usage for this survey will be published in acre-feet. This is the quantity of water needed to cover one acre to the depth of one foot, or 326,000 gallons.

The sum of acres irrigated from all water sources in Section 5, item 1 must be equal to or greater than item code 0042, total acres irrigated, in Section 2, item 5, column 2. If you use multiple sources of water for the same acres, the sum of acres in Section 5 may be larger than item code 0042.

**Item 1** - Report acres irrigated by ground water, on farm surface water, and off farm surface water.

#### Definitions for Water Sources

Ground water is water from a well or wells located on this operation or on a neighboring farm.

On farm surface water is a water supply not controlled by a water supply organization and includes water from a stream, drainage ditch, lake, pond, spring, or reservoir on or adjacent to your farm.

Off-farm surface water is surface or ground water from U.S. Bureau of Reclamation, other Federal agencies, or other suppliers.

**Item 2** - Report estimated quantity of water used on this operation by only one of the following units:

- (a) total acre feet; or
- (b) average acre feet per acre; or
- (c) average inch applied per acre; or
- (d) average gallons of water applied per minute (GPM) and duration in total number of 24 day equivalents; or
- (e) average flow in cubic feet per second (CFS) and duration in total number of 24-hour day equivalents.

**Item 3** - Report if this operation received any off-farm water and total cost, if any was purchased. Report in whole dollars.

**Item 4** - Report the supplier of off-farm water, if any was received.

### Section 6 - Water Transfers in 2008

**Item 1** - If you rented or leased part or all of the 2008 water allotment for the farm operation to others for use off the farm, then record a YES for item 1 and continue with item 2. If your response to Item 1 is NO, check the NO response box and then go to Section 7.

**Item 2** - Record your best estimate of the quantity of water (in acre-feet) transferred to others in 2008 by water source. Include only the water you rented or leased to others for either agricultural or non-agricultural use off this operation.

**Item 3** - Water that is transferred off-farm may be put to one or more alternative uses. To the best of your knowledge, indicate the uses of the transferred water. Be sure to check only those uses that apply. Your response may include from 1 to 3 checks (for options 1 - 3). If the use of the transferred water is unknown, check option 4 and then check one of the reasons, (a) or (b), why the use of the transferred water was unknown.

### Section 7 - Expenditures for Irrigation Facilities and Equipment on This Operation in 2008

For the construction and improvement categories report the expenditures in column 1, the principal purpose of the expenditure in column 2, and the primary source of funding assistance or whether funding assistance was needed. Report any expense incurred in maintaining the irrigation system in Section 13.

### Section 8 - Acres Harvested, Crop Yields, and Pasture on This Operation in 2008

Report the acres of each crop harvested and its corresponding average yield per acre separately for irrigated acres and for non-irrigated acres. Report acres of each crop harvested, even when

multiple crops have been harvested off the same land. In addition, for each irrigated crop harvested, report the estimated average quantity of water applied per acre for the 2008 irrigation season. Report water applied in average acre-feet per acre or in inches per acre (but not both). Acre-feet per acre should be reported to the nearest tenth of a foot (for example, 1.6 or 2.3 acre-feet per acre), while acre-inches per acre should be reported to the nearest whole inch (for example, 19 or 28 inches per acre).

The sum of irrigated acres harvested in Section 8 should be equal to or greater than Section 2, item 5, column 2, item code 0042, total acres irrigated, less any acres reported in column two, item 1c, other cropland irrigated that do not relate to Section 8.

Any harvested crop not pre-listed should be entered under item 19 'all other crops.' Report the crop name in the 'specify' area. **Note:** For winter wheat, report the acres harvested in 2008.

### Section 9 - Primary Method of Water Distribution, Application of Agricultural Chemicals in Irrigation Water, and Water Source by Irrigated Acreage Harvested on This Operation in 2008

For each crop with irrigated acres harvested reported in Section 8, report the primary type of irrigation system in column 1 by selecting the appropriate irrigation system ID code from the system ID code list above the table. Report the percent of the crop acres irrigated using this system in the second column.

Then, for each irrigated crop, report the number of acres that were irrigated applying chemigation, that is, the application of fertilizers or pesticides through the irrigation water. Report the acres of commercial fertilizer application and acres for pesticide application separately.

