

2017 | CENSUS *OF* AGRICULTURE

2018 Irrigation and Water Management Survey

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Introduction

PURPOSE AND SCOPE

The primary purpose of the Irrigation and Water Management Survey (IWMS), formerly known as the Farm and Ranch Irrigation Survey (FRIS), is to provide data relating to on-farm irrigation activities for use in preparing a wide variety of water-related local programs, economic models, legislative initiatives, market analyses, and feasibility studies. The survey name was changed for 2018 to be more inclusive of nursery and greenhouse growers. Selected irrigation data for on-farm irrigation operations have been collected in the census of agriculture since 1890.

The 2018 Irrigation and Water Management Survey is the ninth survey devoted entirely to collecting on-farm irrigation data for the U.S. The 1979, 1984, 1988, and 1994 surveys were conducted by the U.S. Department of Commerce, Bureau of the Census. Responsibility for the survey was transferred to the U.S. Department of Agriculture (USDA), National Agricultural Statistics Service (NASS) in 1997. The 1998 survey utilized 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. Previously, the farm and ranch irrigation surveys published data only for the leading irrigation States and the U.S. total without including Alaska and Hawaii. In 2008, horticultural specialty operations with sales of \$10,000 or greater were included in the survey for the first time.

USES OF SURVEY DATA

The 2018 Irrigation and Water Management Survey provides data that supplement the basic irrigation data collected from all farm and ranch operators in the 2017 Census of Agriculture. Irrigation data from this survey, combined with the 2017 census data, provide

one of the most complete and detailed profiles for irrigation in the U.S.

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 methods;
- 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 2018 Irrigation and Water Management 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

The data are mostly comparable between 2018 and 2013. For Tables 35, 36, and 38, the data are not comparable between 2018 and 2013. In the 2013 survey, acres of horticulture in the open were reported

under the all other crops category. In the 2018 survey, horticulture in the open was reported in a separate category.

See Appendix A, Statistical Methodology for a detailed discussion of data comparability.

WATER RESOURCES REGIONS MAP

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

PERCENT OF NORMAL PRECIPITATION MAPS

The maps on pages 2 through 5 show the areas of the U.S. with deviations from normal precipitation during 2018. The maps are included for reference purposes only.

TABLES AND APPENDICES

The tables are divided into three sections: Entire Farm, Crops Grown in the Open and Pasture, and Horticultural Operations.

Entire Farm Data Tables. Table 1 shows farms and acres irrigated for the 2002 through 2017 Censuses of Agriculture for each State. Tables 2 through 27 present detailed irrigation data collected in the 2018 Irrigation and Water Management Survey from operations that reported irrigated land during 2018 and in the 2017 census. Excluded from these data are institutional, research, and experimental operations. Table 27 presents data on farm operations that irrigated in 2017 but discontinued irrigation either temporarily or permanently in 2018 while continuing to operate a farm or ranch. Comparable adjusted 2013 U.S. level survey data are also presented in some tables. Data are reported at the national level, for each State, and for the 20 Water Resources Regions.

Crops Grown in the Open and Pasture Data Tables. Tables 28 through 39 present detailed 2018 irrigation data collected on crops grown in the open and pasture. Excluded from these data are

institutional, research, and experimental operations, and water use and area of crops grown under protection. Data are reported at the national level and for each State.

Horticultural Operations Data Tables. Tables 40 through 45 present detailed 2018 irrigation data collected on horticultural crops grown under protection. Data are from horticultural operations that reported irrigating in the 2017 census and also in the 2018 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 2018 Irrigation sample counts and the sample's corresponding 2017 census irrigated acreage. It also provides the general 2018 Irrigation unexpanded and expanded acres irrigated and 2017 census acres irrigated. Table B provides a comparison of the irrigated acres published in the 2017 Census of Agriculture and expanded 2018 Irrigation and Water Management Survey acres irrigated by size group. Table C provides the standard error for selected data for irrigated crops grown in the open in 2018. Table D provides the standard error for selected horticultural data in 2018.

Appendix B. Provides information about the development of the report form. It also contains the definitions of specific terms and phrases used in this publication, including items in the publication tables that carry the note "see text." The facsimiles of the report form and the instruction sheet used to collect the Irrigation and Water Management Survey data are included.

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.

SPECIAL STUDIES AND CUSTOM TABULATIONS

The 2018 Irrigation and Water Management Survey data, as well as the 2017 Census of Agriculture Volume 1 Geographic Area Series and related reports, are available on the NASS website at 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. Quick Stats, NASS's online database that allows data users to build customized queries, should be investigated before requesting a custom tabulation.

All NASS publications and 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 5305A, Stop 2054
1400 Independence Ave, S.W.
Washington, D.C. 20250-2054
or
Datalab@nass.usda.gov

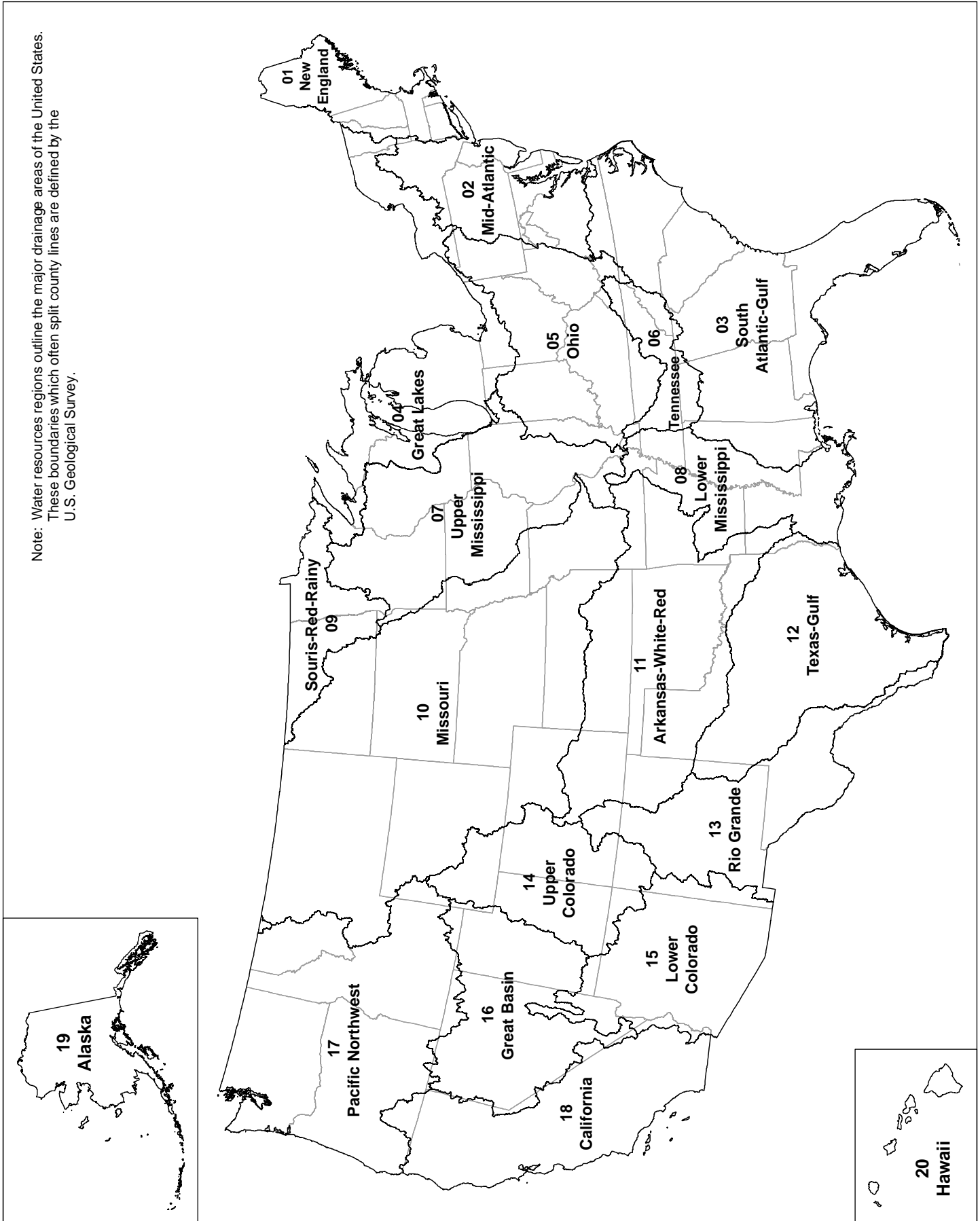
ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used throughout the tables:

- Represents zero.
- (D) Withheld to avoid disclosing data for individual farms.
- (H) Coefficient of variation is greater than or equal to 99.95 percent or the standard error is greater than or equal to 99.95 percent of mean.
- (L) Coefficient of variation is less than 0.05 percent or the standard error is less than 0.05 percent of the mean.
- WRR Water Resources Regions.
- (NA) Not available.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- (cwt) Hundredweight.
- gpm Gallons per minute.
- psi Pounds per square inch.
- sq. ft. Square feet

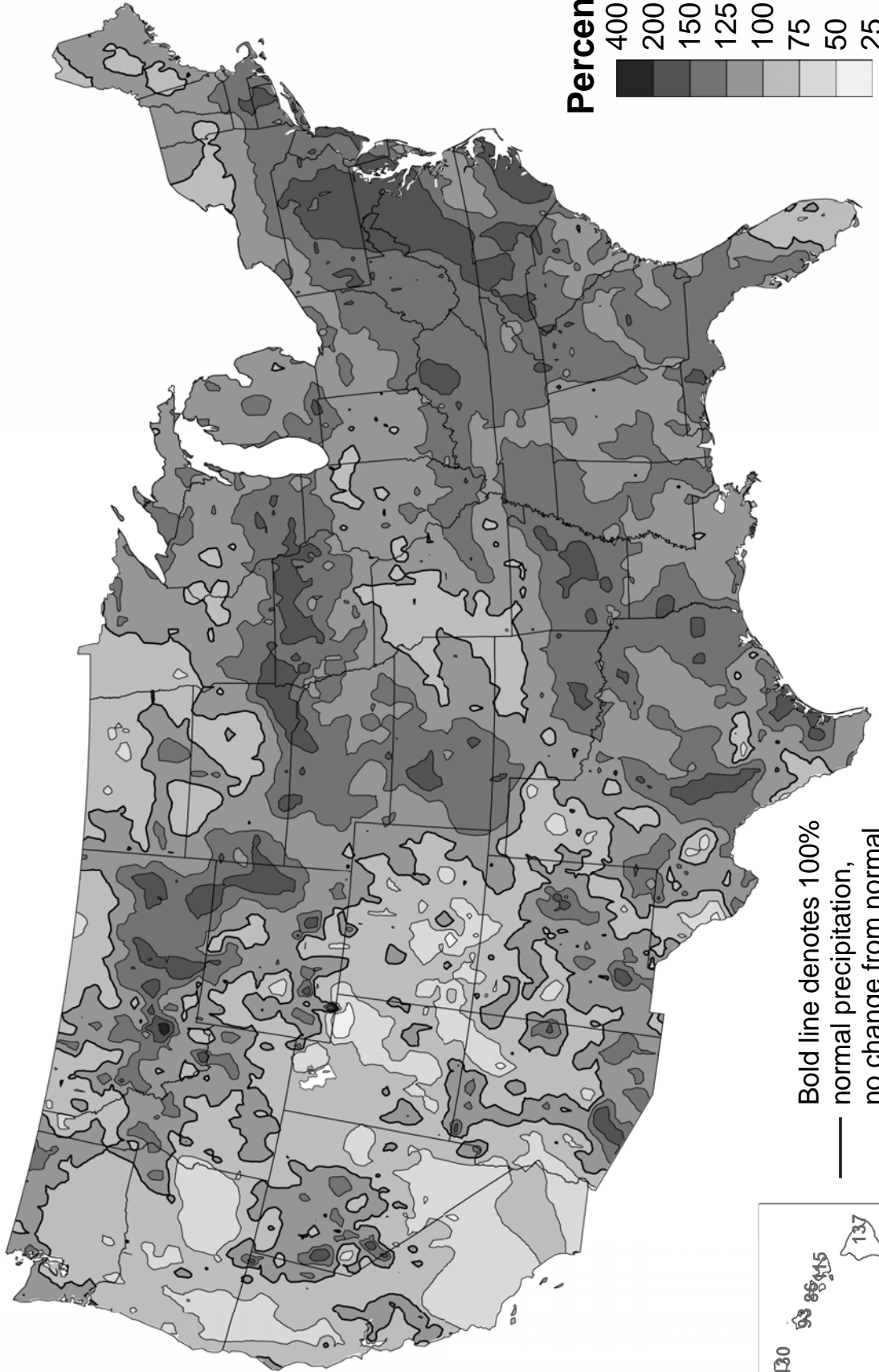
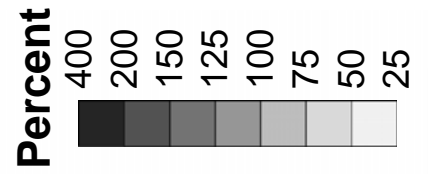
Water Resources Regions Map of the United States

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.

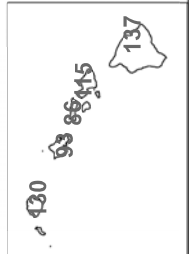
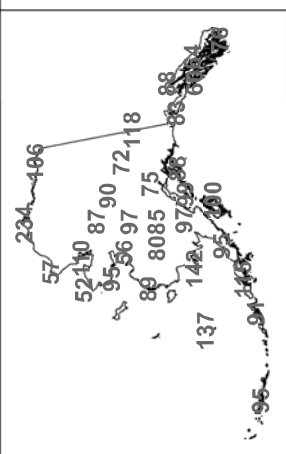


Percent of Normal Precipitation, January - December, 2018

Source: Climate Prediction Center, NOAA
 Computer generated contours based on preliminary
 gridded (CONUS) and station (Alaska and Hawaii) data.
 Normals based on 1998-2017 gridded and 1971-2000
 station data.

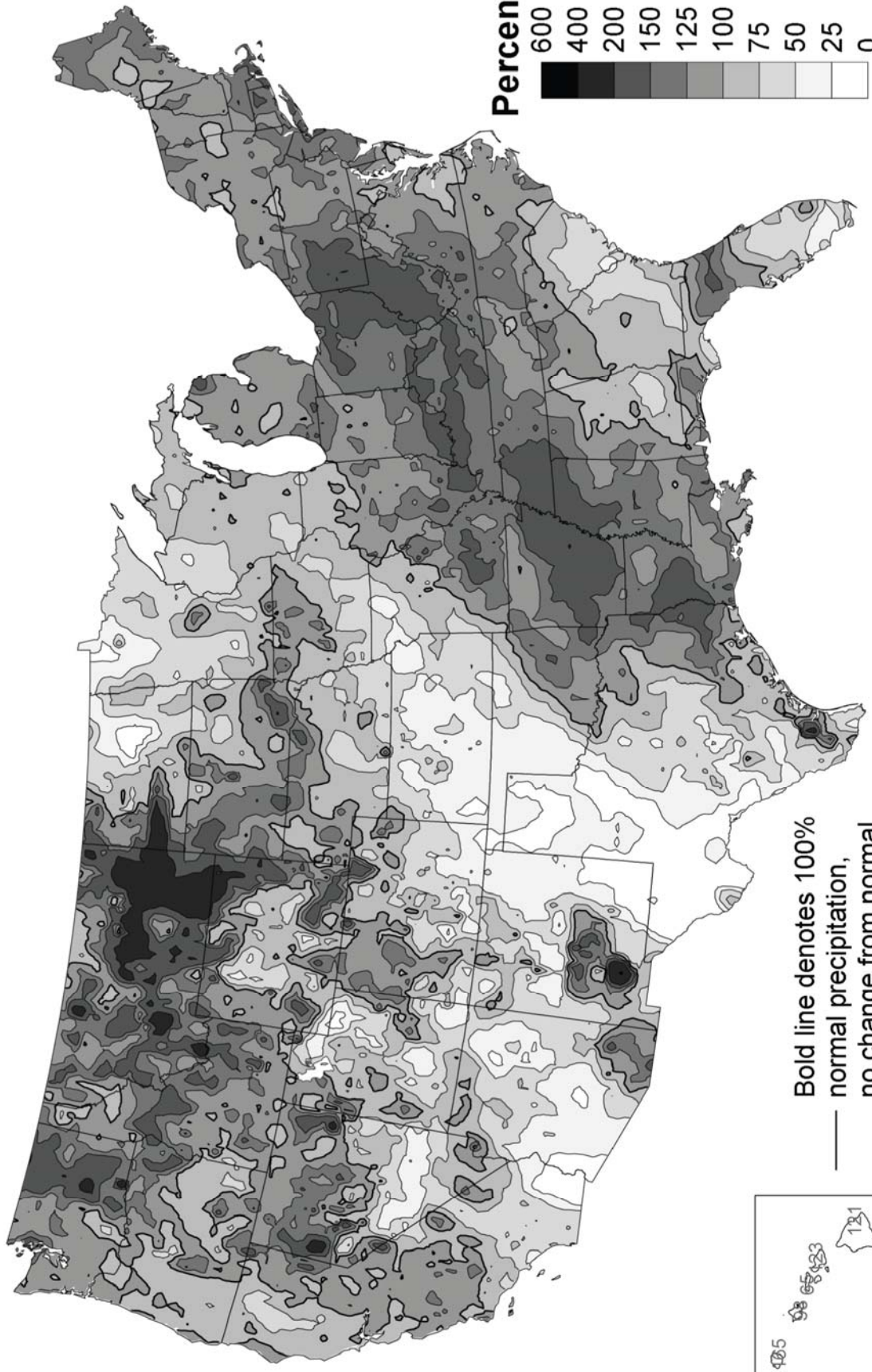
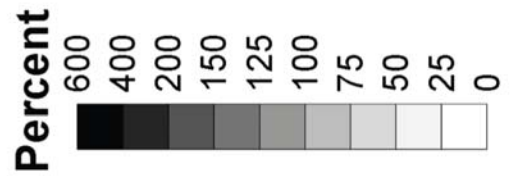


Bold line denotes 100%
 — normal precipitation,
 no change from normal

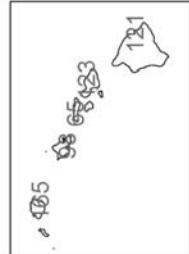
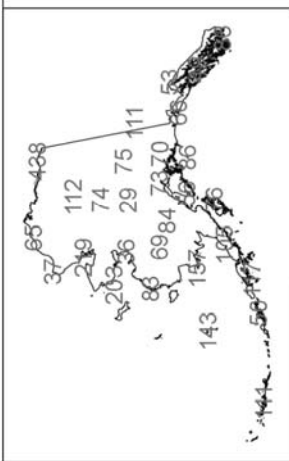


Percent of Normal Precipitation, January 1 - April 30, 2018

Source: Climate Prediction Center, NOAA
 Computer generated contours based on preliminary
 gridded (CONUS) and station (Alaska and Hawaii) data.
 Normals based on 1998-2017 gridded and 1971-2000
 station data.

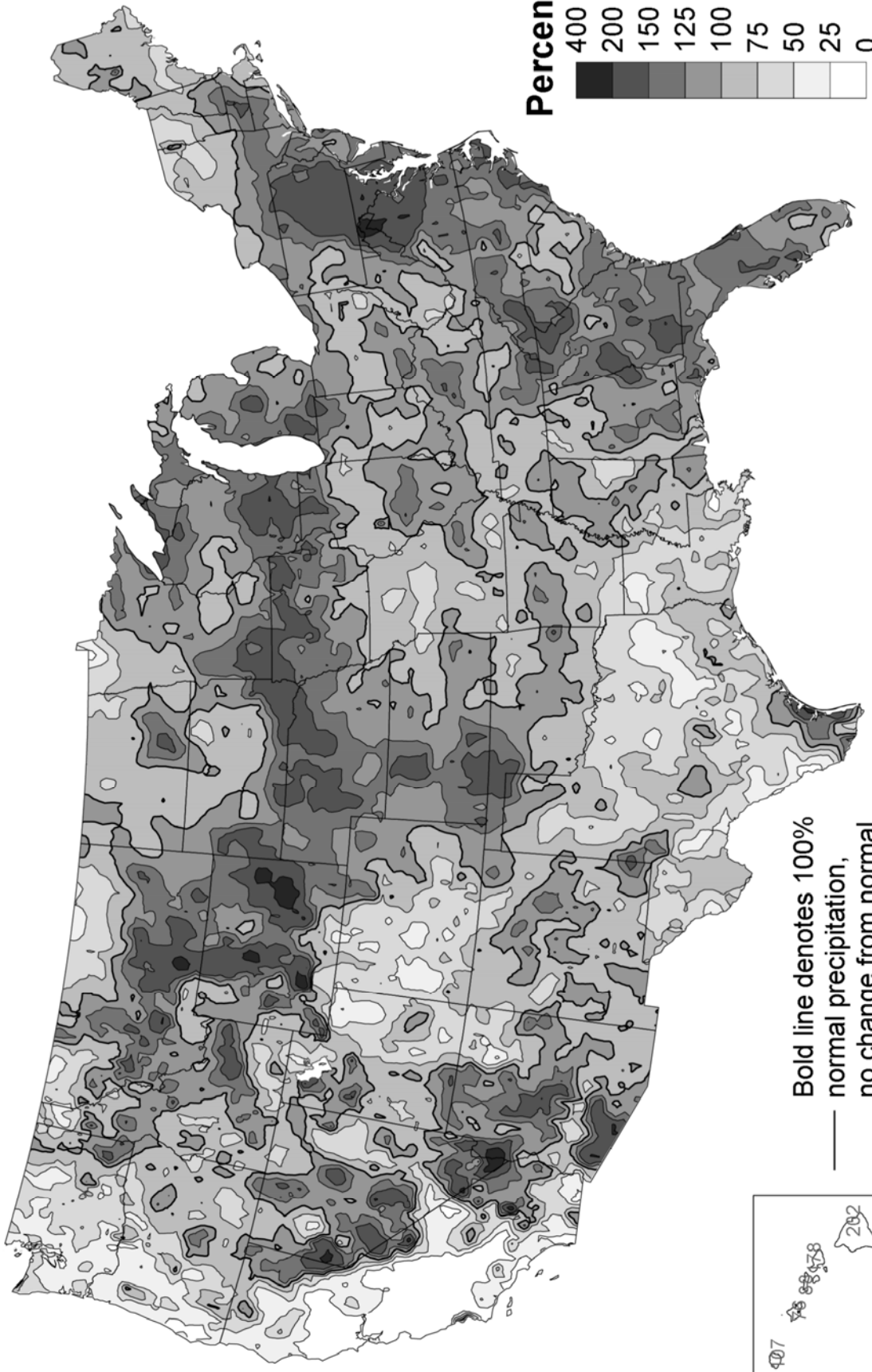
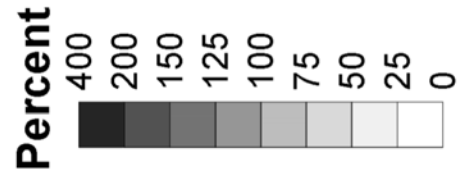


Bold line denotes 100%
 normal precipitation,
 — no change from normal

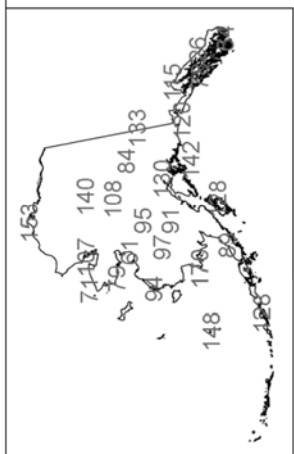


Percent of Normal Precipitation, May 1 - August 31, 2018

Source: Climate Prediction Center, NOAA
 Computer generated contours based on preliminary
 gridded (CONUS) and station (Alaska and Hawaii) data.
 Normals based on 1998-2017 gridded and 1971-2000
 station data.