**Note:** For each crop, an irrigated acre harvested may be reported in both the fertilizer and pesticide columns. Therefore, for each crop, the sum of chemigation acres may total more than the corresponding irrigated harvested acres reported for that crop in column 1 of section 8.

Report the acres of the irrigated crop by water source.

### Section 10 - Number of Irrigation Wells on This Operation in 2008, Including Well Depth and Pumping Capacity

**Item 1** - Please report if this operation irrigated any land with water from wells on this operation at any time during 2008.

**Item 2** - Report the total number of wells used on this operation in 2008. Any well not used will be reported later in item 7.

**Item 2a** - Report the well characteristics and use for up to 3 primary wells pumped on this operation in 2008. **Note:** The 3 primary wells should include those wells with the greatest quantity of water pumped in 2008. Report the individual well characteristics and use even if these values are similar across wells. If less than 3 wells were pumped in 2008, then only report for those wells used.

**Item 2b** - If you used more than 3 wells in 2008, then for all other wells (excluding the 3 primary wells), report the average value for each well characteristic and use.

**Item 3** - Report the number of pumping stations for all wells reported in item 2 above that used backflow prevention devices (check valves) in 2008.

**Item 3a** - Report the number of acres irrigated in 2008 with water pumped from wells with backflow prevention devices.

**Item 4** - Report how many wells reported in item 2 above used flow meters or flow measuring devices.

**Item 4a** - Report the number of acres irrigated in 2008 with water from wells with flow measurement devices.

**Item 5** - Change in depth to water is defined as a change in the depth of water from the well-head to the water table level that has occurred over the last five years prior to 2008.

**Item 6** - Free flowing wells refers to artesian wells that do not require pumping the water to the surface. Water flows to the surface under natural pressure. These are most commonly found in Florida and some western states. Pumps may be used to distribute the water from a holding pond or other type of basin to the field and/or to create sufficient pressure for the field-level irrigation system. Report the number of free-flowing (artesian) wells used in 2008.

**Item 7** - Report the number of operational wells that could have been used in 2008 but were not used. This includes any well that was not used due to needed repairs but only if the respondent plans to repair the well in the future and continue to use the well. Any well which is not operational, and for which the respondent has no plans to ever use again, should be considered abandoned. If all operational wells were in use check the "none" box.

### Section 11 - Pumps, Other Than Well Pumps, Used For Irrigation on This Operation in 2008

These are pumps that were or could be used for lifting surface water from rivers and streams, irrigation channels, ponds and other water holding systems. Tailwater pits hold water that was recovered from irrigated land for recycling.

Some irrigation systems using water from wells may also have pumps in places other than their wells to provide additional lift, especially on farms with large distribution systems or irregular terrain. These pumps are often referred to as booster pumps. Do not include pumps here that were reported in Section 10.

Vertical lift refers to the average surface-level feet-of-lift the pumps must raise the water in order to distribute the water through the field irrigation system. Discharge capacity refers to average pumping capacity in gallons per minute (GPM). Discharge operating pressure refers to the average operating pressure in pounds per square inch at the point of discharge.

### Section 12 - Energy Used on This Operation in 2008 for Pumping Water by Power Source

For each energy source report the number of well pumps and other pumps, the cost of the energy used to power pumps (include the landlord's share of pumping costs), and the

number of acres irrigated by water source. The sum of acres irrigated across all energy types may be less than the total acres irrigated for the operation reported in Section 2, item 5, column 2, item code 0042. The difference should equal those acres irrigated using no pumps to supply water to the field.

### Section 13 - Maintenance and Repair Costs for Irrigation Equipment and Facilities on This Operation in 2008

Report any expense incurred in maintaining the irrigation system including landlord's share. For this section do not include payments made for expanding the system, increasing efficiency, or new construction reported in Section 7.

### Section 14 - Labor Costs for Irrigation on This Operation in 2008

Report hired labor expenses for irrigation activities in item 1a and report contract labor expenses for irrigation activities in item 1b. Labor costs here should pertain only to the operation and maintenance of the irrigation system and facilities. Include the landlord's share of irrigation labor costs. Exclude cost for custom work and contract labor for harvesting.

### Section 15 - Irrigation Practices in 2008

**Item 1** - Report on the method or approach used to decide when to schedule water applications in 2008. Mark all that apply. If "other," is marked, report the practice in the "specify" response area.