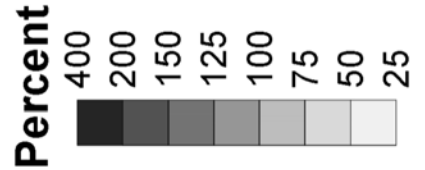
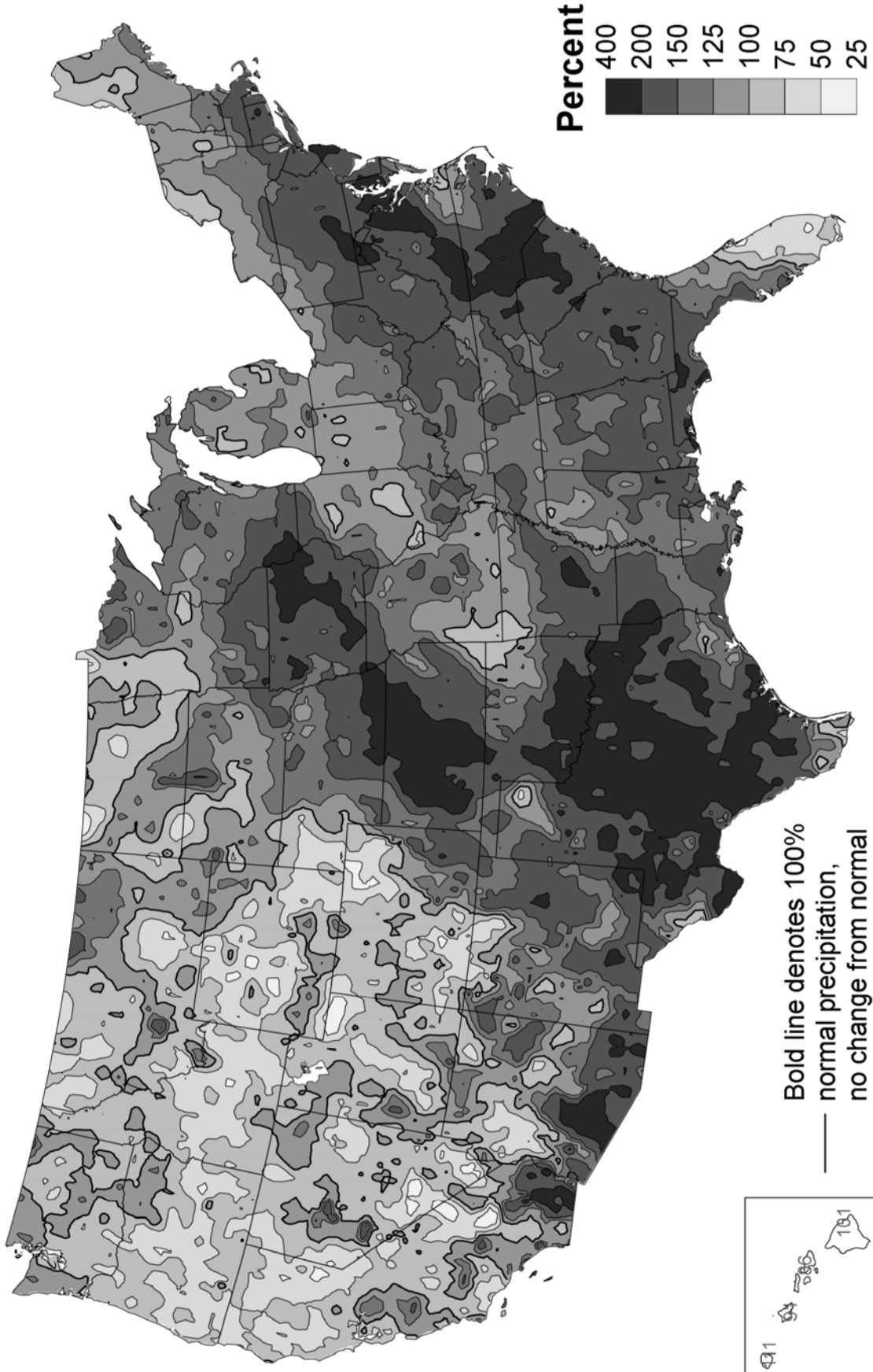


Bold line denotes 100%
 normal precipitation,
 no change from normal



Percent of Normal Precipitation, September 1 - December 31, 2018

Source: Climate Prediction Center, NOAA
 Computer generated contours based on preliminary
 gridded (CONUS) and station (Alaska and Hawaii) data.
 Normals based on 1998-2017 gridded and 1971-2000
 station data.



Bold line denotes 100%
 normal precipitation,
 no change from normal

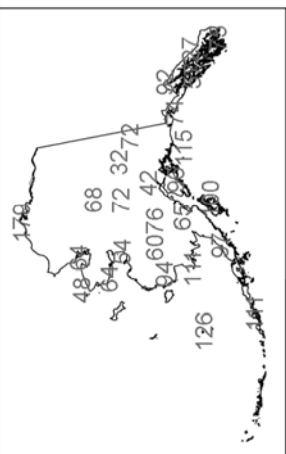


Table 1. Irrigated Farms in the Censuses of Agriculture: 2017 and Earlier Censuses

Geographic area	2017		2012		2007		2002	
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States	294,235	58,013,907	296,303	55,822,231	301,028	56,599,305	299,583	55,311,236
Alabama	1,891	142,001	1,747	113,008	2,035	112,819	1,698	108,783
Alaska	377	2,400	230	2,451	184	3,730	150	2,742
Arizona	4,808	910,883	5,839	880,613	5,094	876,158	4,172	931,735
Arkansas	4,475	4,855,143	5,084	4,803,902	5,393	4,460,682	5,847	4,149,766
California	52,362	7,833,593	53,546	7,861,964	53,400	8,016,159	55,596	8,709,353
Colorado	17,162	2,761,173	15,547	2,516,785	15,774	2,867,957	13,623	2,590,654
Connecticut	998	7,376	1,011	9,272	789	9,901	801	10,139
Delaware	612	163,255	533	127,272	560	104,562	439	97,167
Florida	11,228	1,519,379	11,744	1,493,320	12,868	1,552,118	13,456	1,815,174
Georgia	6,191	1,287,541	5,230	1,125,355	5,716	1,017,773	5,369	870,810
Hawaii	2,250	45,452	2,498	81,813	2,810	58,635	2,231	69,194
Idaho	15,597	3,398,266	15,732	3,365,292	16,124	3,299,889	15,901	3,288,522
Illinois	2,541	612,459	2,644	522,479	2,388	474,454	2,031	390,843
Indiana	2,836	555,443	2,598	437,445	2,391	397,113	2,212	313,130
Iowa	1,707	221,986	1,525	171,656	1,287	189,518	976	142,109
Kansas	5,141	2,503,386	6,205	2,881,292	5,957	2,762,748	5,915	2,678,277
Kentucky	2,030	83,859	2,910	73,573	2,980	58,730	3,606	36,751
Louisiana	3,102	1,235,752	3,015	1,092,881	3,218	954,353	3,496	938,841
Maine	1,420	32,312	1,365	30,887	901	20,994	1,031	19,703
Maryland	1,318	124,831	1,220	104,910	1,326	92,805	1,265	80,828
Massachusetts	1,696	23,928	1,746	23,433	1,630	23,133	1,580	23,720
Michigan	5,153	670,212	5,025	592,243	5,078	500,428	4,413	456,278
Minnesota	3,220	611,621	2,853	524,016	2,918	506,357	2,433	454,850
Mississippi	2,561	1,814,548	2,454	1,651,978	2,284	1,368,661	2,235	1,175,530
Missouri	3,523	1,529,155	3,727	1,180,886	3,613	1,199,981	3,304	1,032,973
Montana	9,941	2,061,236	9,451	1,903,019	10,457	2,013,167	10,150	1,976,111
Nebraska	16,112	8,588,389	17,136	8,296,573	17,128	8,558,559	17,970	7,625,170
Nevada	2,217	790,425	2,512	687,790	2,054	691,030	1,981	746,653
New Hampshire	618	2,207	686	2,630	505	2,482	451	2,292
New Jersey	1,980	86,819	1,769	88,376	2,055	95,277	2,124	96,893
New Mexico	10,745	626,034	11,430	680,318	10,167	830,048	8,282	844,799
New York	3,285	53,257	3,404	59,807	3,036	68,010	3,307	74,663
North Carolina	3,708	143,444	4,699	174,526	5,788	232,075	6,721	264,057
North Dakota	764	263,885	744	218,407	795	236,138	659	202,817
Ohio	2,935	50,665	2,462	46,569	2,402	37,959	2,623	40,685
Oklahoma	2,668	573,776	2,500	479,750	3,026	534,768	2,942	517,553
Oregon	16,291	1,664,921	14,975	1,629,735	16,792	1,845,194	17,776	1,907,627
Pennsylvania	3,904	32,139	4,539	38,990	3,958	37,786	4,108	42,516
Rhode Island	234	2,956	325	3,954	313	4,306	264	3,963
South Carolina	2,167	210,437	1,973	159,239	2,030	132,439	1,918	95,642
South Dakota	1,798	492,452	1,656	378,678	1,627	373,842	1,755	401,083
Tennessee	2,011	184,899	2,146	146,442	2,453	81,405	2,592	61,217
Texas	17,932	4,363,345	18,169	4,489,163	19,713	5,010,416	21,164	5,074,638
Utah	13,159	1,097,219	12,296	1,104,257	12,492	1,134,144	11,587	1,091,011
Vermont	672	3,017	766	3,565	523	2,295	508	2,335
Virginia	2,053	63,433	2,456	68,651	2,347	82,187	3,331	98,913
Washington	14,887	1,689,377	14,736	1,633,571	15,492	1,735,917	15,534	1,823,155
West Virginia	581	1,660	466	2,064	457	2,189	408	1,981
Wisconsin	3,284	454,362	3,240	421,721	2,907	377,291	2,457	385,902
Wyoming	6,090	1,567,599	5,739	1,435,710	5,793	1,550,723	5,191	1,541,688

Table 4. Estimated Quantity of Water Applied By Source: 2018 and 2013 (continued)

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

Table with columns for Geographic area, Applied in the open (Total, Only source), and Applied under protection (Total, Only source). Rows include United States, 2018 DATA by state, and Water Resources Regions.

See footnote(s) at end of table.

--continued

Table 6. Farms Using Recycled or Reclaimed Water: 2018 and 2013

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

Geographic area	Recycled water used ¹				Reclaimed water used									
	Acres in the open		Area under protection		Acres in the open		Area under protection		Total acre-feet applied	Source of reclaimed water ²				
	Farms	Acres irrigated	Farms	Square feet	Farms ³	Acres irrigated	Farms ³	Square feet		Municipal	Industrial	On-farm livestock operation	Off-farm livestock operation	Other
United States2018	4,829	975,941	456	126,777,377	2,556	519,735	95	22,140,886	640,491	688	70	1,059	229	413
.....2013	5,718	1,080,526	535	164,777,627	2,323	309,075	216	6,739,618	341,784	766	56	962	159	557
2018 DATA														
Alabama	35	537	20	1,689,024	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	36	5,001	-	-	18	4,036	9	2,160	2,345	17	1	1	1	1
Arkansas	573	320,944	2	(D)	5	500	-	-	500	-	-	5	-	-
California	800	273,694	54	29,110,385	756	260,395	21	9,102,628	377,595	343	6	302	52	94
Colorado	230	12,947	3	30,000	173	17,894	-	-	10,886	24	-	34	42	73
Connecticut	29	1,136	2	(D)	-	-	-	-	-	-	-	-	-	-
Delaware	6	1,200	-	-	-	-	-	-	-	-	-	-	-	-
Florida	54	22,069	26	1,766,800	4	5,810	24	(D)	764	27	-	-	-	-
Georgia	68	5,154	2	(D)	23	460	-	-	207	-	-	23	-	-
Hawaii	34	50	-	-	2	(D)	-	-	(D)	1	-	-	-	-
Idaho	152	6,542	-	-	124	24,767	3	12,000	45,209	7	-	9	3	80
Illinois	25	555	30	31,444,260	5	475	-	-	120	-	-	-	-	5
Indiana	67	6,941	3	(D)	-	-	1	(D)	(D)	-	-	1	-	-
Iowa	24	1,995	5	13,500	18	720	-	-	144	-	-	-	-	-
Kansas	110	8,673	-	-	73	16,985	-	-	6,160	3	-	48	18	-
Kentucky	3	(D)	2	(D)	-	-	-	-	-	-	-	-	-	-
Louisiana	129	29,484	13	5,007,952	-	-	-	-	-	-	-	-	-	-
Maine	59	(D)	35	114,080	-	-	-	-	-	-	-	-	-	-
Maryland	23	240	2	(D)	-	-	-	-	-	-	-	-	-	-
Massachusetts	204	6,138	-	-	6	18	-	-	12	6	-	-	-	6
Michigan	103	4,890	41	2,484,000	81	6,500	-	-	2,138	-	-	81	-	-
Minnesota	72	1,223	8	656,352	37	2,560	-	-	2,214	18	19	-	-	-
Mississippi	164	57,682	-	-	15	1,881	-	-	853	-	-	15	-	-
Missouri	51	3,118	2	(D)	16	520	2	(D)	370	-	-	10	-	8
Montana	40	9,015	-	-	74	3,266	-	-	3,128	4	-	-	-	23
Nebraska	514	37,061	-	-	295	48,504	-	-	15,651	29	32	185	34	-
Nevada	1	(D)	-	-	36	7,770	-	-	8,840	1	-	5	-	15
New Hampshire	5	(D)	5	(D)	-	-	-	-	-	-	-	-	-	-
New Jersey	41	1,395	40	4,924,780	-	-	-	-	-	-	-	-	-	-
New Mexico	10	1,900	-	-	76	6,408	-	-	3,282	9	-	33	-	-
New York	3	300	23	4,440,942	23	575	-	-	46	23	-	-	-	-
North Carolina	89	2,875	4	12,583,640	32	1,412	-	-	424	8	-	24	-	-
North Dakota	-	-	2	(D)	31	4,960	-	-	806	31	-	-	-	-
Ohio	13	1,368	37	11,711,456	-	-	-	-	-	-	-	-	-	-
Oklahoma	7	(D)	5	525,902	2	(D)	-	-	(D)	-	-	-	-	2
Oregon	274	24,700	14	5,015,706	93	4,270	-	-	1,073	-	-	69	-	24
Pennsylvania	25	558	-	-	22	44	-	-	22	-	-	22	-	-
Rhode Island	1	(D)	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	38	5,710	-	-	25	100	14	17,500	17,575	14	-	25	-	-
South Dakota	25	692	2	(D)	38	4,085	-	-	1,672	19	-	19	-	-
Tennessee	14	77	21	862,848	-	-	-	-	-	-	-	-	-	-
Texas	267	67,795	17	(D)	180	41,231	21	(D)	37,256	47	-	94	-	59
Utah	60	2,396	-	-	81	2,079	-	-	810	27	-	-	27	-
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	37	302	24	(D)	-	-	-	-	-	-	-	-	-	-
Washington	100	4,382	6	18,000	92	34,547	-	-	63,078	30	12	-	27	23
West Virginia	2	(D)	3	32,670	-	-	-	-	-	-	-	-	-	-
Wisconsin	109	16,859	2	(D)	-	-	-	-	-	-	-	-	-	-
Wyoming	103	21,720	1	(D)	100	15,023	-	-	36,040	-	-	54	25	-
Water Resources Regions														
Region 01 New England	298	7,659	42	229,800	6	18	-	-	12	6	-	-	-	6
Region 02 Mid-Atlantic	133	3,880	88	10,630,360	22	(D)	-	-	22	-	-	22	-	-
Region 03 South Atlantic-Gulf	267	38,021	52	17,542,322	92	8,998	38	(D)	19,158	49	-	80	-	-
Region 04 Great Lakes	183	12,646	52	15,845,998	104	7,075	-	-	2,184	23	-	81	-	-
Region 05 Ohio	70	3,891	58	3,435,121	-	-	1	(D)	(D)	-	-	1	-	-
Region 06 Tennessee	54	304	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	142	16,986	45	32,166,112	24	1,235	2	(D)	472	-	19	2	-	5
Region 08 Lower Mississippi	740	360,783	15	5,010,752	7	665	-	-	665	-	-	7	-	-
Region 09 Souris-Red-Rainy	38	684	2	(D)	18	1,800	-	-	1,872	18	-	-	-	-
Region 10 Missouri	737	59,432	6	(D)	679	89,568	-	-	62,666	103	32	322	98	71
Region 11 Arkansas-White-Red	303	99,750	5	525,902	83	24,711	-	-	22,240	12	-	39	18	10
Region 12 Texas-Gulf	194	24,650	17	(D)	182	27,602	21	(D)	17,029	43	-	119	-	40
Region 13 Rio Grande	31	2,524	-	-	57	11,041	-	-	6,824	4	-	-	-	19
Region 14 Upper Colorado	157	19,231	-	-	79	6,856	-	-	6,700	-	-	-	-	3
Region 15 Lower Colorado	36	5,001	-	-	18	4,036	9	2,160	2,345	17	1	1	1	1
Region 16 Great Basin	60	2,396	-	-	85	5,025	-	-	6,939	28	-	-	27	15
Region 17 Pacific Northwest	545	43,654	20	5,033,706	337	65,056	3	12,000	110,832	41	12	78	30	127
Region 18 California	807	274,399	54	29,110,385	761	264,625	21	9,102,628	379,820	343	6	307	52	94
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	34	50	-	-	2	(D)	-	-	-	1	-	-	-	-

¹ Amount of recycled water applied was not collected.² Respondents could report more than one source of reclaimed water.³ Respondents could report reclaimed water for both acres in the open and area under protection.

Table 7. Irrigation by Estimated Quantity of Water Applied: 2018 and 2013 (continued)

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

Geographic area	Acres in the open - con.								
	500 to 999 acre-feet			1,000 to 1,999 acre-feet			2,000 acre-feet or more		
	Farms	Acres irrigated	Acre-foot of water applied	Farms	Acres irrigated	Acre-foot of water applied	Farms	Acres irrigated	Acre-foot of water applied
United States2018	13,631	8,532,800	9,563,173	9,222	9,250,342	12,832,775	8,705	22,629,128	47,840,059
.....2013	14,069	7,751,010	9,852,171	11,582	10,631,863	16,146,214	9,776	23,434,358	49,618,761
2018 DATA									
Alabama	16	(D)	(D)	22	42,046	35,677	2	(D)	(D)
Alaska	-	-	-	-	-	-	-	-	-
Arizona	163	28,344	122,596	136	53,900	190,239	418	801,053	3,979,127
Arkansas	451	405,998	325,060	575	810,222	820,433	813	2,813,175	3,775,230
California	2,518	754,765	1,823,202	1,820	868,256	2,580,859	2,586	5,535,213	17,680,463
Colorado	825	385,812	595,998	590	502,676	856,083	422	840,972	1,523,212
Connecticut	1	(D)	(D)	-	-	-	-	-	-
Delaware	27	42,977	20,551	3	10,294	4,213	7	20,749	14,354
Florida	155	106,459	116,577	88	172,508	128,501	108	757,249	893,332
Georgia	295	303,669	205,146	133	186,606	159,869	60	237,137	233,302
Hawaii	4	(D)	2,580	4	4,671	5,887	3	6,681	12,911
Idaho	996	383,321	697,892	670	515,458	979,495	668	1,812,203	3,936,648
Illinois	88	88,777	64,644	57	88,253	69,928	10	63,459	42,445
Indiana	92	130,999	63,550	16	35,210	21,683	11	32,709	23,954
Iowa	10	(D)	(D)	1	(D)	(D)	1	(D)	(D)
Kansas	620	475,840	442,083	321	443,823	467,450	277	886,469	1,131,541
Kentucky	5	9,956	3,713	4	13,599	4,932	-	-	-
Louisiana	226	196,932	159,282	190	259,684	244,554	152	341,660	464,949
Maine	4	2,729	(D)	1	(D)	(D)	1	(D)	(D)
Maryland	35	30,436	21,894	4	2,400	4,200	-	-	-
Massachusetts	2	(D)	(D)	4	(D)	(D)	1	(D)	(D)
Michigan	165	139,517	112,962	70	102,230	86,753	22	129,997	85,069
Minnesota	93	107,023	62,895	22	56,548	31,116	7	47,881	28,298
Mississippi	225	298,312	156,628	162	370,134	230,832	177	792,888	677,356
Missouri	209	260,353	153,594	194	340,122	267,072	132	485,891	541,046
Montana	810	463,791	565,913	375	409,936	522,744	199	542,730	802,928
Nebraska	1,813	1,930,220	1,238,985	956	1,541,786	1,255,844	278	1,004,471	896,065
Nevada	149	43,585	110,160	216	103,276	296,403	280	480,429	1,374,833
New Hampshire	-	-	-	-	-	-	-	-	-
New Jersey	15	8,656	10,492	2	(D)	(D)	1	(D)	(D)
New Mexico	208	94,816	145,505	122	113,316	168,093	94	230,326	650,273
New York	9	2,841	6,634	4	1,530	5,850	-	-	-
North Carolina	4	6,875	2,645	5	7,250	6,100	-	-	-
North Dakota	28	30,319	15,778	36	49,255	49,400	9	42,302	29,678
Ohio	9	6,068	6,327	-	-	-	-	-	-
Oklahoma	142	81,312	95,799	113	172,900	157,496	50	191,604	266,052
Oregon	573	239,713	389,342	270	196,578	361,501	277	614,662	1,325,613
Pennsylvania	-	-	-	-	-	-	5	15,000	30,000
Rhode Island	-	-	-	-	-	-	-	-	-
South Carolina	68	51,064	45,656	41	40,557	46,350	11	50,192	47,436
South Dakota	39	38,171	26,006	10	21,115	13,180	31	66,449	85,407
Tennessee	21	40,191	(D)	19	30,155	26,751	1	(D)	(D)
Texas	907	639,163	601,753	742	794,839	1,058,337	681	1,768,148	2,983,542
Utah	573	194,070	394,306	374	228,931	490,016	204	276,179	703,404
Vermont	-	-	-	-	-	-	-	-	-
Virginia	2	(D)	(D)	1	(D)	(D)	-	-	-
Washington	587	164,425	428,966	461	298,777	621,648	434	1,003,356	2,444,007
West Virginia	-	-	-	-	-	-	-	-	-
Wisconsin	31	33,661	17,459	36	74,092	54,072	36	165,884	138,753
Wyoming	418	273,444	272,658	352	275,306	495,297	236	542,304	991,941
Water Resources Regions									
Region 01 New England	7	(D)	(D)	5	4,456	7,784	2	(D)	(D)
Region 02 Mid-Atlantic	79	85,763	54,065	14	18,251	18,888	13	37,254	47,213
Region 03 South Atlantic-Gulf	551	501,942	388,785	281	434,450	365,784	182	1,056,128	1,185,020
Region 04 Great Lakes	215	198,800	146,411	74	117,845	93,424	27	142,648	96,763
Region 05 Ohio	39	32,552	27,453	10	27,877	13,443	12	46,252	32,237
Region 06 Tennessee	6	(D)	(D)	15	22,797	21,675	1	(D)	(D)
Region 07 Upper Mississippi	220	268,259	148,470	121	213,950	162,352	46	239,030	184,339
Region 08 Lower Mississippi	969	1,043,182	691,148	1,026	1,657,289	1,421,882	1,129	4,016,263	4,851,729
Region 09 Souris-Red-Rainy	56	56,527	36,481	12	27,600	13,855	4	30,279	14,519
Region 10 Missouri	3,268	2,810,209	2,228,999	1,995	2,561,350	2,724,737	852	2,474,541	3,132,578
Region 11 Arkansas-White-Red	1,147	821,144	809,043	732	944,820	1,074,915	706	2,284,326	3,127,996
Region 12 Texas-Gulf	686	485,540	464,211	536	567,647	731,378	405	906,090	1,734,226
Region 13 Rio Grande	148	52,774	96,420	156	113,854	228,821	207	372,718	869,256
Region 14 Upper Colorado	577	250,267	412,863	246	196,904	358,219	258	437,996	1,037,932
Region 15 Lower Colorado	163	28,344	122,596	143	58,800	198,639	437	863,449	4,241,554
Region 16 Great Basin	630	209,539	444,792	595	373,871	810,811	456	735,333	2,007,570
Region 17 Pacific Northwest	2,348	921,310	1,654,962	1,428	1,019,454	1,985,270	1,352	3,409,911	7,669,045
Region 18 California	2,518	754,765	1,823,202	1,829	884,456	2,595,011	2,613	5,553,014	17,583,376
Region 19 Alaska	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	4	(D)	2,580	4	4,671	5,887	3	6,681	12,911

See footnote(s) at end of table.

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Table 7. Irrigation by Estimated Quantity of Water Applied: 2018 and 2013 (continued)

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

Geographic area	Area under protection											
	Total			Less than 250,000 gallons			250,000 to 499,999 gallons			500,000 to 999,999 gallons		
	Farms	Acres irrigated ¹	Gallons applied (1,000)	Farms	Acres irrigated ¹	Gallons applied (1,000)	Farms	Acres irrigated ¹	Gallons applied (1,000)	Farms	Acres irrigated ¹	Gallons applied (1,000)
United States	24,876	35,012	15,704,320	19,413	4,926	961,973	1,911	2,591	667,078	1,412	2,938	973,475
2013	24,829	32,263	17,870,533	19,108	3,492	861,748	2,105	1,938	729,608	1,231	1,874	863,470
2018 DATA												
Alabama	313	521	103,119	223	59	10,588	40	(D)	(D)	30	135	19,280
Alaska	208	49	14,418	200	33	5,260	-	-	-	5	5	3,919
Arizona	127	275	237,527	70	40	4,953	20	15	(D)	14	12	(D)
Arkansas	157	93	25,230	133	50	6,740	10	(D)	3,375	11	32	7,421
California	1,697	7,550	4,703,858	818	284	38,226	191	439	65,755	238	651	178,977
Colorado	380	331	177,729	285	29	14,613	60	(D)	21,248	2	(D)	(D)
Connecticut	455	862	402,831	291	42	10,549	39	83	(D)	44	21	23,794
Delaware	44	54	5,908	34	29	1,442	8	19	(D)	1	(D)	(D)
Florida	1,346	6,586	2,221,415	811	421	57,027	84	94	26,106	127	467	100,054
Georgia	334	466	169,196	202	94	11,692	69	53	25,119	37	93	24,909
Hawaii	569	691	322,731	485	217	31,127	6	9	1,602	21	29	13,028
Idaho	336	100	62,808	316	32	10,772	3	(D)	(D)	12	15	7,566
Illinois	434	1,149	280,622	331	121	24,305	30	23	10,030	36	65	22,265
Indiana	435	226	106,681	375	63	18,287	41	52	13,558	3	4	2,650
Iowa	379	271	83,257	297	55	10,999	47	36	16,059	25	48	(D)
Kansas	210	201	58,944	139	43	7,846	40	25	14,389	13	12	8,309
Kentucky	686	208	53,949	629	138	23,733	41	16	11,690	9	18	(D)
Louisiana	274	277	46,973	233	69	10,035	20	69	(D)	11	(D)	8,089
Maine	558	156	33,875	535	90	14,427	20	21	(D)	-	-	-
Maryland	383	248	114,299	317	52	8,800	37	21	11,882	5	27	3,260
Massachusetts	434	151	66,158	402	103	43,340	-	-	-	30	33	(D)
Michigan	1,205	1,995	1,062,814	878	237	45,407	86	135	34,760	55	143	37,181
Minnesota	420	417	286,126	324	60	17,740	22	10	(D)	20	17	15,878
Mississippi	203	98	11,034	194	72	7,698	8	(D)	(D)	1	(D)	(D)
Missouri	639	251	105,773	566	89	25,887	23	10	7,102	30	36	20,482
Montana	265	52	20,871	234	16	4,787	21	19	7,562	8	(D)	(D)
Nebraska	236	69	27,541	214	23	10,494	10	7	4,133	10	11	8,460
Nevada	54	8	1,873	51	5	896	3	3	978	-	-	-
New Hampshire	431	190	90,784	335	80	30,829	58	40	(D)	34	(D)	30,521
New Jersey	574	1,049	434,989	432	211	22,669	17	21	4,597	45	43	29,458
New Mexico	179	94	27,991	166	51	7,582	-	-	-	1	(D)	(D)
New York	1,244	1,202	357,639	1,047	216	44,696	53	221	(D)	92	(D)	54,060
North Carolina	807	654	441,111	624	128	29,438	77	59	26,008	52	37	36,044
North Dakota	37	12	2,892	35	8	1,443	1	(D)	(D)	-	-	-
Ohio	905	864	410,236	745	191	44,585	71	43	23,998	33	56	19,523
Oklahoma	234	100	21,774	224	39	6,123	8	(D)	(D)	-	-	-
Oregon	1,020	1,477	931,860	684	149	37,404	109	96	42,693	116	168	83,633
Pennsylvania	1,568	1,670	281,214	1,309	525	73,981	132	456	47,971	58	(D)	40,309
Rhode Island	134	43	14,047	121	36	10,168	13	6	3,879	-	-	-
South Carolina	241	123	19,596	225	39	7,565	14	(D)	(D)	1	(D)	(D)
South Dakota	73	53	32,841	48	8	3,965	7	(D)	(D)	7	6	3,850
Tennessee	617	248	181,752	456	43	16,604	50	18	(D)	49	45	29,815
Texas	686	1,864	776,321	450	101	23,059	96	46	32,582	54	198	34,371
Utah	226	256	182,962	148	23	6,826	35	43	13,464	17	28	11,033
Vermont	389	105	35,866	346	50	18,076	40	41	(D)	2	(D)	(D)
Virginia	696	572	183,681	633	144	25,978	33	55	11,530	10	(D)	(D)
Washington	856	673	286,518	734	148	29,876	53	(D)	(D)	34	44	27,073
West Virginia	306	64	15,518	302	36	8,313	2	(D)	(D)	-	-	-
Wisconsin	783	315	155,444	690	118	31,421	50	35	19,183	5	23	3,907
Wyoming	89	28	11,722	72	18	4,066	13	8	4,394	4	3	3,262
Water Resources Regions												
Region 01 New England	2,110	1,431	615,776	1,778	369	115,634	132	161	42,276	110	91	71,211
Region 02 Mid-Atlantic	3,378	4,115	1,025,976	2,757	1,013	136,026	251	735	87,044	166	304	100,516
Region 03 South Atlantic-Gulf	3,119	8,349	2,956,783	2,210	801	117,959	245	289	81,318	228	631	170,066
Region 04 Great Lakes	2,801	3,169	1,681,343	2,309	430	104,737	161	202	63,858	88	204	57,467
Region 05 Ohio	2,423	1,153	494,258	2,057	437	97,504	168	97	54,181	87	147	59,403
Region 06 Tennessee	635	337	105,058	483	58	16,088	90	92	32,805	40	139	(D)
Region 07 Upper Mississippi	1,773	1,863	742,500	1,430	324	75,644	127	91	43,275	78	107	50,608
Region 08 Lower Mississippi	471	358	81,105	396	112	19,048	26	74	9,049	38	68	26,175
Region 09 Souris-Red-Rainy	47	23	17,185	40	5	887	5	3	(D)	-	-	-
Region 10 Missouri	1,220	834	342,827	996	161	50,750	108	88	40,646	51	55	35,908
Region 11 Arkansas-White-Red	594	233	65,123	518	106	22,380	59	43	19,366	13	34	(D)
Region 12 Texas-Gulf	649	1,732	581,124	427	101	22,545	96	46	32,582	42	186	22,641
Region 13 Rio Grande	199	255	220,081	171	23	5,677	-	-	-	13	17	12,708
Region 14 Upper Colorado	273	89	46,753	249	54	11,795	7	3	2,450	7	4	4,231
Region 15 Lower Colorado	140	280	240,813	80	41	5,647	20	15	(D)	17	15	(D)
Region 16 Great Basin	186	231	156,393	119	19	4,545	38	46	14,441	10	24	(D)
Region 17 Pacific Northwest	2,370	2,232	1,283,271	1,890	338	80,493	172	125	63,674	155	219	113,762
Region 18 California	1,711	7,590	4,710,802	818	284	38,226	200	471	70,064	243	660	181,612
Region 19 Alaska	208	49	14,418	200	33	5,260	-	-	-	5	5	3,919
Region 20 Hawaii	569	691	322,731	485	217	31,127	6	9	1,602	21	29	13,028

See footnote(s) at end of table.

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Table 7. Irrigation by Estimated Quantity of Water Applied: 2018 and 2013 (continued)

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

Geographic area	Area under protection - con.								
	1,000,000 to 1,999,999 gallons			2,000,000 to 4,999,999 gallons			5,000,000 gallons or more		
	Farms	Acres irrigated ¹	Gallons applied (1,000)	Farms	Acres irrigated ¹	Gallons applied (1,000)	Farms	Acres irrigated ¹	Gallons applied (1,000)
United States2018	959	4,110	1,297,353	572	3,893	1,724,090	609	16,554	10,080,351
.....2013	911	2,582	1,243,733	821	4,672	2,548,503	653	17,705	11,623,472
2018 DATA									
Alabama	15	101	25,992	2	(D)	(D)	3	119	29,315
Alaska	2	(D)	(D)	1	(D)	(D)	-	-	-
Arizona	8	33	13,664	12	49	50,486	3	128	(D)
Arkansas	2	(D)	(D)	-	-	-	1	(D)	(D)
California	105	562	157,847	124	601	358,510	221	5,014	3,904,542
Colorado	17	87	(D)	11	61	35,487	5	109	85,757
Connecticut	72	387	100,866	2	(D)	(D)	7	(D)	248,281
Delaware	1	(D)	(D)	-	-	-	-	-	-
Florida	117	806	145,120	102	727	252,340	105	4,072	1,640,769
Georgia	14	(D)	(D)	1	(D)	(D)	11	174	87,623
Hawaii	8	27	9,956	40	273	172,557	9	137	94,461
Idaho	-	-	-	2	(D)	(D)	3	39	34,540
Illinois	28	110	53,145	4	(D)	9,038	5	745	161,839
Indiana	9	35	13,447	3	29	9,542	4	43	49,197
Iowa	2	(D)	(D)	7	47	22,245	1	(D)	(D)
Kansas	11	76	13,200	7	46	15,200	-	-	-
Kentucky	6	(D)	9,542	1	(D)	(D)	-	-	-
Louisiana	1	(D)	(D)	9	90	19,800	-	-	-
Maine	2	(D)	(D)	-	-	-	1	(D)	(D)
Maryland	15	86	17,662	-	-	-	9	63	72,695
Massachusetts	1	(D)	(D)	-	-	-	1	(D)	(D)
Michigan	79	206	96,752	50	276	186,163	57	998	662,911
Minnesota	37	71	47,924	1	(D)	(D)	16	214	194,785
Mississippi	-	-	-	-	-	-	-	-	-
Missouri	1	(D)	(D)	18	80	40,702	1	(D)	(D)
Montana	2	(D)	(D)	-	-	-	-	-	-
Nebraska	1	(D)	(D)	1	(D)	(D)	-	-	-
Nevada	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	4	(D)	(D)	-	-	-
New Jersey	32	130	43,933	41	262	118,079	7	382	216,254
New Mexico	10	10	12,578	2	(D)	(D)	-	-	-
New York	28	206	29,881	1	(D)	(D)	23	335	207,770
North Carolina	42	95	60,309	9	56	20,654	3	280	268,658
North Dakota	1	(D)	(D)	-	-	-	-	-	-
Ohio	30	109	36,730	20	79	46,420	6	386	238,980
Oklahoma	-	-	-	-	-	-	2	(D)	(D)
Oregon	39	176	59,135	31	159	124,153	41	729	584,843
Pennsylvania	60	270	83,290	8	306	(D)	1	(D)	(D)
Rhode Island	-	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	1	(D)	(D)
South Dakota	10	16	14,121	-	-	-	1	(D)	(D)
Tennessee	50	61	63,396	10	49	26,723	2	(D)	(D)
Texas	34	128	43,720	22	109	65,052	30	1,282	577,536
Utah	14	23	16,670	8	27	23,647	4	112	111,323
Vermont	1	(D)	(D)	-	-	-	-	-	-
Virginia	2	(D)	(D)	12	125	29,543	6	221	108,729
Washington	14	69	20,883	5	(D)	(D)	16	309	175,464
West Virginia	1	(D)	(D)	1	(D)	(D)	-	-	-
Wisconsin	35	62	43,215	-	-	-	3	77	57,719
Wyoming	-	-	-	-	-	-	-	-	-
Water Resources Regions									
Region 01 New England	75	392	104,766	6	59	18,179	9	359	263,710
Region 02 Mid-Atlantic	132	688	171,771	51	624	147,757	21	750	382,862
Region 03 South Atlantic-Gulf	189	1,044	249,619	124	896	304,596	123	4,686	2,033,226
Region 04 Great Lakes	101	321	125,337	54	364	197,965	88	1,649	1,131,978
Region 05 Ohio	71	133	90,101	32	233	79,814	8	107	113,255
Region 06 Tennessee	21	31	29,484	1	(D)	(D)	-	-	-
Region 07 Upper Mississippi	89	207	129,884	27	130	64,950	22	1,003	378,140
Region 08 Lower Mississippi	1	(D)	(D)	9	90	19,800	1	(D)	(D)
Region 09 Souris-Red-Rainy	1	(D)	(D)	-	-	-	1	(D)	(D)
Region 10 Missouri	39	180	49,207	19	158	55,680	7	192	110,635
Region 11 Arkansas-White-Red	2	(D)	(D)	-	-	-	2	(D)	(D)
Region 12 Texas-Gulf	34	128	43,720	22	109	65,052	28	1,162	394,584
Region 13 Rio Grande	12	70	14,778	1	(D)	(D)	2	(D)	(D)
Region 14 Upper Colorado	-	-	-	10	28	28,277	-	-	-
Region 15 Lower Colorado	8	33	13,664	12	49	50,486	3	128	(D)
Region 16 Great Basin	14	23	16,670	1	(D)	(D)	4	112	111,323
Region 17 Pacific Northwest	55	247	82,818	38	227	147,677	60	1,077	794,847
Region 18 California	105	562	157,847	124	601	358,510	221	5,014	3,904,542
Region 19 Alaska	2	(D)	(D)	1	(D)	(D)	-	-	-
Region 20 Hawaii	8	27	9,956	40	273	172,557	9	137	94,461

¹ Acres irrigated are the square feet under protection converted to acres, without rounding.