**Item 2** - Report in item 2 whether this operation had to discontinue irrigation in 2008 long enough to affect crop yield. Report the reason(s) if irrigation was discontinued. Mark all that apply. If "other," is marked, report the reason for discontinuing irrigation in the "specify" response area.

### Section 16 - Other Uses of Irrigation Water on This Operation in 2008

Report acres on which irrigation water was used for other than crop consumptive use. Report the area only once, regardless of how many applications were applied to the same area. If acres are reported in the "other" technique, report the technique in the "specify" response area.

### Section 17 - Water Management Practices for Gravity Irrigation Systems

If you reported gravity irrigation in Section 4, then complete this section. For each item a through j, report the number of gravity irrigated acres using the specific technique.

### Section 18 - Improvements to Irrigation Systems on This Operation Since 2003 that Reduced Energy Use and/or Conserved Water

Report results of improvements made to existing irrigation systems since 2003 listed in item 2. Any changes to the system to increase its size and bring more acres under irrigation should not be included here. Report in item 2 all the results of improvements on existing irrigation systems. For example, if a farmer installs new equipment on 200 acres of existing irrigated land that reduced energy use, and at the same time increases his irrigation by another 100 acres, the responses should only be for the original 200 acres. Report in item 3 any barriers to implementing improvements to existing irrigation systems.

### Section 19 - Sources of Irrigation Information

Mark all that apply. If "other" is marked, report the source of information in the "specify" response area.

### Section 20 - Recycled and/or Reclaimed Water Use on This Operation in 2008

Report recycled and reclaimed water use separately. For this survey, recycled water is the reuse of irrigation water that was previously used to irrigate a crop on the operation. Reclaimed water is treated wastewater used for irrigation. Include any water obtained from off-farm suppliers or from livestock operations.

**Item 1** - Report whether this operation used recycled water to irrigate any crops in 2008.

**Item 1a** - Report the area which one or more applications of recycled water for irrigation were made in 2008. Report the acres only once even if multiple applications were made to the same acreage.

**Item 2** - Report whether this operation used reclaimed water to irrigate any crops in 2008.

**Item 2a** - Report the area which one or more applications of reclaimed water for irrigation were made in 2008. Report the acres only once even if multiple applications were made to the same acreage.

**Item 2b** - Report how much reclaimed irrigation water was used on this operation in 2008. Report the quantity of reclaimed water to the nearest tenth acre-foot or total gallons.

**Item 3** - Identify the source(s) of reclaimed water used on this operation by marking an 'X' in all the sources that apply.

**Item 4** - Report whether this operation purchased any reclaimed water to irrigate any crops in 2008.

**Item 4a** - Report the quantity of reclaimed water purchase for irrigation in acre-feet or gallons.

**Item 4b** - Report the average price paid for the quantity of reclaimed water reported in item 4a. Report the average price paid as either dollars per acre-foot or dollars per 1,000 gallons.

**Item 5** - Report whether this operation received any payments for using reclaimed water for irrigation in 2008.

**Item 5a** - Report the quantity of reclaimed water that his operation received payment for in 2008. Report the quantity in either acre-feet or gallons.

**Item 5b** - Report the average price received for using the quantity of reclaimed irrigation water in item 5a. Report the average price received as dollars per acre-foot or dollars per 1,000 gallons.

### Section 21 - Irrigated Land in 2007

Complete this section ONLY if you did not irrigate in 2008.

This section references both 2007 and 2008 irrigation. Report in item 1 whether any land was irrigated on this operation in 2007. Report in item 2, the reasons for not irrigating in 2008. Mark all that apply in item 2 and if 'other' is marked, report the reason in the "specify" response area. In item 3, report whether the discontinuance of irrigation is permanent.

### Section 22 - Value of Farm Sales in 2008

**Item 1** - Select the appropriate category for the gross value of sales of all agricultural products sold from this operation in 2008. Agricultural products include all crop and livestock sold from this operation.

**Item 2** - Report the percent of the total gross value of sales that were from irrigated crops.

**Item 3** - Report the percent of the total gross value of sales that were from non-irrigated crop or livestock sales. The sum of items 2 and 3 should equal 100 percent.

### Section 23- Person Completing this Form

Please print the name of the person completing this form, the date completed, and telephone number. Please indicate if you would like a free copy of the survey results in the mail.