Table 8. Irrigation Wells Used on Farms: 2018

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

Geographic area	Wells used									
	Farms	Number	With flow meters				With backflow prevention devices			
			Farms	Number	Acres irrigated in the open	Square feet under protection irrigated	Farms	Number	Acres irrigated in the open	Square feet under protection irrigated
United States	119,235	462,788	41,717	167,946	15,901,044	246,819,352	86,900	342,643	25,524,194	701,583,207
Alabama	625	1,021	64	150	18,926	150,720	449	771	45,375	5,403,919
Alaska	232	292	10	13	(D)	(D)	122	174	606	1,157,138
Arizona	1,195	3,932	519	2,404	215,512	5,232,200	832	2,391	245,566	7,029,940
Arkansas	2,814	41,247	541	3,828	457,204	-	1,486	14,251	1,432,811	644,105
California	24,342	67,354	8,627	26,499	2,201,411	116,788,922	18,817	53,289	3,339,468	158,612,107
Colorado	2,853	10,306	1,839	8,077	935,656	5,891,175	2,082	8,715	961,878	6,414,095
Connecticut	468	1,018	61	94	127	4,554,000	327	860	696	22,493,220
Delaware	517	2,747	79	379	27,087	(D)	417	2,385	142,976	1,289,808
Florida	7,043	18,646	1,805	6,038	344,300	24,617,277	5,419	13,852	491,389	176,187,179
Georgia	3,256	11,198	1,582	7,593	650,828	7,675,299	2,494	9,385	692,899	10,560,901
Hawaii	83	87	13	14	2,323	816,960	15	17	2,591	704,966
Idaho	3,015	7,371	1,185	3,876	593,923	620,373	1,903	5,053	714,955	2,045,636
Illinois	1,548	5,095	249	744	87,514	1,592,200	1,280	4,424	442,848	37,199,635
Indiana	1,709	5,056	306	613	49,269	49,000	1,348	4,179	360,370	4,099,115
Iowa	826	1,947	69	202	15,159	79,120	629	1,415	109,133	2,998,836
Kansas	3,758	18,877	3,421	18,005	2,144,645	3,324,640	3,273	17,625	2,134,256	3,943,920
Kentucky	285	549	15	27	899	32,832	221	442	28,540	699,726
Louisiana	1,575	10,102	86	462	43,812	680,700	918	4,121	372,608	3,717,058
Maine	740	950	30	47	(D)	34,020	376	468	1,381	1,185,566
Maryland	776	2,136	107	204	9,474	895,729	557	1,712	68,547	5,679,094
Massachusetts	518	790	72	144	(D)	608,760	485	667	2,559	2,319,401
Michigan	3,254	9,691	598	2,252	106,382	8,446,720	2,694	7,599	526,412	20,746,734
Minnesota	2,079	5,905	813	2,126	219,306	8,466,372	1,671	4,982	429,313	11,911,132
Mississippi	1,354	14,684	685	4,505	491,360	262,080	934	9,533	955,677	1,864,320
Missouri	2,037	14,641	161	679	85,084	299,300	1,283	7,306	583,632	2,911,700
Montana	1,336	1,817	204	269	19,874	186,360	901	988	26,445	986,844
Nebraska	11,801	66,940	7,931	38,311	4,095,335	27,000	9,932	56,892	5,995,061	957,620
Nevada	771	2,204	467	1,598	199,573	7,903	441	1,561	161,155	(D)
New Hampshire	510	655	36	61	154	1,367,400	329	441	520	2,624,822
New Jersey	1,233	2,708	291	652	16,341	6,519,114	851	2,205	47,727	34,178,537
New Mexico	4,103	9,977	2,072	4,724	207,854	442,314	2,258	7,390	338,460	635,250
New York	1,302	1,896	92	114	970	1,475,760	896	1,280	8,721	23,406,911
North Carolina	1,228	1,643	67	101	4,131	174,800	723	962	10,454	5,212,206
North Dakota	420	2,157	319	1,618	130,849	6,400	411	2,090	169,977	240,712
Ohio	892	1,203	164	170	2,690	205,920	631	860	11,345	6,992,013
Oklahoma	1,303	5,702	246	1,101	137,831	136,726	912	3,722	321,415	1,119,066
Oregon	4,518	8,992	1,137	2,345	180,583	10,549,894	2,943	5,670	277,546	34,806,914
Pennsylvania	1,983	2,764	272	449	10,287	3,259,673	1,313	1,944	21,723	26,345,248
Rhode Island	192	279	16	16	4	362,790	153	190	797	1,068,416
South Carolina	1,144	3,296	251	844	63,948	1,218,000	786	2,499	140,346	3,915,995
South Dakota	721	1,952	141	245	18,493	(D)	467	1,381	142,301	248,400
Tennessee	753	1,799	110	246	30,856	147,000	547	1,368	123,174	1,455,816
Texas	8,975	72,939	2,767	20,302	1,432,393	17,714,946	6,532	62,604	2,618,735	33,696,646
Utah	1,500	3,005	278	527	66,863	(D)	730	1,630	149,003	(D)
Vermont	329	419	36	36	170	65,520	216	297	624	1,521,269
Virginia	786	1,182	65	138	2,174	1,916,104	481	776	6,147	9,142,402
Washington	4,003	6,881	1,021	2,504	2,504	3,517,620	2,641	4,990	365,932	10,532,930
West Virginia	179	222	24	49	(D)	175,440	85	113	104	426,520
Wisconsin	1,733	5,166	448	1,779	205,047	2,692,332	1,242	4,163	389,075	8,436,100
Wyoming	618	1,348	325	772	101,754	143,821	447	1,011	110,921	197,748
Water Resources Regions										
Region 01 New England	2,606	3,942	248	395	7,952	6,979,650	1,800	2,821	6,508	30,549,645
Region 02 Mid-Atlantic	5,545	12,087	842	1,872	66,334	13,861,884	3,813	9,377	291,705	93,903,456
Region 03 South Atlantic-Gulf	13,416	36,214	3,812	14,765	1,076,063	34,217,680	9,968	27,854	1,375,371	202,885,077
Region 04 Great Lakes	5,307	13,492	894	2,917	163,678	11,157,940	4,165	10,528	700,500	29,963,762
Region 05 Ohio	2,480	5,065	380	694	61,640	379,228	1,788	3,882	271,261	13,606,982
Region 06 Tennessee	598	752	2	(D)	(D)	-	472	564	15,244	4,549,773
Region 07 Upper Mississippi	5,624	16,191	1,369	3,932	411,010	10,212,604	4,329	13,443	1,204,469	53,020,988
Region 08 Lower Mississippi	6,182	72,908	1,423	9,408	1,067,032	827,700	3,582	32,754	3,197,492	4,332,541
Region 09 Souris-Red-Rainy	358	2,177	244	1,422	117,484	96,000	299	1,921	153,267	(D)
Region 10 Missouri	18,367	86,798	11,355	50,912	5,487,822	7,390,443	14,873	73,376	7,723,673	10,949,687
Region 11 Arkansas-White-Red	6,652	44,752	3,728	23,772	2,745,637	554,374	5,310	34,701	3,339,043	2,946,746
Region 12 Texas-Gulf	7,403	58,207	1,795	12,271	638,179	12,487,746	5,340	50,024	1,680,899	28,279,934
Region 13 Rio Grande	3,857	8,601	2,128	5,429	297,267	8,277,274	1,906	5,707	274,429	8,659,710
Region 14 Upper Colorado	430	617	95	(D)	(D)	145,045	184	207	8,878	165,040
Region 15 Lower Colorado	1,476	4,370	570	2,582	243,364	5,232,200	1,042	2,744	275,920	7,029,940
Region 16 Great Basin	2,185	5,182	750	2,203	289,757	(D)	1,165	3,357	353,446	(D)
Region 17 Pacific Northwest	11,923	23,506	3,421	8,713	1,013,057	14,868,887	7,840	15,800	1,305,286	47,897,344
Region 18 California	24,511	67,548	8,638	26,491	2,201,994	116,788,922	18,887	53,392	3,343,606	158,612,107
Region 19 Alaska	232	292	10	13	(D)	(D)	122	174	606	1,157,138
Region 20 Hawaii	83	87	13	14	2,323	816,960	15	17	2,591	704,966

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Table 8. Irrigation Wells Used on Farms: 2018 (continued)

[Excludes institutional, research, and experimental farms. 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	63,189	17,837	9,423	5,554	4,232	3,181	5,212	4,585	2,076	3,946
Alabama	488	71	21	9	5	3	22	5	1	-
Alaska	195	16	19	2	-	-	-	-	-	-
Arizona	588	354	66	58	16	32	29	14	8	30
Arkansas	432	221	151	143	124	142	289	424	207	681
California	14,221	3,570	2,287	1,091	707	537	931	467	204	327
Colorado	1,286	626	173	142	159	88	188	82	40	69
Connecticut	254	62	107	28	-	2	-	15	-	-
Delaware	123	79	58	26	79	24	55	38	12	23
Florida	3,998	1,381	566	427	152	119	169	76	31	124
Georgia	1,655	413	369	276	152	27	67	187	46	64
Hawaii	80	2	1	-	-	-	-	-	-	-
Idaho	2,042	399	184	87	47	67	43	85	30	31
Illinois	701	326	157	59	66	29	114	47	28	21
Indiana	902	279	84	72	154	53	79	38	36	12
Iowa	543	50	86	32	40	25	33	6	8	3
Kansas	1,148	530	424	323	282	254	344	200	115	138
Kentucky	207	41	6	18	-	2	3	4	2	2
Louisiana	456	225	117	170	89	32	197	109	45	135
Maine	607	85	40	3	1	3	-	-	1	-
Maryland	458	91	72	32	9	13	48	39	10	4
Massachusetts	323	130	53	12	-	-	-	-	-	-
Michigan	1,804	548	275	216	86	94	63	70	24	74
Minnesota	1,038	512	156	49	109	63	26	89	11	26
Mississippi	280	153	122	90	63	87	102	118	77	262
Missouri	990	196	81	82	60	52	86	133	162	195
Montana	1,060	135	94	42	1	-	4	-	-	-
Nebraska	3,012	1,887	1,238	902	730	645	1,239	1,238	390	520
Nevada	402	141	73	40	46	11	19	20	15	4
New Hampshire	389	114	-	5	-	-	2	-	-	-
New Jersey	816	114	140	17	50	39	22	26	6	3
New Mexico	2,984	416	230	78	43	75	75	105	39	58
New York	937	241	74	30	8	6	1	5	-	-
North Carolina	1,033	131	18	17	10	2	9	5	2	1
North Dakota	161	11	62	26	81	-	5	46	23	5
Ohio	725	130	16	7	3	1	3	2	5	-
Oklahoma	653	176	105	78	34	63	44	56	31	63
Oregon	3,082	717	282	120	103	36	74	37	21	46
Pennsylvania	1,422	475	31	28	14	2	5	6	-	-
Rhode Island	127	55	4	-	6	-	-	-	-	-
South Carolina	709	143	82	42	15	52	36	20	32	13
South Dakota	235	202	133	38	73	5	18	12	5	-
Tennessee	430	150	63	2	35	30	17	19	3	4
Texas	3,600	1,110	559	398	444	305	590	648	370	951
Utah	1,051	217	39	59	4	71	33	15	5	6
Vermont	272	28	27	-	2	-	-	-	-	-
Virginia	614	80	33	11	34	10	3	1	-	-
Washington	3,089	366	217	119	33	39	73	54	2	11
West Virginia	149	23	1	6	-	-	-	-	-	-
Wisconsin	1,123	275	106	22	43	31	49	22	23	39
Wyoming	295	140	121	20	20	10	3	2	6	1
Water Resources Regions										
Region 01 New England	1,838	458	230	48	9	5	2	15	1	-
Region 02 Mid-Atlantic	3,458	1,015	376	135	161	94	133	115	28	30
Region 03 South Atlantic-Gulf	7,898	2,140	1,103	794	367	203	306	292	111	202
Region 04 Great Lakes	3,300	842	353	271	108	122	100	85	49	77
Region 05 Ohio	1,777	296	86	52	100	46	73	21	24	5
Region 06 Tennessee	501	79	8	3	2	-	3	1	1	-
Region 07 Upper Mississippi	3,132	1,129	386	140	261	104	176	141	65	90
Region 08 Lower Mississippi	1,158	623	416	444	284	313	642	717	398	1,187
Region 09 Souris-Red-Rainy	109	38	37	18	52	14	4	52	30	4
Region 10 Missouri	6,069	3,166	1,989	1,159	1,159	842	1,519	1,390	484	590
Region 11 Arkansas-White-Red	2,260	865	532	476	412	302	498	461	365	481
Region 12 Texas-Gulf	3,053	885	521	392	273	281	477	523	216	782
Region 13 Rio Grande	2,853	429	207	4	88	62	77	75	19	43
Region 14 Upper Colorado	341	54	14	-	-	21	-	-	-	-
Region 15 Lower Colorado	840	354	88	58	16	32	29	19	8	32
Region 16 Great Basin	1,322	378	123	132	50	61	47	42	20	10
Region 17 Pacific Northwest	8,681	1,448	630	335	180	142	190	176	53	88
Region 18 California	14,324	3,620	2,304	1,091	710	537	936	460	204	325
Region 19 Alaska	195	16	19	2	-	-	-	-	-	-
Region 20 Hawaii	80	2	1	-	-	-	-	-	-	-

Table 9. Characteristics of Irrigation Wells Used on Farms: 2018

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

Geographic area	All wells used		Flowing wells used (see text)		Change in average depth to water ¹					
	Farms	Number	Farms	Number	Did not change		Increased		Decreased	
					Farms	Number of wells	Farms	Number of wells	Farms	Number of wells
United States	119,235	462,788	1,520	2,844	88,174	299,615	13,033	63,621	18,028	99,552
Alabama	625	1,021	2	(D)	578	946	13	23	34	52
Alaska	232	292	22	22	186	240	18	20	28	32
Arizona	1,195	3,932	27	45	871	2,377	173	1,151	151	404
Arkansas	2,814	41,247	10	40	2,246	32,916	229	3,361	339	4,970
California	24,342	67,354	362	555	14,662	36,256	3,937	12,891	5,743	18,207
Colorado	2,853	10,306	58	178	1,538	4,400	497	2,889	818	3,017
Connecticut	468	1,018	28	28	364	854	76	136	28	28
Delaware	517	2,747	-	-	394	2,169	73	378	50	200
Florida	7,043	18,646	114	124	6,206	15,510	459	1,187	378	1,949
Georgia	3,256	11,198	29	104	2,500	8,244	355	1,500	401	1,454
Hawaii	83	87	1	(D)	83	87	-	-	-	-
Idaho	3,015	7,371	162	213	2,448	5,773	274	771	293	827
Illinois	1,548	5,095	6	6	1,428	4,672	68	162	52	261
Indiana	1,709	5,056	-	-	1,590	4,656	86	348	33	52
Iowa	826	1,947	-	-	703	1,584	77	229	46	134
Kansas	3,758	18,877	-	-	2,202	9,089	624	4,459	932	5,329
Kentucky	285	549	-	-	250	511	27	(D)	8	(D)
Louisiana	1,575	10,102	26	52	1,343	8,014	103	1,206	129	882
Maine	740	950	4	4	675	852	34	67	31	31
Maryland	776	2,136	-	-	695	1,805	31	264	50	67
Massachusetts	518	790	-	-	467	679	11	11	40	100
Michigan	3,254	9,691	1	(D)	3,073	9,111	135	428	46	152
Minnesota	2,079	5,905	20	20	1,790	5,086	210	597	79	222
Mississippi	1,354	14,684	6	60	1,112	10,630	128	2,054	114	2,000
Missouri	2,037	14,641	24	64	1,847	12,707	63	406	127	1,528
Montana	1,336	1,817	58	90	1,281	1,707	-	-	55	110
Nebraska	11,801	66,940	5	10	8,136	43,548	1,835	11,918	1,830	11,474
Nevada	771	2,204	15	15	464	796	91	527	216	881
New Hampshire	510	655	21	21	493	628	7	7	10	20
New Jersey	1,233	2,708	1	(D)	1,166	2,339	26	74	41	295
New Mexico	4,103	9,977	-	-	2,508	4,679	428	2,060	1,167	3,238
New York	1,302	1,896	91	91	1,222	1,749	52	86	28	61
North Carolina	1,228	1,643	31	50	1,089	1,496	77	77	62	70
North Dakota	420	2,157	-	-	363	1,951	7	84	50	122
Ohio	892	1,203	-	-	867	1,133	24	(D)	1	(D)
Oklahoma	1,303	5,702	7	80	866	2,577	135	532	302	2,593
Oregon	4,518	8,992	39	39	3,888	7,719	276	501	354	772
Pennsylvania	1,983	2,764	22	22	1,713	2,373	219	323	51	68
Rhode Island	192	279	-	-	155	203	23	52	14	24
South Carolina	1,144	3,296	-	-	1,048	2,770	36	350	60	176
South Dakota	721	1,952	-	-	540	1,464	125	329	56	159
Tennessee	753	1,799	-	-	705	1,686	27	92	21	21
Texas	8,975	72,939	46	276	5,104	27,874	1,214	10,346	2,657	34,719
Utah	1,500	3,005	151	439	724	1,499	320	624	456	882
Vermont	329	419	34	34	320	405	-	-	9	14
Virginia	786	1,182	-	-	705	1,096	54	54	27	32
Washington	4,003	6,881	67	73	3,415	5,626	163	305	425	950
West Virginia	179	222	5	20	155	198	-	-	24	24
Wisconsin	1,733	5,166	-	-	1,454	3,832	162	537	117	797
Wyoming	618	1,348	25	57	542	1,099	31	124	45	125
Water Resources Regions										
Region 01 New England	2,606	3,942	59	59	2,332	3,466	151	273	123	203
Region 02 Mid-Atlantic	5,545	12,087	97	115	4,949	10,313	369	1,071	227	703
Region 03 South Atlantic-Gulf	13,416	36,214	164	270	11,491	29,317	973	3,174	952	3,723
Region 04 Great Lakes	5,307	13,492	51	51	4,874	12,332	264	798	169	362
Region 05 Ohio	2,480	5,065	-	-	2,342	4,844	121	185	17	36
Region 06 Tennessee	598	752	12	12	583	722	-	-	15	30
Region 07 Upper Mississippi	5,624	16,191	25	25	4,994	13,744	419	1,223	211	1,224
Region 08 Lower Mississippi	6,182	72,908	46	196	5,119	58,125	482	6,929	581	7,854
Region 09 Souris-Red-Rainy	358	2,177	1	(D)	278	1,862	26	157	54	158
Region 10 Missouri	18,367	86,798	112	273	12,861	55,915	2,534	15,009	2,972	15,874
Region 11 Arkansas-White-Red	6,652	44,752	20	95	3,913	20,092	1,056	7,898	1,683	16,762
Region 12 Texas-Gulf	7,403	58,207	45	273	4,243	23,032	963	8,135	2,197	27,040
Region 13 Rio Grande	3,857	8,601	4	12	2,446	4,291	396	1,887	1,015	2,423
Region 14 Upper Colorado	430	617	43	(D)	295	424	49	49	86	144
Region 15 Lower Colorado	1,476	4,370	27	45	1,071	2,669	220	1,263	185	438
Region 16 Great Basin	2,185	5,182	155	435	1,163	2,308	345	1,091	677	1,783
Region 17 Pacific Northwest	11,923	23,506	271	328	10,158	19,397	674	1,532	1,091	2,577
Region 18 California	24,511	67,548	365	558	14,793	36,435	3,973	12,927	5,745	18,186
Region 19 Alaska	232	292	22	22	186	240	18	20	28	32
Region 20 Hawaii	83	87	1	(D)	83	87	-	-	-	-

See footnote(s) at end of table.

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Table 9. Characteristics of Irrigation Wells Used on Farms: 2018 (continued)

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

Geographic area	All pumped wells ²							
	Farms	Number	Average well depth (feet)	Average depth to water at start of irrigation season (feet)	Average depth to bowls or impellers (feet)	Average pumping capacity (gpm)	Average operating pressure (psi)	Average engine size (hp)
United States	118,185	459,944	235	94	151	708	39	81
Alabama	623	(D)	193	78	117	332	44	60
Alaska	210	270	112	51	78	37	48	19
Arizona	1,184	3,887	450	174	277	743	28	116
Arkansas	2,810	41,207	119	48	80	1,439	32	65
California	24,138	66,799	373	123	209	730	41	121
Colorado	2,813	10,128	206	89	144	704	40	78
Connecticut	440	990	185	60	125	52	62	12
Delaware	517	2,747	91	28	58	579	49	53
Florida	6,962	18,522	335	106	151	800	41	72
Georgia	3,231	11,094	293	98	170	496	49	87
Hawaii	82	(D)	244	94	144	202	44	155
Idaho	2,904	7,158	307	135	197	1,072	57	164
Illinois	1,545	5,089	129	40	78	722	40	66
Indiana	1,709	5,056	96	31	64	669	48	58
Iowa	826	1,947	125	34	68	610	41	52
Kansas	3,758	18,877	226	107	174	568	29	116
Kentucky	285	549	150	74	107	474	51	52
Louisiana	1,549	10,050	121	49	81	1,429	21	67
Maine	740	946	206	44	135	78	45	63
Maryland	776	2,136	137	47	88	354	43	56
Massachusetts	518	790	201	47	114	77	51	16
Michigan	3,254	(D)	121	44	77	462	59	52
Minnesota	2,059	5,885	136	45	80	556	44	49
Mississippi	1,354	14,624	112	42	69	1,604	28	67
Missouri	2,021	14,577	138	38	75	1,215	34	64
Montana	1,294	1,727	145	52	94	217	53	36
Nebraska	11,801	66,930	200	76	128	760	42	95
Nevada	771	2,189	403	102	220	1,050	44	138
New Hampshire	489	634	363	96	230	20	58	14
New Jersey	1,232	(D)	161	48	87	311	56	54
New Mexico	4,103	9,977	254	114	168	515	31	65
New York	1,256	1,805	119	47	81	108	55	39
North Carolina	1,199	1,593	229	86	155	91	51	45
North Dakota	420	2,157	69	20	45	603	45	43
Ohio	892	1,203	103	45	69	139	55	25
Oklahoma	1,299	5,622	194	87	151	368	37	79
Oregon	4,513	8,953	211	69	129	349	60	60
Pennsylvania	1,961	2,742	191	66	118	75	60	16
Rhode Island	192	279	161	65	109	39	42	11
South Carolina	1,144	3,296	367	130	209	336	49	48
South Dakota	721	1,952	98	41	71	594	49	45
Tennessee	753	1,799	215	74	123	714	42	64
Texas	8,947	72,663	285	161	229	213	29	59
Utah	1,361	2,566	361	109	184	628	53	104
Vermont	306	385	293	116	191	19	50	79
Virginia	786	1,182	277	80	173	58	47	9
Washington	3,936	6,808	271	104	168	414	64	85
West Virginia	174	202	157	46	120	24	46	3
Wisconsin	1,733	5,166	166	49	97	650	54	75
Wyoming	594	1,291	254	93	156	556	38	56
Water Resources Regions								
Region 01 New England	2,557	3,883	229	64	147	55	53	29
Region 02 Mid-Atlantic	5,471	11,972	155	51	95	298	52	42
Region 03 South Atlantic-Gulf	13,291	35,944	314	103	161	611	44	72
Region 04 Great Lakes	5,284	13,441	124	43	77	443	58	51
Region 05 Ohio	2,480	5,065	100	36	69	561	49	55
Region 06 Tennessee	586	740	212	101	148	150	46	37
Region 07 Upper Mississippi	5,602	16,166	142	43	82	633	45	63
Region 08 Lower Mississippi	6,148	72,712	121	46	78	1,433	30	65
Region 09 Souris-Red-Rainy	357	(D)	101	38	68	599	43	40
Region 10 Missouri	18,291	86,525	196	77	128	726	41	93
Region 11 Arkansas-White-Red	6,644	44,657	268	146	218	592	29	94
Region 12 Texas-Gulf	7,375	57,934	253	139	198	184	30	46
Region 13 Rio Grande	3,857	8,589	257	81	143	682	34	78
Region 14 Upper Colorado	387	(D)	138	56	89	243	39	50
Region 15 Lower Colorado	1,465	4,325	437	169	273	729	30	115
Region 16 Great Basin	2,057	4,747	387	112	206	902	48	130
Region 17 Pacific Northwest	11,734	23,178	255	98	159	573	60	97
Region 18 California	24,307	66,990	372	123	208	729	41	121
Region 19 Alaska	210	270	112	51	78	37	48	19
Region 20 Hawaii	82	(D)	244	94	144	202	44	155

See footnote(s) at end of table.

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Table 9. Characteristics of Irrigation Wells Used on Farms: 2018 (continued)

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

Geographic area	Average well depth ²				Number of wells with an average well depth of -					
	For all pumped wells (feet)	For farms with 1 well (feet)	For farms with 2 wells (feet)	For farms with 3 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	235	240	246	254	17,629	68,774	166,939	85,893	77,399	43,310
Alabama	193	185	191	291	34	58	626	168	69	62
Alaska	112	128	79	89	22	111	110	(D)	12	-
Arizona	450	406	452	546	-	769	808	227	444	1,639
Arkansas	119	156	142	117	473	6,767	32,906	871	123	67
California	373	306	341	326	725	2,722	11,326	14,865	20,429	16,732
Colorado	206	184	147	244	995	1,926	2,510	1,932	2,368	397
Connecticut	185	166	211	201	43	90	610	129	73	45
Delaware	91	(D)	93	88	24	1,518	1,191	(D)	(D)	-
Florida	335	242	311	378	3,065	1,696	5,323	2,100	1,449	4,889
Georgia	293	342	321	332	57	233	3,051	3,004	3,268	1,481
Hawaii	244	(D)	(D)	-	4	-	4	66	(D)	6
Idaho	307	248	300	281	78	609	1,591	1,685	1,930	1,265
Illinois	129	172	139	104	164	1,723	2,608	295	241	58
Indiana	96	114	127	103	605	2,500	1,637	238	76	-
Iowa	125	212	120	93	211	515	946	152	84	39
Kansas	226	173	117	175	583	4,952	4,730	3,697	3,029	1,886
Kentucky	150	107	147	253	36	250	90	124	49	-
Louisiana	121	150	119	113	38	3,019	6,181	759	27	26
Maine	206	224	92	276	198	92	202	69	347	(D)
Maryland	137	181	115	200	305	769	457	405	175	25
Massachusetts	201	149	141	253	101	164	176	162	127	60
Michigan	121	127	120	138	810	3,712	4,050	857	261	-
Minnesota	136	142	102	202	205	2,190	2,330	754	402	(D)
Mississippi	112	183	116	105	40	2,193	12,260	73	52	6
Missouri	138	326	340	130	264	4,335	8,942	270	329	437
Montana	145	165	146	113	335	436	533	202	205	16
Nebraska	200	205	205	228	925	10,180	22,952	22,905	9,346	622
Nevada	403	335	387	390	31	62	99	311	1,088	598
New Hampshire	363	249	542	-	167	75	18	82	58	234
New Jersey	161	245	144	102	224	709	1,305	153	250	63
New Mexico	254	171	198	364	184	425	3,467	3,468	1,638	795
New York	119	125	122	74	417	591	549	164	45	39
North Carolina	229	242	236	227	85	146	587	417	223	135
North Dakota	69	118	(D)	100	794	946	382	31	4	-
Ohio	103	114	92	(D)	215	498	375	47	68	-
Oklahoma	194	198	214	167	422	1,783	1,175	998	951	293
Oregon	211	193	247	228	1,196	1,098	3,182	1,264	1,701	512
Pennsylvania	191	181	199	166	138	394	1,061	752	307	90
Rhode Island	161	169	159	218	(D)	61	65	113	12	(D)
South Carolina	367	329	323	264	6	369	808	323	666	1,124
South Dakota	98	111	170	63	733	531	467	147	30	44
Tennessee	215	245	167	174	-	203	573	568	441	14
Texas	285	329	273	265	727	4,217	19,979	18,508	21,833	7,399
Utah	361	340	423	227	171	20	334	194	1,235	612
Vermont	293	231	327	485	(D)	77	24	40	113	94
Virginia	277	345	275	185	173	64	141	375	280	149
Washington	271	227	264	331	1,379	1,386	1,536	729	712	1,066
West Virginia	157	142	195	(D)	20	51	72	50	9	-
Wisconsin	166	200	205	236	115	1,419	2,259	717	517	139
Wyoming	254	236	274	342	28	120	331	406	297	109
Water Resources Regions										
Region 01 New England	229	205	248	260	540	530	1,099	571	684	459
Region 02 Mid-Atlantic	155	218	173	120	820	3,719	4,497	1,688	959	289
Region 03 South Atlantic-Gulf	314	270	303	340	3,386	2,575	10,451	6,093	5,692	7,747
Region 04 Great Lakes	124	130	130	151	1,283	4,958	5,472	1,188	507	33
Region 05 Ohio	100	124	126	85	349	2,959	1,333	297	120	7
Region 06 Tennessee	212	232	203	106	23	104	294	147	138	34
Region 07 Upper Mississippi	142	187	133	163	1,055	4,971	7,068	1,712	1,080	280
Region 08 Lower Mississippi	121	171	141	121	393	13,705	55,500	2,271	615	228
Region 09 Souris-Red-Rainy	101	(D)	(D)	148	600	743	660	50	123	-
Region 10 Missouri	196	191	196	201	3,129	15,122	27,749	26,922	12,170	1,433
Region 11 Arkansas-White-Red	268	238	177	215	1,273	8,148	10,308	6,098	11,754	7,076
Region 12 Texas-Gulf	253	333	260	234	649	3,356	20,028	17,499	14,091	2,311
Region 13 Rio Grande	257	182	228	439	272	823	3,098	1,832	1,604	960
Region 14 Upper Colorado	138	173	185	-	149	129	150	(D)	(D)	9
Region 15 Lower Colorado	437	355	452	519	34	776	883	276	619	1,737
Region 16 Great Basin	387	346	403	388	62	71	450	651	2,250	1,263
Region 17 Pacific Northwest	255	215	265	271	2,861	3,259	6,335	3,545	4,428	2,750
Region 18 California	372	306	340	324	725	2,715	11,450	14,948	20,464	16,688
Region 19 Alaska	112	128	79	89	22	111	110	(D)	12	-
Region 20 Hawaii	244	(D)	(D)	-	4	-	4	66	(D)	6

See footnote(s) at end of table.

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Table 9. Characteristics of Irrigation Wells Used on Farms: 2018 (continued)

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

Geographic area	Average depth to water at start of irrigation season				Number of wells with an average depth to water of -					
	For all pumped wells (feet)	For farms with 1 well (feet)	For farms with 2 wells (feet)	For farms with 3 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	94	89	88	90	184,468	125,088	97,430	30,468	20,056	2,434
Alabama	78	82	83	74	225	533	236	17	(D)	(D)
Alaska	51	58	38	39	185	62	20	(D)	(D)	-
Arizona	174	198	182	187	1,063	848	557	475	783	161
Arkansas	48	60	57	49	25,540	13,706	1,886	68	(D)	6
California	123	114	122	111	12,998	19,545	22,193	8,383	3,315	365
Colorado	89	83	68	92	4,014	1,888	3,271	854	85	16
Connecticut	60	48	22	78	633	236	121	-	-	-
Delaware	28	(D)	26	36	2,692	39	16	-	-	-
Florida	106	78	111	120	9,265	5,591	1,589	674	481	922
Georgia	98	122	78	113	2,604	3,586	4,073	629	178	24
Hawaii	94	(D)	(D)	-	6	69	3	(D)	(D)	-
Idaho	135	112	119	113	1,578	1,376	3,066	557	534	47
Illinois	40	65	43	34	3,990	759	254	86	-	-
Indiana	31	38	52	43	4,194	697	165	-	-	-
Iowa	34	66	46	25	1,535	321	70	18	3	-
Kansas	107	84	46	85	7,373	3,384	4,565	2,805	750	-
Kentucky	74	48	55	(D)	343	116	42	-	48	-
Louisiana	49	59	42	41	5,249	4,345	443	13	-	-
Maine	44	57	18	15	645	113	188	-	-	-
Maryland	47	72	44	71	1,325	540	247	17	7	-
Massachusetts	47	61	29	46	453	280	45	6	6	-
Michigan	44	54	39	62	6,846	2,190	569	40	45	-
Minnesota	45	51	33	70	4,169	1,227	481	8	-	-
Mississippi	42	67	53	35	10,758	3,788	55	23	-	-
Missouri	38	91	94	31	13,128	754	375	128	48	144
Montana	52	66	33	23	1,094	336	255	30	10	(D)
Nebraska	76	75	73	87	20,725	28,933	15,910	1,362	-	-
Nevada	102	98	78	85	417	748	890	105	29	-
New Hampshire	96	77	126	-	332	31	175	25	71	-
New Jersey	48	74	48	37	1,831	548	247	78	-	-
New Mexico	114	61	92	78	3,011	2,138	3,712	505	611	-
New York	47	53	39	31	1,221	480	88	-	-	16
North Carolina	86	96	92	85	653	404	397	86	26	27
North Dakota	20	35	(D)	17	2,114	39	4	-	-	-
Ohio	45	58	21	29	927	180	51	-	45	-
Oklahoma	87	87	106	65	2,900	969	863	637	252	(D)
Oregon	69	74	90	72	5,043	1,956	1,509	208	129	108
Pennsylvania	66	67	66	66	1,223	947	508	54	10	-
Rhode Island	54	64	86	113	157	30	71	21	-	-
South Carolina	130	139	129	73	1,270	608	550	514	329	25
South Dakota	41	37	79	23	1,488	380	38	(D)	(D)	-
Tennessee	74	91	65	64	520	815	429	28	-	7
Texas	161	125	109	123	10,338	15,321	23,919	11,129	11,598	358
Utah	109	112	120	82	637	590	1,037	238	64	-
Vermont	116	86	63	243	133	53	113	86	-	-
Virginia	80	89	113	44	442	257	454	18	11	-
Washington	104	88	89	159	3,504	1,214	1,013	469	407	201
West Virginia	46	40	65	(D)	115	81	3	-	3	-
Wisconsin	49	69	55	47	3,174	1,549	384	40	19	-
Wyoming	93	92	125	117	388	488	280	28	107	-
Water Resources Regions										
Region 01 New England	64	63	58	80	2,297	714	662	133	77	-
Region 02 Mid-Atlantic	51	75	59	44	7,714	2,626	1,431	167	18	16
Region 03 South Atlantic-Gulf	103	93	103	109	14,443	10,786	6,813	1,924	1,003	975
Region 04 Great Lakes	43	52	39	61	9,509	3,036	784	45	67	-
Region 05 Ohio	36	48	52	33	4,004	758	270	-	26	7
Region 06 Tennessee	101	112	100	36	222	217	215	36	23	27
Region 07 Upper Mississippi	43	63	41	47	11,744	3,236	987	168	31	-
Region 08 Lower Mississippi	46	64	53	44	47,421	22,278	2,729	92	48	144
Region 09 Souris-Red-Rainy	38	(D)	(D)	70	1,766	237	173	-	-	-
Region 10 Missouri	77	70	73	75	30,453	32,121	20,999	2,721	231	-
Region 11 Arkansas-White-Red	146	109	83	105	15,706	5,863	8,720	6,952	7,225	191
Region 12 Texas-Gulf	139	124	100	98	8,976	14,364	21,408	7,356	5,667	163
Region 13 Rio Grande	81	64	97	93	4,096	2,087	1,612	410	365	19
Region 14 Upper Colorado	56	72	68	-	380	48	82	25	(D)	8
Region 15 Lower Colorado	169	169	182	180	1,119	930	732	600	783	161
Region 16 Great Basin	112	109	104	131	988	1,308	1,989	309	153	-
Region 17 Pacific Northwest	98	87	97	105	10,326	4,727	5,537	1,214	1,016	358
Region 18 California	123	114	121	110	13,113	19,621	22,264	8,312	3,315	365
Region 19 Alaska	51	58	38	39	185	62	20	(D)	(D)	-
Region 20 Hawaii	94	(D)	(D)	-	6	69	3	(D)	(D)	-

See footnote(s) at end of table.

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Table 9. Characteristics of Irrigation Wells Used on Farms: 2018 (continued)

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

Geographic area	Average depth to bowls or impellers				Number of wells with an average depth to bowls of -					
	For all pumped wells (feet)	For farms with 1 well (feet)	For farms with 2 wells (feet)	For farms with 3 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	151	147	149	153	58,063	140,470	150,464	59,907	41,218	9,806
Alabama	117	113	134	131	97	368	465	60	17	10
Alaska	78	90	61	56	96	108	54	(D)	(D)	-
Arizona	277	285	279	365	16	1,452	380	323	1,118	598
Arkansas	80	100	88	80	3,446	28,739	8,711	286	18	7
California	209	188	202	190	1,909	9,538	27,289	14,784	10,696	2,583
Colorado	144	119	107	157	1,933	2,355	3,486	1,779	405	170
Connecticut	125	98	105	134	49	441	382	73	(D)	-
Delaware	58	(D)	48	55	844	1,799	90	14	-	-
Florida	151	122	160	176	5,178	4,526	6,026	728	1,011	1,053
Georgia	170	192	170	195	661	1,836	4,856	2,896	728	117
Hawaii	144	(D)	(D)	-	(D)	71	(D)	(D)	(D)	(D)
Idaho	197	171	190	177	534	1,190	2,359	2,002	864	209
Illinois	78	105	80	60	1,107	3,097	649	175	61	-
Indiana	64	67	90	75	1,786	2,603	609	40	18	-
Iowa	68	111	76	64	777	833	273	39	21	4
Kansas	174	137	85	127	3,241	5,105	3,710	3,549	2,930	342
Kentucky	107	71	102	(D)	140	251	99	11	48	-
Louisiana	81	92	72	68	919	7,066	1,949	116	-	-
Maine	135	134	68	225	268	169	190	255	64	-
Maryland	88	117	93	123	663	780	555	105	33	-
Massachusetts	114	95	75	202	234	217	211	26	96	6
Michigan	77	85	77	95	3,015	4,289	2,048	273	65	-
Minnesota	80	84	59	112	1,938	2,465	1,361	121	-	-
Mississippi	69	107	75	62	864	12,957	749	43	11	-
Missouri	75	167	195	59	5,213	8,094	659	208	154	249
Montana	94	109	75	78	633	453	430	168	35	8
Nebraska	128	128	130	148	6,420	16,775	36,218	6,385	1,116	-
Nevada	220	193	178	198	76	101	662	987	259	104
New Hampshire	230	138	384	-	221	38	90	(D)	165	76
New Jersey	87	139	72	61	956	1,118	415	152	40	23
New Mexico	168	107	138	148	(D)	2,167	3,337	2,996	821	(D)
New York	81	82	77	51	784	598	317	67	23	16
North Carolina	155	161	172	142	205	464	548	235	73	68
North Dakota	45	84	(D)	54	1,480	539	138	-	-	-
Ohio	69	79	56	50	552	392	214	-	45	-
Oklahoma	151	153	185	123	1,652	1,084	1,228	734	877	(D)
Oregon	129	127	160	123	1,693	2,977	2,721	978	417	167
Pennsylvania	118	113	118	120	371	921	1,118	252	78	(D)
Rhode Island	109	101	122	142	54	88	98	(D)	(D)	-
South Carolina	209	215	192	167	373	277	1,373	404	818	51
South Dakota	71	72	114	43	985	541	343	39	44	-
Tennessee	123	141	110	103	112	644	901	128	7	7
Texas	229	198	174	189	2,447	6,379	27,812	16,095	16,702	3,228
Utah	184	190	188	125	198	219	1,203	595	350	(D)
Vermont	191	136	133	404	89	50	59	95	92	-
Virginia	173	197	217	151	212	118	384	347	64	57
Washington	168	140	153	246	2,114	1,573	1,089	947	534	551
West Virginia	120	97	183	(D)	45	(D)	70	26	9	-
Wisconsin	97	113	111	103	689	2,422	1,799	197	59	-
Wyoming	156	146	179	183	164	200	666	82	179	-
Water Resources Regions										
Region 01 New England	147	121	163	198	855	1,012	991	488	455	82
Region 02 Mid-Atlantic	95	131	110	76	3,191	4,998	2,682	816	219	66
Region 03 South Atlantic-Gulf	161	150	162	178	6,592	7,657	13,315	4,444	2,632	1,304
Region 04 Great Lakes	77	82	77	99	4,135	6,062	2,772	376	96	-
Region 05 Ohio	69	80	91	59	1,586	2,748	607	70	47	7
Region 06 Tennessee	148	162	151	84	159	163	283	63	45	27
Region 07 Upper Mississippi	82	106	78	86	4,586	7,363	3,515	497	182	23
Region 08 Lower Mississippi	78	103	88	74	8,681	51,394	11,895	521	77	144
Region 09 Souris-Red-Rainy	68	(D)	(D)	97	1,065	597	491	23	-	-
Region 10 Missouri	128	117	126	131	11,741	21,553	41,422	9,544	2,059	190
Region 11 Arkansas-White-Red	218	175	139	156	5,789	10,817	6,976	7,345	10,655	3,075
Region 12 Texas-Gulf	198	197	156	154	1,853	5,611	26,559	13,542	9,811	558
Region 13 Rio Grande	143	109	156	186	806	2,966	2,721	1,312	685	99
Region 14 Upper Colorado	89	108	132	-	197	(D)	176	24	4	(D)
Region 15 Lower Colorado	273	255	279	335	54	1,455	470	532	1,216	598
Region 16 Great Basin	206	189	184	229	(D)	352	2,024	1,488	635	105
Region 17 Pacific Northwest	159	140	165	172	4,625	5,876	6,015	3,957	1,770	935
Region 18 California	208	188	201	189	1,905	9,599	27,425	14,853	10,625	2,583
Region 19 Alaska	78	90	61	56	96	108	54	(D)	(D)	-
Region 20 Hawaii	144	(D)	(D)	-	(D)	(D)	71	(D)	(D)	(D)

¹ Increases and decreases in depth are reported over a five year period.

² Data do not include flowing wells.