## INSTRUCTION SHEET 2008 HORTICULTURAL IRRIGATION SURVEY

### Completing the 2008 Horticultural Irrigation Survey Questionnaire

Make all entries clear and easy to read. Use a **blue** or **black** ball point pen.

#### General

This is supplemental sample of the 2008 Farm and Ranch Irrigation Survey (FRIS). A horticultural operation is an operation growing and selling horticultural crops: greenhouse crops; floricultural crops; nursery crops; mushrooms; sod; cuttings; seedlings; liners and plugs; greenhouse produced food crops; vegetable and flower seeds; Christmas trees; short rotation woody crops; unfinished plants or propagation materials; and other horticultural crops during 2008. Operations producing food crops, such as fruit or berries, grown in the open are not considered horticultural establishments.

Refer to the instructions below for completing the questionnaire. The enclosed census follow-on questionnaire was mailed to producers and growers throughout the United States. Because it is meant for use in all parts of the country, it may contain items and inquiries which do not apply to your operation. In this case, mark the "No" or "None" box and go on to the next item or section.

#### Partial Year Operation

If you stopped farming at any time during 2008, complete the questionnaire for the portion of 2008 that you did farm. Write "Stopped farming in 2008" and the date you stopped farming below the address area. Mail the completed questionnaire in the return envelope.

#### If You Receive More Than One Questionnaire For The Same Operation

Return any duplicate questionnaires in the same envelope with your completed questionnaire(s). In the address area of the questionnaire(s) you complete, write the 11-digit ID number from the label of the extra questionnaire(s).

#### Partnership Operations

Complete only ONE questionnaire for a partnership operation and include all partners' shares on the same questionnaire. If two or more questionnaires

were received for the partnership, see instruction on "If You Receive More Than One Questionnaire For The Same Operation" above.

#### How to Enter Your Responses on the Questionnaire

Please enter your answers in the proper spaces and in the units requested, i.e., square feet, gallons per minute, dollars, etc. Mark all applicable Yes/No boxes with an "X".

#### Instructions by Section

##### Section 1 - Horticulture Operation

This section determines whether or not your operation is within the scope of this survey. The screening questions listed below will guide you through the questionnaire.

**Item 1** - Report whether any of the following crops were grown for sale on this operation in 2008. Include deciduous shade and flowering trees, broadleaf and coniferous evergreen trees and shrubs, deciduous shrubs, vines and climbing plants, ground covers, small fruit plants, and other ornamental plants. Also include, potted flowering plants for indoor or patio use, cut flowers, cut cultivated greens, foliage plants for indoor or patio use, plants for further growing on or propagation materials such as cuttings, liners, plug seedlings, tissue cultured plantlets, and prefinished plants. Turfgrass sod, sprigs or plugs, dry bulbs, corms, rhizomes or tubers, cultivated mushrooms, greenhouse produce food crops, transplants for commercial truck crop production, vegetable seeds, flower seeds, aquatic plants, and tobacco transplants sold for transplant are all included. If your operation produces any of these horticultural crops, mark the "Yes" box and continue to item 2. Otherwise, mark the "No" box and go to Section 9 on the back page of the questionnaire.

**Item 2** - Report whether sales of horticulture crops grown on this operation were \$10,000 or more in 2008.

**Item 3** - Report whether this operation irrigated or watered any horticultural crops in 2008. If your operation did not irrigate or water horticultural crops in 2008, then go to page 7, Section 8.

### Section 2 - Irrigation Area, Methods, and Water Applied to Horticultural Crops Under Protection in 2008

Report whether this operation irrigated any nursery, greenhouse, floriculture, mushrooms, propagative materials, or other horticultural crops grown under protection. Under protection includes horticultural crops grown under glass, rigid plastic, plastic film, including "tunnel" protection. If any horticultural crops on your operation were grown under protection, then complete this section.

**Item 2** - Report the total area and irrigated area under protection in square feet. Report the area only once, regardless of how many crops were grown for sale from the same area. Irrigation refers to the one or more applications of water to land or crops by any artificial or controlled means.

**Item 3** - Report the area irrigated in square feet for each horticultural category listed. Report the area of each horticulture crop, even when multiple crops were harvested off the same land. For example, if two crops annual bedding plants were grown from 1,000 square feet, enter 1,000 in the Floriculture and Bedding Crops category. If 500 square feet of food crops were also grown in the same area, then also report 500 in the Food crops grown under protection category. For each category, enter the total area under protection that was irrigated.

Report crops grown on this operation in the appropriate category:

- Floriculture and bedding crops - Bedding/garden plants, cut flowers and cut florist greens, indoor foliage plants, potted flowering plants
- Nursery crops - Ornamentals, shrubs, shade trees, fruit and nut trees, vines, palms, ornamental grasses, evergreens not for Christmas trees, deciduous trees and shrubs, aquatic plants
- Propagative materials - Bulbs, corms, rhizomes, and tubers; cuttings, seedlings, linings, and plugs; flower and vegetable seeds; tobacco transplants; vegetable transplants
- Food crops grown under protection
- Mushrooms

- Other - If more than one crop was grown for this category, report the primary type of crop in the specify area.

**Item 4** - Report the area irrigated or watered for horticultural crops grown under protection in 2008 by irrigation method used on this operation. If more than one method was used, report area in all methods that apply. Report quantity of water in the unit of measure most used for each method. If the total quantity of water, column 2a, and the unit of measure, column 2b, is known, then skip column 3.

Report for the following irrigation methods:

- a. Hand Watered
- b. Gravity Irrigation – refers to the free-flowing application of water.
- c. Sprinkler – Exclude hand-held sprinklers.
- d. Drip, trickle, or low-flow micro irrigation – the water is distributed down the rows by tapes which meter out small amounts of water at low pressure near the plant's roots.
- e. Subirrigation – this is sometimes referred to as water seepage. It is used to maintain a water table at a predetermined depth. Normally these systems are permanently in place below the rootline. Water is usually applied by using emitters.

The total area reported, by method used, should be equal to or greater than item 2, irrigated area, code 0629.

### Section 3 - Irrigation of Horticultural Crops Under Protection by Water Source in 2008

Report the water source percentage for each irrigation method listed. The percentage for ground water, on-farm water, and off-farm water should add to 100% for each method (row).

#### Definitions of Water Sources

**Ground water** is water from a well or wells located on this farm or on a neighboring farm.

**On farm surface water** is a water supply not controlled by a water supply organization and includes water from a stream, drainage ditch, lake, pond, spring, or reservoir on or adjacent to your farm.

**Off-farm surface water** is surface or ground water from U.S. Bureau of Reclamation, other Federal agencies, or other suppliers.

#### **Section 4 - Irrigation Area, Methods, and Water Applied to Horticultural Crops in the Open in 2008**

Report whether this operation irrigated and nursery, greenhouse, floriculture, mushrooms, propagative materials, or other horticultural crops grown in the open in 2008. If any horticultural crops on your operation were grown in the open, then complete this section.

**Item 2** - Report the total acres and irrigated acres for horticulture crops grown in the open to the nearest tenth acre. Report the acres only once even when multiple crops were harvested off the same land. Irrigation refers to the application of water to land or crops by any artificial or controlled means.

**Item 3** - Report acres for each horticulture crop listed to the nearest tenth acre. Report acres of each crop harvested, even when multiple crops were harvested off the same land. For example, if annual bedding plants and a nursery crop were harvested from the same 2 acres, enter 2.0 acres in the Floriculture and bedding crops category and 2.0 acres in the Nursery crop category. For each category, enter the total acres in grown in the open and irrigated acres.

Report crops grown on this operation in the appropriate category:

- Floriculture and bedding crops - bedding/garden plants, cut flowers and cut florist greens, indoor foliage plants, potted flowering plants
- Nursery crops - ornamentals, shrubs, shade trees, fruit and nut trees, vines, palms, ornamental grasses, evergreens not for Christmas trees, deciduous trees and shrubs, aquatic plants
- Sod
- Propagative materials - bulbs, corms, rhizomes, and tubers; cuttings, seedlings, linings, and plugs; flower and vegetable seeds; tobacco transplants; vegetable transplants
- Christmas trees and short rotation woody crops - *A short rotation woody crop is a tree that grows from seed to a mature tree in 10 years or less.*
- Other - If more than one crop was grown for this category, report the primary type of crop in the specify area.

**Item 4** - Report the area irrigated or watered for horticultural crops grown in the open in 2008 by

irrigation method used on this operation. If more than one method was used, report area in all methods that apply. Report quantity of water in the unit of measure most used for each method. If the total quantity of water, column 2a, and the unit of measure, column 2b, is known, then skip column 3.