Table 10. Irrigation Pumps on Farms: 2018

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

Geographic area	Farms	Total pumps	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	160,690	600,522	84,167	26,468	12,400	7,598	5,688	6,829	4,049	8,713	2,474	2,304
Alabama	937	2,047	618	92	66	71	15	37	13	21	4	-
Alaska	245	1,333	191	26	24	3	-	1	-	-	-	-
Arizona	1,325	4,560	680	345	65	73	17	50	26	29	9	31
Arkansas	3,024	45,090	531	239	137	145	135	216	197	674	360	390
California	29,950	97,228	16,189	4,878	2,533	1,432	895	1,343	841	1,275	302	262
Colorado	4,759	14,906	2,375	1,095	283	231	142	264	105	188	27	49
Connecticut	612	1,332	378	68	115	3	29	-	2	17	-	-
Delaware	517	2,851	120	80	60	22	79	74	5	54	20	3
Florida	7,458	20,926	4,140	1,585	547	405	195	141	168	138	77	62
Georgia	3,793	13,449	1,861	453	534	267	202	150	41	318	29	38
Hawaii	318	503	238	45	5	2	23	3	2	-	-	-
Idaho	7,548	23,214	4,397	1,170	566	257	345	168	154	350	77	64
Illinois	1,720	5,467	804	352	167	74	72	119	32	79	14	7
Indiana	1,969	5,734	1,006	364	107	97	139	125	36	73	19	3
Iowa	958	2,301	605	48	108	78	40	54	6	15	2	2
Kansas	4,043	19,954	1,206	662	453	341	269	416	224	334	91	47
Kentucky	709	1,236	522	101	14	48	-	11	2	8	3	-
Louisiana	1,769	11,232	530	279	118	171	96	99	133	207	74	62
Maine	945	1,775	583	169	101	11	37	32	5	6	1	-
Maryland	930	2,511	549	120	79	54	11	25	22	65	5	-
Massachusetts	1,183	2,356	653	334	20	130	1	30	2	9	2	2
Michigan	3,724	11,923	1,915	673	235	297	171	171	57	114	46	45
Minnesota	2,286	6,250	1,203	517	181	49	112	76	22	99	15	12
Mississippi	1,505	15,811	353	187	135	102	75	144	46	175	152	136
Missouri	2,436	15,636	1,048	421	182	83	70	90	52	285	81	124
Montana	4,893	12,232	2,909	993	340	171	93	153	33	136	16	49
Nebraska	12,465	72,591	3,194	1,908	1,323	835	718	1,236	817	1,878	401	155
Nevada	831	2,563	414	134	93	60	57	11	14	38	2	8
New Hampshire	603	845	439	121	33	5	1	2	-	2	-	-
New Jersey	1,454	3,354	910	157	184	35	64	46	20	31	6	1
New Mexico	4,655	11,286	3,226	599	296	45	110	111	65	144	36	23
New York	1,743	2,874	1,126	365	128	85	14	7	6	12	-	-
North Carolina	2,315	3,982	1,672	316	109	100	24	28	55	7	1	3
North Dakota	622	2,684	284	39	82	22	63	44	10	69	5	4
Ohio	1,343	2,015	972	277	56	9	9	6	2	10	2	-
Oklahoma	1,588	6,530	873	175	109	106	45	76	34	104	27	39
Oregon	9,360	19,205	6,312	1,537	495	299	205	186	73	169	56	28
Pennsylvania	2,474	3,974	1,596	658	82	85	9	13	-	31	-	-
Rhode Island	203	333	123	54	10	9	6	1	-	-	-	-
South Carolina	1,347	3,909	826	198	73	51	27	65	27	64	11	5
South Dakota	910	2,713	321	243	127	72	58	30	22	31	5	1
Tennessee	1,030	2,215	648	180	70	1	56	36	13	22	3	1
Texas	10,007	75,258	4,174	1,329	652	435	495	533	410	1,006	391	582
Utah	3,835	6,738	2,741	627	99	141	4	157	39	23	2	2
Vermont	410	688	309	49	10	11	5	26	-	-	-	-
Virginia	1,268	2,020	943	159	91	1	50	5	11	7	1	-
Washington	7,745	21,095	4,583	1,201	667	345	253	171	123	294	71	37
West Virginia	326	460	241	73	5	2	-	-	-	5	-	-
Wisconsin	2,037	6,691	1,142	331	185	57	81	66	51	79	26	19
Wyoming	2,563	5,642	1,494	442	246	170	71	81	31	18	2	8
Water Resources Regions												
Region 01 New England	3,729	7,023	2,314	749	289	162	76	91	9	34	3	2
Region 02 Mid-Atlantic	6,807	15,352	3,993	1,376	520	276	181	169	59	197	32	4
Region 03 South Atlantic-Gulf	16,048	44,876	9,231	2,646	1,361	893	506	323	304	550	126	108
Region 04 Great Lakes	6,368	17,012	3,711	1,115	403	377	202	216	86	150	60	48
Region 05 Ohio	3,845	7,413	2,548	737	153	90	113	105	42	51	2	4
Region 06 Tennessee	929	1,403	712	121	46	17	21	5	1	3	3	-
Region 07 Upper Mississippi	6,291	18,597	3,378	1,176	513	239	294	264	79	253	62	33
Region 08 Lower Mississippi	6,402	77,796	1,227	646	398	453	306	529	385	1,196	619	643
Region 09 Souris-Red-Rainy	554	2,452	284	39	50	18	37	36	4	82	-	4
Region 10 Missouri	24,591	108,609	9,002	4,591	2,468	1,429	1,211	1,839	1,035	2,300	466	250
Region 11 Arkansas-White-Red	7,503	47,286	2,831	991	563	524	404	473	386	823	240	268
Region 12 Texas-Gulf	8,308	60,009	3,607	1,052	594	396	357	500	291	707	332	472
Region 13 Rio Grande	4,237	10,106	2,887	651	237	-	126	87	86	119	10	34
Region 14 Upper Colorado	2,817	5,097	1,805	591	198	75	30	71	31	14	-	2
Region 15 Lower Colorado	1,611	5,032	932	347	87	73	17	50	26	37	11	31
Region 16 Great Basin	3,768	8,473	2,416	584	189	233	67	148	32	78	4	17
Region 17 Pacific Northwest	25,994	65,304	16,407	4,069	1,721	906	809	569	350	837	204	122
Region 18 California	30,325	97,846	16,453	4,916	2,581	1,432	908	1,350	841	1,282	300	262
Region 19 Alaska	245	333	191	26	24	3	-	1	-	-	-	-
Region 20 Hawaii	318	503	238	45	5	2	23	3	2	-	-	-

Table 11. Irrigation Pumps Used on Farms for Wells Pumped: 2018 (continued)

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

Geographic area	Average operating pressure (see text) for -				Well pumps with average operating pressure of -						
	All pumped wells (psi)	Farms with 1 well (psi)	Farms with 2 wells (psi)	Farms with 3 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	39	47	45	45	143,349	246,989	52,440	10,833	6,333	124	
Alabama	44	39	49	57	233	518	239	(D)	-	-	
Alaska	48	52	51	32	9	178	58	8	17	100	
Arizona	28	39	35	29	2,403	1,195	235	48	6	132	
Arkansas	32	39	35	30	18,882	20,605	1,402	290	28	100	
California	41	44	42	45	18,251	36,712	8,687	1,974	1,175	136	
Colorado	40	43	41	47	1,622	7,385	962	54	105	117	
Connecticut	62	54	64	67	43	42	845	60	-	-	
Delaware	49	50	48	46	(D)	2,335	225	-	(D)	108	
Florida	41	44	42	45	3,963	12,016	2,163	54	326	128	
Georgia	49	44	47	45	988	7,450	1,925	440	291	191	
Hawaii	44	(D)	(D)	-	-	77	(D)	(D)	(D)	(D)	
Idaho	57	55	52	58	356	2,893	3,300	504	105	113	
Illinois	40	45	43	41	805	3,610	617	57	-	-	
Indiana	48	45	51	49	384	3,591	830	167	84	108	
Iowa	41	50	43	39	119	1,536	287	5	-	-	
Kansas	29	29	30	30	9,878	8,874	95	30	-	-	
Kentucky	51	67	42	(D)	39	344	78	6	82	100	
Louisiana	21	24	26	29	8,427	1,491	132	-	-	-	
Maine	45	37	43	63	251	459	128	60	48	108	
Maryland	43	48	45	44	263	1,523	303	47	-	-	
Massachusetts	51	56	47	58	48	446	232	58	6	125	
Michigan	59	56	66	56	1,087	4,503	2,554	779	(D)	112	
Minnesota	44	47	50	47	519	4,306	759	161	140	121	
Mississippi	28	34	31	33	8,571	5,154	803	96	-	-	
Missouri	34	51	46	34	5,537	8,046	766	204	24	127	
Montana	53	56	47	54	74	1,109	438	94	12	426	
Nebraska	42	46	44	43	9,103	49,463	7,974	309	81	100	
Nevada	44	49	42	43	244	1,548	328	54	15	135	
New Hampshire	58	58	59	-	18	189	416	11	-	-	
New Jersey	56	61	60	47	261	1,509	402	(D)	335	112	
New Mexico	31	37	36	24	4,941	4,667	359	-	10	100	
New York	55	51	55	61	134	792	608	187	84	105	
North Carolina	51	51	50	65	74	947	506	40	26	122	
North Dakota	45	(D)	(D)	43	31	1,730	396	-	-	-	
Ohio	55	55	48	53	68	504	543	79	9	118	
Oklahoma	37	34	30	31	2,054	3,360	57	151	-	-	
Oregon	60	59	57	58	804	3,334	2,781	1,507	527	111	
Pennsylvania	60	68	49	59	348	1,237	704	285	168	227	
Rhode Island	42	41	46	65	53	189	21	(D)	(D)	108	
South Carolina	49	45	50	55	171	2,191	358	573	3	105	
South Dakota	49	41	58	70	223	1,267	153	44	265	104	
Tennessee	42	57	40	40	256	1,431	59	-	53	132	
Texas	29	40	34	31	40,851	27,373	3,736	681	22	132	
Utah	53	58	65	37	167	1,669	367	12	351	117	
Vermont	50	45	52	60	-	229	143	(D)	(D)	124	
Virginia	47	44	57	37	(D)	634	403	-	(D)	(D)	
Washington	64	60	64	73	227	2,023	2,771	995	792	107	
West Virginia	46	46	40	(D)	(D)	170	(D)	-	(D)	110	
Wisconsin	54	57	53	67	163	3,143	1,248	441	171	110	
Wyoming	38	38	37	37	255	992	(D)	(D)	-	-	
Water Resources Regions											
Region 01 New England	53	48	52	63	435	1,420	1,738	231	59	109	
Region 02 Mid-Atlantic	52	58	50	49	1,018	7,424	2,226	594	710	137	
Region 03 South Atlantic-Gulf	44	45	43	46	5,540	23,408	5,241	1,109	646	156	
Region 04 Great Lakes	58	55	61	58	1,286	6,511	3,551	1,137	956	111	
Region 05 Ohio	49	54	50	45	632	3,025	1,142	121	145	109	
Region 06 Tennessee	46	43	53	58	94	482	139	25	-	-	
Region 07 Upper Mississippi	45	49	49	48	1,416	11,426	2,541	560	223	119	
Region 08 Lower Mississippi	30	39	32	31	38,984	30,658	2,519	458	93	119	
Region 09 Souris-Red-Rainy	43	(D)	(D)	35	185	1,556	408	(D)	-	-	
Region 10 Missouri	41	44	44	44	13,794	62,326	9,450	490	465	109	
Region 11 Arkansas-White-Red	29	34	32	30	23,540	20,134	754	(D)	(D)	(D)	
Region 12 Texas-Gulf	30	41	35	30	30,486	23,334	3,453	639	22	132	
Region 13 Rio Grande	34	37	37	30	3,241	4,809	482	(D)	(D)	100	
Region 14 Upper Colorado	39	35	49	-	115	345	(D)	-	-	-	
Region 15 Lower Colorado	30	46	35	37	2,556	1,401	256	52	60	157	
Region 16 Great Basin	48	53	58	42	384	3,148	837	66	312	111	
Region 17 Pacific Northwest	60	58	55	64	1,421	8,574	8,771	3,028	1,384	111	
Region 18 California	41	44	43	45	18,213	36,753	8,786	2,017	1,221	134	
Region 19 Alaska	48	52	51	32	9	178	58	8	17	100	
Region 20 Hawaii	44	(D)	(D)	-	-	77	(D)	(D)	(D)	(D)	

Table 12. Irrigation Pumps Used on Farms Other Than for Wells: 2018

[Excludes institutional, research, and experimental farms. 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						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	2,899	6,870	16	30	1,124	2,014	1,707	1,002	783	942	422	4,490	
Alabama	3	(D)	9	56	900	-	(D)	-	-	-	-	-	
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	
Arizona	58	102	21	21	878	32	36	(D)	-	(D)	-	-	
Arkansas	429	1,244	14	24	1,778	-	5	475	339	283	142	3,335	
California	771	2,401	19	29	1,129	747	591	287	306	339	131	5,139	
Colorado	43	77	15	28	612	24	53	-	-	-	-	-	
Connecticut	1	(D)	(D)	(D)	(D)	-	-	(D)	-	-	-	-	
Delaware	3	9	10	50	2,000	-	-	-	-	9	-	-	
Florida	8	24	12	30	6,183	-	-	(D)	(D)	-	(D)	(D)	
Georgia	23	69	40	50	600	-	69	-	-	-	-	-	
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	
Idaho	112	210	18	61	308	129	81	-	-	-	-	-	
Illinois	6	6	10	40	200	6	-	-	-	-	-	-	
Indiana	34	34	5	120	600	-	34	-	-	-	-	-	
Iowa	18	18	40	30	300	18	-	-	-	-	-	-	
Kansas	70	85	10	23	677	30	37	-	18	-	-	-	
Kentucky	1	(D)	(D)	(D)	(D)	(D)	-	-	-	-	-	-	
Louisiana	67	219	10	17	3,294	-	(D)	23	(D)	(D)	123	4,577	
Maine	-	-	-	-	-	-	-	-	-	-	-	-	
Maryland	1	(D)	(D)	(D)	(D)	-	-	-	-	(D)	-	-	
Massachusetts	79	(D)	6	(D)	(D)	-	36	-	-	104	(D)	(D)	
Michigan	42	64	9	53	619	(D)	(D)	-	-	-	-	-	
Minnesota	1	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-	
Mississippi	95	218	16	24	1,917	(D)	-	(D)	(D)	87	15	3,600	
Missouri	8	8	50	50	50	8	-	-	-	-	-	-	
Montana	62	126	44	32	694	92	-	-	-	34	-	-	
Nebraska	508	926	12	21	525	318	560	48	-	-	-	-	
Nevada	2	(D)	(D)	(D)	(D)	(D)	-	-	-	-	-	-	
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	
New Jersey	2	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-	
New Mexico	-	-	-	-	-	-	-	-	-	-	-	-	
New York	25	28	7	37	49	28	-	-	-	-	-	-	
North Carolina	9	12	20	55	905	-	12	-	-	-	-	-	
North Dakota	-	-	-	-	-	-	-	-	-	-	-	-	
Ohio	1	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-	
Oklahoma	-	-	-	-	-	-	-	-	-	-	-	-	
Oregon	173	325	18	48	414	187	53	85	-	-	-	-	
Pennsylvania	22	22	10	30	3	22	-	-	-	-	-	-	
Rhode Island	1	(D)	(D)	(D)	(D)	-	-	-	-	(D)	-	-	
South Carolina	3	6	2	100	500	-	6	-	-	-	-	-	
South Dakota	23	23	4	40	750	-	23	-	-	-	-	-	
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	
Texas	75	154	17	32	581	80	19	55	-	-	-	-	
Utah	41	130	5	42	117	130	-	-	-	-	-	-	
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	
Virginia	2	(D)	(D)	(D)	(D)	(D)	-	-	-	-	-	-	
Washington	64	116	11	32	61	116	-	-	-	-	-	-	
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	
Wisconsin	-	-	-	-	-	-	-	-	-	-	-	-	
Wyoming	13	13	22	22	687	(D)	-	-	-	(D)	-	-	
Water Resources Regions													
Region 01 New England	81	146	6	37	1,642	-	36	(D)	-	(D)	(D)	(D)	
Region 02 Mid-Atlantic	55	78	9	40	399	(D)	(D)	-	-	11	-	-	
Region 03 South Atlantic-Gulf	60	130	28	48	1,773	4	90	5	16	(D)	(D)	(D)	
Region 04 Great Lakes	59	81	8	67	615	(D)	(D)	-	-	-	-	-	
Region 05 Ohio	18	18	6	115	608	-	18	-	-	-	-	-	
Region 06 Tennessee	2	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-	
Region 07 Upper Mississippi	15	(D)	25	60	400	(D)	(D)	-	-	-	-	-	
Region 08 Lower Mississippi	526	1,551	14	23	1,946	(D)	(D)	485	433	362	256	3,822	
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-	-	-	-	
Region 10 Missouri	633	1,120	16	23	577	392	643	48	-	37	-	-	
Region 11 Arkansas-White-Red	171	312	14	22	1,412	82	41	72	28	65	24	4,667	
Region 12 Texas-Gulf	9	28	9	70	300	28	-	-	-	-	-	-	
Region 13 Rio Grande	2	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-	
Region 14 Upper Colorado	28	36	5	37	168	36	-	-	-	-	-	-	
Region 15 Lower Colorado	58	102	21	21	878	32	36	(D)	-	(D)	-	-	
Region 16 Great Basin	39	136	7	40	125	136	-	-	-	-	-	-	
Region 17 Pacific Northwest	365	690	16	49	291	478	134	78	-	-	-	-	
Region 18 California	778	2,408	19	29	1,129	747	591	294	306	339	131	5,139	
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	

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Table 12. Irrigation Pumps Used on Farms Other Than for Wells: 2018 (continued)

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

Geographic area	Pumps to discharge water from ponds, lakes, reservoirs, rivers, canals, etc.												
	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	43,004	95,003	23	53	1,105	40,124	25,491	12,428	5,781	4,268	6,911	6,910	
Alabama	362	973	17	45	813	257	572	59	(D)	(D)	52	4,417	
Alaska	36	44	27	62	360	(D)	(D)	-	(D)	-	-	-	
Arizona	58	135	28	53	4,320	6	22	(D)	34	(D)	56	8,571	
Arkansas	792	2,360	19	25	1,822	97	283	438	611	583	348	3,782	
California	5,435	12,108	22	50	1,286	3,691	2,390	2,494	1,439	1,365	729	6,690	
Colorado	1,387	2,863	17	48	692	791	1,523	232	317	-	-	-	
Connecticut	228	333	17	56	231	267	(D)	-	-	(D)	-	-	
Delaware	28	93	6	57	716	15	78	-	-	-	-	-	
Florida	674	2,045	9	51	5,755	454	189	300	178	214	710	14,700	
Georgia	1,008	2,236	28	79	616	756	880	571	(D)	-	(D)	3,000	
Hawaii	124	180	12	47	961	73	21	-	86	-	-	-	
Idaho	4,008	12,010	27	56	1,106	4,025	4,318	1,577	1,003	434	653	7,838	
Illinois	222	359	14	46	875	139	124	39	24	19	14	9,000	
Indiana	355	608	11	45	1,125	173	336	(D)	17	(D)	72	5,000	
Iowa	167	303	15	40	158	267	36	-	-	-	-	-	
Kansas	512	878	15	43	907	118	601	114	30	-	15	12,000	
Kentucky	455	674	21	33	121	617	39	18	-	-	-	-	
Louisiana	399	911	14	25	2,482	184	55	59	42	233	338	4,537	
Maine	323	624	41	55	403	456	123	(D)	(D)	-	(D)	(D)	
Maryland	220	372	22	48	466	220	109	(D)	-	-	(D)	(D)	
Massachusetts	696	1,297	12	54	1,522	(D)	273	222	(D)	(D)	(D)	6,129	
Michigan	917	2,035	12	72	534	550	1,375	65	-	45	-	-	
Minnesota	257	317	12	46	605	205	38	23	-	51	-	-	
Mississippi	268	819	14	36	1,106	210	70	332	56	85	66	3,306	
Missouri	584	941	27	71	645	498	342	63	8	-	30	7,200	
Montana	3,236	8,928	23	47	1,231	3,248	2,107	1,314	604	288	1,367	4,167	
Nebraska	1,559	3,315	14	34	597	1,103	2,036	176	-	-	-	-	
Nevada	77	165	32	49	2,980	(D)	(D)	(D)	-	-	67	(D)	
New Hampshire	154	170	31	57	100	(D)	(D)	-	(D)	-	-	-	
New Jersey	282	611	9	58	684	269	172	123	-	47	-	-	
New Mexico	470	993	9	36	459	645	(D)	205	(D)	-	(D)	(D)	
New York	605	958	14	64	282	782	91	54	(D)	-	(D)	(D)	
North Carolina	1,265	2,166	27	58	852	1,068	281	568	32	-	217	4,066	
North Dakota	222	411	20	50	1,419	9	200	63	45	32	62	3,500	
Ohio	500	687	14	47	712	488	94	49	-	18	38	7,958	
Oklahoma	309	872	15	48	524	325	380	145	(D)	(D)	-	-	
Oregon	4,478	8,108	24	66	940	4,758	2,066	391	161	218	514	7,972	
Pennsylvania	669	1,076	39	52	196	881	154	41	-	-	-	-	
Rhode Island	31	47	12	62	834	40	-	(D)	-	-	(D)	(D)	
South Carolina	304	601	48	65	955	207	284	50	-	-	60	5,400	
South Dakota	176	520	75	55	1,628	154	165	79	-	70	52	8,000	
Tennessee	313	405	26	42	140	398	-	7	-	-	-	-	
Texas	1,082	1,785	23	57	1,292	1,176	227	146	(D)	(D)	148	11,105	
Utah	1,866	2,531	25	42	478	1,866	129	76	417	22	21	3,000	
Vermont	126	217	20	48	82	211	6	-	-	-	-	-	
Virginia	488	724	36	69	331	471	234	(D)	-	(D)	-	-	
Washington	3,008	9,464	23	64	1,262	4,552	1,965	1,468	314	138	1,027	6,989	
West Virginia	130	186	12	33	194	186	-	-	-	-	-	-	
Wisconsin	417	1,411	10	60	592	829	419	60	-	57	46	3,065	
Wyoming	1,722	3,134	35	48	535	1,753	514	706	131	-	30	4,050	
Water Resources Regions													
Region 01 New England	1,471	2,552	21	55	928	1,399	456	249	27	230	191	6,074	
Region 02 Mid-Atlantic	1,651	2,991	25	56	399	1,922	740	243	20	55	11	4,279	
Region 03 South Atlantic-Gulf	3,663	8,191	23	62	1,995	2,917	2,090	1,674	250	220	1,040	11,390	
Region 04 Great Lakes	1,681	3,273	13	65	522	1,440	1,645	102	(D)	(D)	(D)	7,978	
Region 05 Ohio	1,518	2,089	19	43	395	1,641	289	73	17	18	51	6,141	
Region 06 Tennessee	401	596	27	39	496	374	168	(D)	(D)	(D)	22	4,409	
Region 07 Upper Mississippi	912	2,234	12	63	615	1,236	724	89	24	79	82	3,915	
Region 08 Lower Mississippi	1,033	3,067	17	24	2,038	188	221	601	621	758	678	4,039	
Region 09 Souris-Red-Rainy	223	276	17	36	1,146	(D)	(D)	36	-	51	(D)	3,500	
Region 10 Missouri	6,913	16,268	23	45	995	5,600	6,061	2,192	599	366	1,450	4,362	
Region 11 Arkansas-White-Red	948	2,008	16	41	1,046	479	749	316	223	145	96	5,521	
Region 12 Texas-Gulf	1,034	1,599	23	60	1,368	1,063	202	118	(D)	(D)	148	11,105	
Region 13 Rio Grande	375	1,104	10	35	579	544	272	254	(D)	-	(D)	(D)	
Region 14 Upper Colorado	1,513	2,636	20	43	529	1,532	477	227	391	-	9	(D)	
Region 15 Lower Colorado	58	135	28	53	4,320	6	22	(D)	34	(D)	56	8,571	
Region 16 Great Basin	1,474	2,341	31	44	754	1,338	381	138	347	96	41	8,854	
Region 17 Pacific Northwest	12,372	30,958	25	61	1,081	14,375	8,463	3,457	1,611	814	2,238	7,408	
Region 18 California	5,604	12,461	22	50	1,266	3,854	2,455	2,626	1,439	1,358	729	6,690	
Region 19 Alaska	36	44	27	62	360	(D)	(D)	-	-	-	-	-	
Region 20 Hawaii	124	180	12	47	961	73	21	-	86	-	-	-	