Report for the following irrigation methods:

- a. Hand Watered
- b. Gravity Irrigation - refers to the free-flowing application of water.
- c. Sprinkler - Exclude hand-held sprinklers.
- d. Drip, trickle, or low-flow micro irrigation - the water is distributed down the rows by tapes which meter out small amounts of water at low pressure near the plant's roots.
- e. Subirrigation - this is sometimes referred to as water seepage. It is used to maintain a water table at a predetermined depth. Normally these systems are permanently in place below the rootline. Water is usually applied by using emitters.

The total area reported, by method used, should be equal to or greater than item 2, irrigated area, code 0738.

#### **Section 5 - Irrigation of Horticultural Crops in the Open by Water Source in 2008**

Report the water source percentage for each irrigation method listed. The percentage for ground water, on-farm water, and off-farm water should add to 100% for each method (row).

#### **Section 6 - Recycled and/or Reclaimed Water Use on This Operation in 2008**

Report recycled and reclaimed water use separately. Report the use of recycled and reclaimed water for horticulture crops only. For this survey, recycled water is the reuse of irrigation water that was previously used to irrigate a crop on this operation. Reclaimed water is treated wastewater used for irrigation. Include any water obtained from off-farm suppliers or from livestock operations.

**Item 1** - Report whether this operation used recycled water to irrigate any horticulture crops in 2008.

**Item 1a** - Report the area of horticulture crops which one or more applications of recycled water for irrigation were made in 2008. Report the area under protection in square feet and area in the open to the nearest tenth acre. Report the area

only once even if multiple applications were made to the same area.

**Item 2** - Report whether this operation used reclaimed water to irrigate any horticulture crops in 2008.

**Item 2a** - Report the area which one or more applications of reclaimed water for irrigation to horticulture crops were made in 2008. Report the area under protection in square feet and the area in the open to the nearest tenth acre. Report the area only once, even when multiple application were made to the same area.

**Item 2b** - Report how much reclaimed irrigation water was used on this operation for horticulture crops in 2008. Report the quantity of water in total gallons.

**Item 3** - Identify the source(s) of reclaimed water used on this operation for horticulture crops by marking an 'X' in all the sources that apply.

**Item 4** - Report whether this operation purchased any reclaimed water to irrigate any horticulture crops in 2008.

**Item 4a** - Report the quantity of purchased reclaimed water for horticulture crops.

**Item 4b** - Report the average price paid per 1,000 gallons for the reclaimed water reported in item 4a.

**Item 5** - Report whether this operation received any payments for using reclaimed water for irrigating horticulture crops in 2008.

**Item 5a** - Report the quantity of reclaimed water that his operation received payment for in 2008 to irrigate horticulture crops. Report the quantity in gallons.

**Item 5b** - Report the average price received for using the quantity of reclaimed water reported in item 5a to irrigate horticulture crops. Report the average price received as dollars per 1,000 gallons.

### **Section 7 - Other Uses of Irrigation Water on This Operation in 2008**

Report area on which irrigation water was used for other than crop consumptive use. Report the area as square feet under protection or acres in the open. Report the acres in the open to the nearest tenth-acre. Report the area only once, regardless

of how many applications were applied to the same area. If acres are reported in the "other" technique, report the technique in the "specify" response area.

### **Section 8 - Irrigated Land in 2008**

Complete this section ONLY if you did not irrigate in 2008. This section references both 2007 and 2008 irrigation. Report in item 1 whether any land was irrigated on this operation in 2007. Report in item 2, the reasons for not irrigating in 2008. Mark all that apply in item 2 and if 'other' is marked, report the reason in the "specify" response area. In item 3, report whether the discontinuance of irrigation is permanent.

### **Section 9 - Value of Farm Sales in 2008**

**Item 1** - Select the appropriate category for the gross value of sales of all agricultural products from this operation in 2008. Agricultural products include all crop and livestock sold from this operation.

**Item 2** - Report the percent of the total gross value of sales that were from irrigated horticultural crops.

**Item 3** - Report the percent of the total gross value of sales that were from all other crop or livestock sales. The sum of items 2 and 3 should equal 100 percent.

### **Section 10 - Person Completing this Form**

Please print the name of the person completing this form, the date completed, and telephone number. Please indicate if you would like a free copy of the survey results in the mail.