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Table 12. Irrigation Pumps Used on Farms Other Than for Wells: 2018 (continued)

[Excludes institutional, research, and experimental farms. 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	16,339	38,705	25	48	1,015	15,985	10,486	3,939	3,911	2,506	1,878	6,909
Alabama	46	52	13	28	196	42	10	-	-	-	-	-
Alaska	13	19	15	44	104	(D)	-	(D)	-	-	-	-
Arizona	64	436	7	53	1,309	145	-	90	94	(D)	(D)	(D)
Arkansas	95	279	12	25	1,229	37	56	89	31	47	19	3,000
California	5,639	15,920	24	44	1,133	5,368	3,315	1,639	2,844	1,912	842	4,976
Colorado	1,018	1,838	15	40	592	965	778	24	-	-	71	4,000
Connecticut	7	7	(D)	88	457	3	4	-	-	-	-	-
Delaware	1	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-
Florida	82	335	9	20	2,795	177	-	92	-	3	63	13,171
Georgia	19	50	14	60	690	(D)	(D)	30	-	-	-	-
Hawaii	120	239	11	42	520	86	153	-	-	-	-	-
Idaho	1,720	3,836	21	52	1,214	1,708	1,686	130	62	108	142	19,818
Illinois	9	13	15	54	36	13	-	-	-	-	-	-
Indiana	36	36	16	21	158	(D)	-	(D)	-	-	-	-
Iowa	17	33	10	31	238	33	-	-	-	-	-	-
Kansas	73	114	33	36	530	74	25	12	3	-	-	-
Kentucky	3	(D)	(D)	29	(D)	(D)	-	(D)	-	-	-	-
Louisiana	24	52	8	14	3,250	-	-	(D)	(D)	(D)	(D)	4,000
Maine	92	205	11	52	170	178	27	-	-	-	-	-
Maryland	1	(D)	(D)	(D)	(D)	(D)	-	-	-	-	-	-
Massachusetts	101	127	24	35	3,274	56	-	47	-	-	24	15,000
Michigan	90	134	6	73	308	93	41	-	-	-	-	-
Minnesota	28	38	7	74	366	12	26	-	-	-	-	-
Mississippi	67	150	21	32	1,610	37	-	8	-	105	-	-
Missouri	20	110	85	46	819	10	100	-	-	-	-	-
Montana	725	1,451	15	45	997	583	396	226	62	48	136	4,412
Nebraska	425	1,420	12	38	727	214	1,059	137	-	10	-	-
Nevada	75	191	5	37	1,615	14	-	151	-	11	15	9,000
New Hampshire	35	41	(D)	69	150	41	-	-	-	-	-	-
New Jersey	16	33	14	22	632	(D)	(D)	-	-	-	-	-
New Mexico	234	316	19	36	332	265	41	-	-	10	-	-
New York	83	83	16	37	158	66	17	-	-	-	-	-
North Carolina	106	211	41	131	650	82	-	129	-	-	-	-
North Dakota	27	116	20	32	119	116	-	-	-	-	(D)	(D)
Ohio	91	124	9	88	928	60	(D)	-	-	-	(D)	(D)
Oklahoma	34	36	8	56	574	26	(D)	3	-	-	(D)	(D)
Oregon	1,137	1,819	40	64	895	1,139	338	168	-	113	61	12,820
Pennsylvania	113	134	28	32	122	134	-	-	-	-	-	-
Rhode Island	5	5	10	140	1,400	-	-	5	-	-	-	-
South Carolina	3	6	10	(D)	500	-	6	-	-	-	-	-
South Dakota	69	218	16	38	1,470	106	87	-	-	-	25	8,300
Tennessee	8	11	39	34	24	11	-	-	-	-	-	-
Texas	393	656	15	42	456	489	104	35	-	22	6	4,000
Utah	947	1,511	23	52	408	1,116	316	16	(D)	(D)	(D)	(D)
Vermont	60	86	38	30	202	61	25	-	-	-	-	-
Virginia	79	103	30	73	527	71	-	32	-	-	-	-
Washington	1,701	4,707	45	64	1,009	1,775	1,272	570	768	-	322	5,106
West Virginia	52	72	54	61	12	72	-	-	-	-	-	-
Wisconsin	38	114	7	40	3,344	57	-	-	-	-	57	6,667
Wyoming	498	1,204	19	34	902	371	509	290	-	12	22	15,850
Water Resources Regions												
Region 01 New England	271	442	19	48	1,066	335	31	52	-	-	24	15,000
Region 02 Mid-Atlantic	228	311	38	47	325	232	47	32	-	-	-	-
Region 03 South Atlantic-Gulf	210	611	20	64	1,845	279	9	251	-	9	63	13,171
Region 04 Great Lakes	167	217	8	63	599	(D)	76	-	-	-	(D)	(D)
Region 05 Ohio	206	241	11	59	249	186	46	9	-	-	-	-
Region 06 Tennessee	59	65	22	17	146	55	10	-	-	-	-	-
Region 07 Upper Mississippi	83	173	7	48	2,294	90	26	-	-	-	57	6,667
Region 08 Lower Mississippi	139	466	23	32	1,391	(D)	148	(D)	34	(D)	(D)	3,350
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri	1,874	4,696	18	39	841	1,367	2,474	515	62	70	208	4,786
Region 11 Arkansas-White-Red	208	309	12	29	1,044	151	69	9	3	44	33	3,942
Region 12 Texas-Gulf	280	448	18	44	451	303	104	35	-	-	6	4,000
Region 13 Rio Grande	285	405	20	35	421	300	71	24	-	10	-	-
Region 14 Upper Colorado	1,128	1,879	20	46	576	1,430	259	104	40	-	46	9,667
Region 15 Lower Colorado	69	470	7	51	1,340	145	-	120	94	(D)	(D)	(D)
Region 16 Great Basin	631	1,249	18	43	576	820	232	148	4	23	22	7,918
Region 17 Pacific Northwest	4,656	10,478	34	60	1,058	4,630	3,416	865	830	212	525	9,982
Region 18 California	5,712	15,987	24	44	1,130	5,392	3,315	1,677	2,844	1,921	838	4,976
Region 19 Alaska	13	19	15	44	104	(D)	-	(D)	-	-	-	-
Region 20 Hawaii	120	239	11	42	520	86	153	-	-	-	-	-

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Table 12. Irrigation Pumps Used on Farms Other Than for Wells: 2018 (continued)

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

Geographic area	Pumps by average discharge operating pressure (see text)											
	From tailwater pits				From ponds, lakes, reservoirs rivers, canals, etc.				Relifting or boosting water within systems			
	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	1,271	2,505	2,424	670	3,961	10,092	44,658	36,292	1,293	3,738	23,246	10,428
Alabama	-	-	(D)	(D)	152	15	461	345	25	-	16	11
Alaska	-	-	-	-	(D)	-	(D)	20	(D)	(D)	(D)	(D)
Arizona	38	28	36	-	(D)	(D)	24	80	(D)	(D)	(D)	241
Arkansas	516	372	305	51	479	901	819	161	53	43	183	-
California	374	899	884	244	422	1,534	6,689	3,463	497	1,749	10,782	2,892
Colorado	-	32	45	-	-	204	1,962	697	10	258	1,307	263
Connecticut	-	-	(D)	-	-	51	158	124	-	-	(D)	(D)
Delaware	-	-	9	-	-	(D)	(D)	74	-	-	-	(D)
Florida	(D)	(D)	-	-	199	221	1,363	262	254	-	54	27
Georgia	-	-	69	-	11	46	746	1,433	-	-	36	14
Hawaii	-	-	-	-	-	(D)	(D)	-	-	-	233	6
Idaho	-	-	83	127	156	190	5,536	6,128	60	94	1,949	1,733
Illinois	-	-	6	-	5	64	163	127	-	-	8	5
Indiana	-	-	-	34	5	61	403	139	-	(D)	-	(D)
Iowa	-	-	18	-	-	188	41	74	-	18	(D)	(D)
Kansas	27	21	37	-	10	112	558	198	-	65	26	23
Kentucky	-	-	(D)	-	90	204	293	87	(D)	(D)	(D)	-
Louisiana	(D)	198	(D)	-	239	391	190	91	26	(D)	(D)	-
Maine	-	-	-	-	-	136	228	260	-	3	108	94
Maryland	-	(D)	-	-	-	114	127	131	-	-	-	(D)
Massachusetts	-	66	(D)	22	56	112	778	351	28	-	99	-
Michigan	-	-	42	22	40	55	749	1,191	-	-	15	119
Minnesota	-	-	-	(D)	18	19	242	38	-	-	12	26
Mississippi	28	166	6	18	41	292	370	116	(D)	(D)	136	-
Missouri	-	-	8	-	40	145	483	273	(D)	(D)	100	-
Montana	-	80	46	-	213	1,767	4,308	2,640	-	274	721	456
Nebraska	163	572	191	(D)	525	573	1,909	308	15	61	1,160	184
Nevada	-	-	-	-	5	15	111	34	-	71	117	3
New Hampshire	-	-	-	-	-	-	51	119	-	-	-	41
New Jersey	-	-	(D)	-	-	44	305	262	(D)	(D)	-	-
New Mexico	-	-	-	-	68	271	654	-	47	-	269	-
New York	-	22	-	6	113	107	237	501	-	16	45	22
North Carolina	-	-	12	-	44	393	590	1,139	-	26	-	185
North Dakota	-	-	-	-	67	31	186	127	-	-	108	8
Ohio	-	-	(D)	-	23	176	249	239	-	-	10	114
Oklahoma	-	-	-	-	26	242	275	329	-	-	9	27
Oregon	54	35	156	80	140	183	3,372	4,413	10	96	892	821
Pennsylvania	-	-	22	-	52	218	421	385	-	67	42	25
Rhode Island	-	-	(D)	-	-	-	23	24	-	-	-	5
South Carolina	-	-	-	6	-	46	258	297	-	-	6	-
South Dakota	-	-	23	-	70	-	237	213	-	-	(D)	(D)
Tennessee	-	-	-	-	42	-	316	47	-	-	11	-
Texas	42	-	84	28	100	352	1,029	304	3	104	472	77
Utah	-	-	118	12	-	256	2,024	251	120	31	894	466
Vermont	-	-	-	-	25	-	165	27	32	-	(D)	(D)
Virginia	-	-	(D)	(D)	56	33	117	518	23	32	-	48
Washington	7	-	109	-	27	61	2,864	6,512	56	276	2,018	2,357
West Virginia	-	-	-	-	50	-	136	-	-	3	-	69
Wisconsin	-	-	-	-	50	39	383	939	-	-	114	-
Wyoming	-	(D)	(D)	-	279	213	1,841	801	20	333	802	49
Water Resources Regions												
Region 01 New England	-	66	58	22	56	299	1,308	889	33	3	262	144
Region 02 Mid-Atlantic	-	24	40	14	163	383	1,067	1,378	23	122	69	97
Region 03 South Atlantic-Gulf	13	(D)	103	(D)	389	702	3,478	3,622	254	6	114	237
Region 04 Great Lakes	-	-	42	39	148	233	1,276	1,616	27	-	25	165
Region 05 Ohio	-	-	(D)	(D)	141	409	1,018	521	-	62	38	141
Region 06 Tennessee	-	-	-	(D)	102	44	331	119	25	26	14	-
Region 07 Upper Mississippi	-	-	(D)	(D)	24	305	813	1,092	-	(D)	139	(D)
Region 08 Lower Mississippi	491	706	291	63	627	1,363	902	175	46	53	367	-
Region 09 Souris-Red-Rainy	-	-	-	-	(D)	(D)	166	23	-	-	-	-
Region 10 Missouri	163	662	295	-	1,044	2,446	8,663	4,115	49	698	3,265	684
Region 11 Arkansas-White-Red	131	51	130	-	156	574	753	525	43	74	165	27
Region 12 Texas-Gulf	-	-	-	28	100	345	853	301	3	82	286	77
Region 13 Rio Grande	-	(D)	-	-	35	265	804	-	47	30	328	-
Region 14 Upper Colorado	-	(D)	-	(D)	76	274	1,871	415	-	249	1,225	405
Region 15 Lower Colorado	38	28	36	-	(D)	(D)	24	80	-	(D)	(D)	241
Region 16 Great Basin	-	-	136	-	5	164	1,893	279	120	94	848	187
Region 17 Pacific Northwest	61	32	394	203	394	686	12,416	17,462	126	466	4,841	5,045
Region 18 California	374	902	884	248	422	1,557	6,822	3,660	497	1,719	10,831	2,940
Region 19 Alaska	-	-	-	-	(D)	-	(D)	20	-	(D)	(D)	(D)
Region 20 Hawaii	-	-	-	-	-	(D)	-	-	-	-	233	6

Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018

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

Geographic area	Total energy expenses for pumping ¹						Expenses (\$1,000)
	Farms	Pumps powered	Acres in the open by water source		Square feet under protection by water source		
			Water from wells	Surface water	Water from wells	Surface water	
United States	158,236	595,775	36,902,198	13,233,255	993,579,006	302,858,793	2,420,638
Alabama	929	2,014	90,057	82,589	9,064,080	5,144,224	4,656
Alaska	242	327	1,370	125	1,808,434	154,526	80
Arizona	1,259	4,414	337,873	105,373	9,836,360	(D)	42,216
Arkansas	3,024	45,090	4,047,330	577,775	1,573,874	1,061,540	128,626
California	28,767	94,698	4,461,363	3,512,066	193,255,732	84,361,298	769,947
Colorado	4,722	14,831	1,154,063	379,151	7,448,640	828,212	86,299
Connecticut	556	1,164	2,559	2,354	25,738,372	813,160	1,113
Delaware	517	2,847	189,403	19,962	2,293,800	-	9,773
Florida	7,431	20,881	737,191	588,274	253,225,684	33,666,658	47,447
Georgia	3,793	13,449	1,006,468	173,360	14,146,250	3,377,970	46,641
Hawaii	317	502	2,297	15,066	824,960	2,885,772	1,120
Idaho	7,496	23,159	1,044,768	1,434,002	3,003,332	158,600	145,734
Illinois	1,715	5,462	545,504	21,749	43,928,430	890,000	12,309
Indiana	1,951	5,716	528,697	54,963	5,753,528	2,141,188	9,621
Iowa	940	2,229	158,281	9,936	2,415,586	3,378,890	2,244
Kansas	4,043	19,940	2,341,715	109,987	4,087,616	249,250	109,308
Kentucky	695	1,220	33,749	24,985	1,494,908	3,983,194	861
Louisiana	1,769	11,232	1,006,581	116,956	5,651,525	6,649,912	30,702
Maine	913	1,743	12,250	22,580	4,345,739	684,165	1,067
Maryland	889	2,463	109,458	23,856	9,362,253	906,340	3,922
Massachusetts	1,183	2,356	5,053	16,137	4,378,296	118,000	1,789
Michigan	3,703	11,902	713,213	151,844	59,458,501	18,327,900	21,054
Minnesota	2,286	6,250	529,760	23,967	14,235,622	2,677,466	11,659
Mississippi	1,505	15,811	1,653,354	115,290	3,336,444	195,300	42,647
Missouri	2,384	15,540	1,385,498	98,458	5,782,916	1,601,240	29,134
Montana	4,888	12,220	60,103	1,110,353	1,494,808	100,980	26,556
Nebraska	12,465	72,591	7,277,592	634,495	2,457,968	-	234,140
Nevada	824	2,556	308,365	59,734	213,380	50,500	28,230
New Hampshire	599	840	1,175	1,721	6,325,538	744,500	199
New Jersey	1,431	3,331	66,628	22,276	43,424,676	4,692,558	5,612
New Mexico	4,415	10,973	400,765	130,683	1,945,008	1,329,045	35,443
New York	1,719	2,850	19,064	23,039	32,151,291	5,644,700	1,836
North Carolina	2,288	3,928	23,956	114,895	10,301,998	17,535,594	4,603
North Dakota	622	2,684	189,046	77,691	240,712	(D)	6,381
Ohio	1,298	1,932	17,437	16,779	15,969,059	23,180,842	922
Oklahoma	1,588	6,530	511,198	68,867	1,197,066	542,621	21,496
Oregon	9,301	19,133	433,629	592,328	37,770,843	18,624,450	54,249
Pennsylvania	2,453	3,932	29,831	9,180	54,606,820	7,586,125	1,459
Rhode Island	194	315	1,992	1,846	1,468,969	237,000	124
South Carolina	1,347	3,909	220,332	42,232	4,459,916	1,253,000	10,553
South Dakota	908	2,711	209,540	130,467	1,161,600	31,824	7,430
Tennessee	988	2,173	179,228	11,652	2,702,132	3,929,200	2,531
Texas	9,945	75,177	3,451,914	322,658	41,975,732	23,868,044	263,656
Utah	3,808	6,700	238,814	413,818	3,284,912	910,960	28,451
Vermont	410	688	911	949	2,122,254	157,752	164
Virginia	1,268	2,020	10,927	39,105	12,547,674	15,113,972	1,129
Washington	7,648	20,880	529,088	1,125,751	15,536,597	1,150,764	92,825
West Virginia	283	417	516	5,543	633,640	174,872	101
Wisconsin	1,980	6,634	478,334	41,061	12,914,397	666,600	18,145
Wyoming	2,537	5,411	143,958	555,327	221,130	71,400	14,436
Water Resources Regions							
Region 01 New England	3,628	6,800	23,702	44,948	43,317,334	2,656,825	4,376
Region 02 Mid-Atlantic	6,695	15,229	414,980	122,400	146,130,013	28,431,258	22,758
Region 03 South Atlantic-Gulf	15,986	44,769	2,061,814	1,018,330	293,977,702	57,973,466	114,140
Region 04 Great Lakes	6,288	16,909	962,382	198,520	77,631,329	40,425,146	26,749
Region 05 Ohio	3,769	7,299	373,754	66,894	19,903,049	13,801,383	8,838
Region 06 Tennessee	887	1,336	31,400	38,959	5,447,518	6,775,152	1,739
Region 07 Upper Mississippi	6,213	18,457	1,542,794	107,026	66,405,104	5,945,812	41,174
Region 08 Lower Mississippi	6,402	77,796	7,461,692	685,908	7,508,489	7,020,552	201,381
Region 09 Souris-Red-Rainy	554	2,452	176,639	29,730	152,800	(D)	4,230
Region 10 Missouri	24,499	108,264	9,353,331	2,446,919	16,495,114	3,339,481	365,704
Region 11 Arkansas-White-Red	7,461	47,206	4,523,811	309,472	3,565,652	1,581,721	257,295
Region 12 Texas-Gulf	8,246	59,928	2,162,528	219,665	36,729,816	23,868,044	158,928
Region 13 Rio Grande	4,064	9,926	388,509	171,931	9,789,468	91,000	35,632
Region 14 Upper Colorado	2,783	4,995	20,312	371,430	195,040	1,629,705	14,026
Region 15 Lower Colorado	1,545	4,886	379,086	123,178	9,971,360	(D)	44,786
Region 16 Great Basin	3,734	8,428	608,045	401,886	3,498,292	899,060	54,854
Region 17 Pacific Northwest	25,781	64,956	1,936,856	3,325,224	57,106,800	18,112,514	291,190
Region 18 California	29,142	95,310	4,476,896	3,535,644	193,120,732	86,255,298	771,639
Region 19 Alaska	242	327	1,370	125	1,808,434	154,526	80
Region 20 Hawaii	317	502	2,297	15,066	824,960	2,885,772	1,120

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	Total energy expenses for pumping ¹ - con.					
	Expenses per irrigated acre for operations with only acres in the open (dollars)		Expenses per irrigated acre for operations with only horticulture in the open (dollars)		Expenses per 10,000 sq ft. for operations with only irrigated horticulture under protection (dollars)	
	Water from wells only	Surface water only	Water from wells only	Surface water only	Water from wells only	Surface water only
United States	48.17	36.64	79.47	68.10	163.75	134.04
Alabama	28.44	23.38	18.81	71.18	59.74	65.37
Alaska	37.68	7.04	65.33	22.00	61.35	266.21
Arizona	115.37	30.48	75.47	95.51	(D)	250.00
Arkansas	26.84	19.27	51.45	29.88	102.33	27.55
California	133.67	54.62	284.96	227.63	226.22	293.15
Colorado	64.79	39.38	91.02	141.46	44.04	-
Connecticut	39.09	22.37	(D)	(D)	70.94	70.00
Delaware	22.30	-	4.90	-	30.04	-
Florida	48.32	13.40	110.30	59.65	376.19	49.19
Georgia	38.97	33.74	70.75	9.99	66.93	-
Hawaii	37.70	65.43	500.00	114.16	(D)	207.21
Idaho	62.59	44.68	29.09	46.78	277.14	5.22
Illinois	19.63	17.04	26.78	65.62	188.03	194.00
Indiana	15.80	16.56	30.37	58.10	49.02	(D)
Iowa	12.07	16.88	26.50	15.00	210.31	(D)
Kansas	45.57	39.82	48.13	107.02	5.77	7.50
Kentucky	15.23	8.50	110.00	77.20	93.80	292.43
Louisiana	28.33	25.82	62.17	13.07	596.33	128.21
Maine	34.11	31.59	5.97	13.97	108.30	-
Maryland	26.17	24.15	21.82	25.61	133.06	-
Massachusetts	41.18	100.19	64.27	49.33	3.70	312.50
Michigan	22.17	31.39	28.26	46.47	42.11	64.58
Minnesota	20.79	12.75	32.86	(D)	53.37	11.40
Mississippi	22.95	16.90	(D)	14.76	194.91	-
Missouri	20.16	15.85	33.93	48.19	367.53	(D)
Montana	25.89	22.02	51.18	(D)	246.79	(D)
Nebraska	30.61	21.07	58.59	-	304.03	-
Nevada	85.88	57.91	176.58	-	197.49	320.00
New Hampshire	39.78	41.99	50.00	38.00	324.00	1.67
New Jersey	59.28	58.57	80.08	57.51	86.59	16.03
New Mexico	80.69	45.09	27.46	-	702.90	-
New York	50.32	27.55	86.99	55.47	248.16	497.41
North Carolina	32.90	28.70	75.55	59.26	276.96	86.20
North Dakota	21.50	13.91	(D)	-	(D)	-
Ohio	21.05	21.82	41.17	53.29	85.73	22.15
Oklahoma	42.31	18.21	46.41	13.84	796.97	534.76
Oregon	55.07	45.23	88.55	80.40	93.04	202.48
Pennsylvania	21.57	34.62	31.03	86.36	35.89	283.78
Rhode Island	25.92	16.72	(D)	(D)	150.84	-
South Carolina	44.07	48.92	41.68	69.47	415.58	-
South Dakota	17.84	27.42	36.96	114.68	-	(D)
Tennessee	10.33	27.64	12.75	42.98	127.62	541.60
Texas	72.77	44.69	57.22	59.80	96.78	173.86
Utah	68.36	27.85	(D)	65.45	(D)	206.60
Vermont	24.64	45.97	68.50	222.00	580.58	-
Virginia	11.48	16.50	36.43	16.58	112.80	63.82
Washington	63.75	45.48	32.04	64.08	213.50	190.39
West Virginia	187.64	45.94	-	75.77	862.93	169.20
Wisconsin	28.61	120.26	26.62	29.31	72.16	-
Wyoming	34.74	15.72	(D)	-	213.26	-
Water Resources Regions						
Region 01 New England	37.51	62.91	42.51	43.29	95.85	64.96
Region 02 Mid-Atlantic	29.83	31.87	60.72	50.73	60.02	139.40
Region 03 South Atlantic-Gulf	42.94	19.04	91.11	52.16	328.31	61.95
Region 04 Great Lakes	20.85	26.36	28.87	38.86	66.06	63.13
Region 05 Ohio	18.28	20.07	36.93	58.66	136.18	158.00
Region 06 Tennessee	24.41	23.32	24.45	22.45	293.12	165.52
Region 07 Upper Mississippi	22.08	57.93	27.60	63.94	139.12	27.44
Region 08 Lower Mississippi	23.68	22.04	44.28	(D)	379.73	133.47
Region 09 Souris-Red-Rainy	20.51	13.14	141.26	(D)	(D)	(D)
Region 10 Missouri	33.54	21.90	81.31	111.24	128.50	60.26
Region 11 Arkansas-White-Red	55.23	36.04	48.84	20.05	333.39	94.00
Region 12 Texas-Gulf	71.60	34.39	53.32	61.77	120.16	173.86
Region 13 Rio Grande	80.27	39.63	47.77	-	(D)	-
Region 14 Upper Colorado	65.50	40.25	155.55	92.66	128.63	1,266.67
Region 15 Lower Colorado	108.02	26.24	84.75	95.51	(D)	250.00
Region 16 Great Basin	76.59	19.78	155.06	38.08	263.14	(D)
Region 17 Pacific Northwest	61.01	43.47	60.81	70.42	164.16	79.23
Region 18 California	133.09	54.91	283.64	227.63	226.45	293.99
Region 19 Alaska	37.68	7.04	65.33	22.00	61.35	266.21
Region 20 Hawaii	37.70	65.43	500.00	114.16	(D)	207.21

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	Total energy expenses for pumping ¹ - con.						
	Farms with energy expenses of -						
	\$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	63,381	18,491	22,878	15,891	13,857	13,499	10,540
Alabama	547	91	95	93	55	29	19
Alaska	227	8	2	4	1	-	-
Arizona	302	249	226	142	80	96	180
Arkansas	385	219	295	239	369	736	781
California	8,147	3,309	4,789	3,559	3,423	2,827	2,918
Colorado	1,648	554	492	687	470	416	463
Connecticut	423	54	31	1	30	16	1
Delaware	111	71	142	73	52	46	22
Florida	4,308	756	981	560	384	249	193
Georgia	1,663	412	517	155	442	389	215
Hawaii	226	51	5	6	18	3	8
Idaho	2,541	1,044	1,330	740	649	575	617
Illinois	586	229	299	263	202	102	34
Indiana	712	225	542	274	67	101	30
Iowa	531	147	135	75	47	5	-
Kansas	391	352	706	729	605	730	530
Kentucky	599	41	27	7	12	6	3
Louisiana	417	129	263	253	257	296	154
Maine	785	72	31	11	7	5	2
Maryland	496	107	77	112	47	68	2
Massachusetts	910	108	116	14	24	10	1
Michigan	1,901	371	611	395	184	151	90
Minnesota	773	396	547	307	188	46	29
Mississippi	367	103	181	190	201	216	247
Missouri	1,011	225	260	248	225	273	142
Montana	2,081	952	803	436	260	268	88
Nebraska	1,372	1,024	2,257	2,266	2,130	2,294	1,122
Nevada	201	77	121	62	143	108	112
New Hampshire	542	50	4	1	2	-	-
New Jersey	836	98	243	134	54	78	11
New Mexico	2,770	417	444	267	147	166	204
New York	1,451	147	54	30	16	13	8
North Carolina	1,489	437	135	107	68	49	3
North Dakota	112	63	233	73	71	47	23
Ohio	1,089	124	53	21	6	5	-
Oklahoma	574	108	328	174	133	141	130
Oregon	5,064	1,424	1,026	659	487	482	159
Pennsylvania	2,170	192	57	19	5	10	-
Rhode Island	173	7	10	2	-	-	-
South Carolina	695	85	256	90	63	98	60
South Dakota	101	140	224	319	65	47	12
Tennessee	544	115	192	59	66	12	-
Texas	3,687	1,046	1,124	628	861	1,336	1,266
Utah	1,432	743	697	427	199	196	114
Vermont	320	87	3	-	-	-	-
Virginia	1,043	62	105	41	9	8	-
Washington	3,504	1,102	916	461	725	506	441
West Virginia	273	3	2	5	-	-	-
Wisconsin	1,034	194	321	155	114	109	72
Wyoming	817	471	570	318	192	135	34
Water Resources Regions							
Region 01 New England	2,963	342	194	29	65	31	4
Region 02 Mid-Atlantic	4,723	566	628	384	179	215	43
Region 03 South Atlantic-Gulf	8,934	1,697	2,014	1,037	992	819	493
Region 04 Great Lakes	3,705	664	857	505	230	232	95
Region 05 Ohio	2,646	304	435	226	72	63	23
Region 06 Tennessee	619	161	40	8	41	16	2
Region 07 Upper Mississippi	2,512	847	1,297	708	483	246	139
Region 08 Lower Mississippi	866	480	905	712	935	1,369	1,135
Region 09 Souris-Red-Rainy	195	64	64	75	120	19	17
Region 10 Missouri	4,858	2,870	4,535	4,129	3,203	3,217	1,687
Region 11 Arkansas-White-Red	1,779	529	928	850	944	1,166	1,273
Region 12 Texas-Gulf	3,281	917	852	625	662	1,104	808
Region 13 Rio Grande	2,584	442	408	220	56	124	230
Region 14 Upper Colorado	1,291	425	487	417	103	27	33
Region 15 Lower Colorado	399	249	321	169	128	108	187
Region 16 Great Basin	1,364	590	539	325	323	357	236
Region 17 Pacific Northwest	11,972	3,873	3,512	1,868	1,801	1,565	1,197
Region 18 California	8,237	3,412	4,855	3,594	3,501	2,818	2,930
Region 19 Alaska	227	8	2	4	1	-	-
Region 20 Hawaii	226	51	5	6	18	3	8

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	Electricity								
	Farms	Pumps powered	Acres in the open by water source		Square feet under protection by water source		Expenses (\$1,000)	Expenses per irrigated acre for operations with only acres in the open (dollars)	
			Water from wells	Surface water	Water from wells	Surface water		Water from wells only	Surface water only
United States	135,309	443,694	24,067,216	10,011,992	889,659,055	251,313,798	1,885,602	57.26	38.83
Alabama	684	1,265	68,853	40,607	(D)	5,024,224	3,034	27.15	19.52
Alaska	226	291	(D)	26	(D)	133,246	60	48.93	(D)
Arizona	1,158	3,944	320,811	59,445	9,836,360	33,660	38,410	114.41	20.92
Arkansas	2,357	21,194	1,780,940	274,954	1,573,874	538,820	57,128	25.98	21.30
California	27,079	84,856	4,029,423	2,645,026	192,097,024	73,509,538	698,867	143.76	58.17
Colorado	4,285	13,654	1,099,327	344,361	(D)	(D)	83,049	65.89	40.34
Connecticut	450	867	1,036	633	25,423,372	147,120	915	51.71	20.17
Delaware	489	1,880	128,560	2,393	(D)	-	6,038	48.82	-
Florida	5,832	11,408	330,545	52,406	194,921,084	25,738,738	19,182	46.26	27.33
Georgia	3,459	11,420	855,562	114,691	14,146,250	(D)	39,349	39.27	28.31
Hawaii	299	419	(D)	8,319	824,960	2,885,772	729	221.53	63.17
Idaho	7,426	22,839	1,041,567	1,393,433	2,998,592	158,000	145,178	62.54	45.62
Illinois	1,335	3,995	388,142	8,769	43,827,230	832,500	8,111	20.21	9.59
Indiana	1,450	3,846	336,533	21,814	3,840,064	1,958,588	5,526	15.02	21.38
Iowa	798	1,731	116,901	3,487	2,353,570	(D)	1,551	11.75	(D)
Kansas	2,529	7,838	747,307	42,445	4,087,616	77,250	37,475	47.46	48.68
Kentucky	405	616	(D)	14,345	1,450,708	1,896,600	524	18.43	7.08
Louisiana	1,361	5,333	344,174	(D)	5,651,525	6,649,912	13,063	36.17	10.61
Maine	687	1,035	1,275	1,923	2,091,039	(D)	149	64.23	27.15
Maryland	575	1,317	48,990	3,250	7,163,533	762,340	1,532	27.52	33.53
Massachusetts	719	1,195	3,037	3,793	(D)	48,000	418	40.10	63.23
Michigan	3,238	9,139	551,153	84,420	59,328,325	17,939,500	16,902	25.10	35.54
Minnesota	2,050	5,817	496,143	19,585	14,225,482	2,661,032	10,746	20.55	9.95
Mississippi	1,190	7,567	653,421	67,773	(D)	195,300	18,749	25.89	19.79
Missouri	1,708	8,984	767,619	45,017	5,282,928	(D)	15,315	19.85	19.68
Montana	4,588	9,532	59,845	1,012,565	(D)	(D)	23,488	25.58	20.98
Nebraska	9,153	42,587	4,131,033	421,105	2,457,968	-	144,771	33.15	19.51
Nevada	795	2,441	260,213	(D)	213,380	(D)	24,553	88.16	57.91
New Hampshire	527	712	(D)	674	6,316,066	693,200	149	40.73	70.39
New Jersey	927	1,611	26,758	2,424	35,572,100	371,258	2,128	64.00	127.62
New Mexico	3,543	9,437	334,134	109,720	1,945,008	1,249,245	30,955	84.38	51.75
New York	1,117	1,529	6,047	1,862	17,838,219	5,364,178	446	35.22	33.02
North Carolina	1,673	2,768	15,974	70,468	10,217,998	16,321,134	3,089	29.67	29.85
North Dakota	555	2,544	182,148	76,094	(D)	(D)	6,137	21.18	12.96
Ohio	956	1,359	14,158	6,394	15,643,891	13,265,856	586	20.30	24.00
Oklahoma	1,076	4,099	234,030	31,334	1,197,066	(D)	8,706	37.50	15.33
Oregon	9,054	18,396	429,044	573,601	37,770,843	18,504,450	53,732	55.77	45.98
Pennsylvania	1,895	2,778	15,350	2,966	44,292,966	1,463,775	804	25.51	21.51
Rhode Island	159	213	930	(D)	(D)	228,000	69	29.90	-
South Carolina	1,208	3,546	204,640	32,727	(D)	1,253,000	9,850	46.78	35.21
South Dakota	825	2,428	174,886	98,042	1,161,600	31,824	6,463	19.57	29.83
Tennessee	716	1,301	87,088	6,117	2,518,116	3,889,600	1,657	12.96	28.46
Texas	8,658	65,277	2,448,894	212,995	41,534,671	23,744,444	199,862	76.95	54.80
Utah	3,421	6,024	225,158	359,539	3,284,912	910,960	26,587	66.54	30.20
Vermont	365	475	(D)	(D)	1,985,694	(D)	135	25.58	22.97
Virginia	849	1,267	5,351	5,921	11,504,454	(D)	457	22.90	38.57
Washington	7,457	20,352	521,934	1,095,147	15,536,597	1,005,072	91,600	64.18	46.02
West Virginia	218	352	516	5,155	633,640	(D)	89	187.64	254.91
Wisconsin	1,612	5,393	424,383	21,187	12,763,897	438,600	13,879	27.82	80.39
Wyoming	2,173	4,623	134,438	514,331	(D)	71,400	13,408	36.33	15.21
Water Resources Regions									
Region 01 New England	2,720	4,278	7,738	7,596	40,332,154	1,287,845	1,777	42.66	58.30
Region 02 Mid-Atlantic	4,898	9,297	226,976	20,906	110,957,751	16,216,576	11,031	44.25	40.59
Region 03 South Atlantic-Gulf	12,984	30,815	1,463,734	332,207	234,135,942	47,629,838	75,041	41.68	27.05
Region 04 Great Lakes	5,070	12,777	760,677	99,359	76,832,665	30,012,798	20,886	22.27	33.84
Region 05 Ohio	2,632	4,652	228,528	32,084	17,543,225	11,306,645	5,516	(D)	22.26
Region 06 Tennessee	719	959	24,482	11,147	5,447,518	6,567,552	1,011	24.78	(D)
Region 07 Upper Mississippi	5,191	14,853	1,228,421	49,628	66,011,760	5,592,272	30,316	22.23	45.82
Region 08 Lower Mississippi	5,060	38,791	3,349,235	354,826	(D)	6,497,832	94,436	24.46	16.01
Region 09 Souris-Red-Rainy	458	2,316	(D)	27,052	(D)	(D)	4,122	(D)	12.93
Region 10 Missouri	19,175	69,700	5,699,442	1,974,660	16,152,290	(D)	257,298	37.43	21.65
Region 11 Arkansas-White-Red	5,273	25,114	1,795,393	151,443	3,565,652	1,430,512	117,031	61.46	48.85
Region 12 Texas-Gulf	7,392	55,976	1,891,199	117,145	36,288,755	23,744,444	143,559	74.09	50.56
Region 13 Rio Grande	3,310	8,405	330,613	155,520	9,789,468	40,000	31,379	82.09	40.51
Region 14 Upper Colorado	2,475	4,363	16,392	356,027	195,040	(D)	13,402	59.31	39.90
Region 15 Lower Colorado	1,408	4,341	355,427	67,065	9,971,360	33,660	40,379	107.53	18.06
Region 16 Great Basin	3,315	7,654	545,862	342,222	3,498,292	(D)	49,295	76.21	21.11
Region 17 Pacific Northwest	25,247	63,183	1,921,916	3,225,971	57,080,280	17,846,222	287,505	61.30	43.70
Region 18 California	27,457	85,510	4,047,428	2,678,789	191,962,024	75,403,538	700,829	143.06	58.11
Region 19 Alaska	226	291	(D)	26	(D)	133,246	60	48.93	(D)
Region 20 Hawaii	299	419	(D)	8,319	824,960	2,885,772	729	221.53	63.17

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	Electricity - con.						
	Farms with energy expenses of -						
	\$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	55,672	16,559	19,885	13,698	11,896	10,431	7,889
Alabama	411	67	72	89	39	17	14
Alaska	213	8	1	4	-	-	-
Arizona	289	217	209	124	83	106	149
Arkansas	343	227	320	249	391	529	298
California	7,627	3,151	4,477	3,554	3,168	2,648	2,681
Colorado	1,513	445	432	631	443	374	455
Connecticut	331	43	29	1	45	-	1
Delaware	156	115	72	39	72	28	7
Florida	3,712	775	649	343	181	112	63
Georgia	1,666	343	383	197	441	339	159
Hawaii	226	51	6	2	8	1	5
Idaho	2,534	981	1,330	740	658	568	615
Illinois	477	191	279	178	101	96	13
Indiana	543	213	396	156	91	48	3
Iowa	504	96	105	60	30	3	-
Kansas	326	281	445	583	498	254	142
Kentucky	382	9	23	1	11	3	2
Louisiana	470	118	290	148	164	100	71
Maine	674	10	5	-	-	-	-
Maryland	383	58	43	102	21	6	1
Massachusetts	638	53	22	2	1	2	1
Michigan	1,678	412	602	251	134	132	70
Minnesota	689	379	451	288	169	45	29
Mississippi	407	92	236	105	126	118	106
Missouri	812	139	169	198	148	187	55
Montana	1,978	912	692	403	290	254	59
Nebraska	991	814	2,050	1,706	1,626	1,311	655
Nevada	188	81	132	45	143	105	101
New Hampshire	476	49	6	-	-	-	-
New Jersey	649	74	148	27	48	17	3
New Mexico	2,346	309	303	168	137	142	204
New York	970	132	11	3	-	-	1
North Carolina	1,133	305	113	65	9	47	1
North Dakota	48	63	231	73	71	47	22
Ohio	789	114	37	9	4	3	-
Oklahoma	414	83	196	163	127	81	25
Oregon	4,940	1,348	1,002	636	487	495	146
Pennsylvania	1,744	91	43	10	3	5	-
Rhode Island	146	4	8	-	1	-	-
South Carolina	637	110	156	86	74	88	57
South Dakota	57	181	188	300	40	47	12
Tennessee	367	75	197	32	43	2	-
Texas	3,380	954	989	587	630	1,199	1,025
Utah	1,210	723	642	420	151	161	114
Vermont	285	81	-	-	-	-	-
Virginia	801	12	13	13	7	3	-
Washington	3,408	1,048	916	457	694	512	432
West Virginia	208	3	2	5	-	-	-
Wisconsin	864	117	268	155	95	74	58
Wyoming	639	402	496	290	193	122	34
Water Resources Regions							
Region 01 New England	2,391	212	70	3	47	2	2
Region 02 Mid-Atlantic	3,837	408	328	184	151	57	12
Region 03 South Atlantic-Gulf	7,696	1,542	1,365	796	749	611	297
Region 04 Great Lakes	2,898	646	822	306	185	179	75
Region 05 Ohio	1,839	277	295	137	73	32	5
Region 06 Tennessee	535	128	40	18	20	1	2
Region 07 Upper Mississippi	2,247	698	1,054	577	344	204	86
Region 08 Lower Mississippi	972	453	1,026	573	722	824	490
Region 09 Souris-Red-Rainy	119	45	64	75	120	18	17
Region 10 Missouri	3,896	2,428	3,757	3,303	2,632	2,011	1,148
Region 11 Arkansas-White-Red	1,505	367	742	737	778	647	518
Region 12 Texas-Gulf	3,023	880	779	530	513	1,028	745
Region 13 Rio Grande	2,206	295	290	154	45	123	230
Region 14 Upper Colorado	1,118	363	416	417	111	17	33
Region 15 Lower Colorado	386	250	304	151	98	115	156
Region 16 Great Basin	1,129	574	495	301	275	319	225
Region 17 Pacific Northwest	11,719	3,680	3,488	1,841	1,779	1,600	1,150
Region 18 California	7,717	3,254	4,543	3,589	3,246	2,642	2,693
Region 19 Alaska	213	8	1	4	-	-	-
Region 20 Hawaii	226	51	6	2	8	1	5

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	Natural gas								
	Farms	Pumps powered	Acres in the open by water source		Square feet under protection by water source		Expenses (\$1,000)	Expenses per irrigated acre for operations with only acres in the open (dollars)	
			Water from wells	Surface water	Water from wells	Surface water		Water from wells only	Surface water only
United States	7,284	29,041	3,586,909	170,857	162,784	74,400	167,057	46.07	23.85
Alabama	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-
Arizona	47	124	8,422	-	-	-	1,554	184.49	-
Arkansas	203	889	97,607	11,156	-	-	2,451	24.77	-
California	323	809	68,445	40,936	-	-	6,300	62.60	33.54
Colorado	146	258	31,078	3,360	-	-	1,152	35.01	19.11
Connecticut	1	(D)	-	(D)	-	-	(D)	-	(D)
Delaware	-	-	-	-	-	-	-	-	-
Florida	27	54	4,860	-	-	-	802	165.00	-
Georgia	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-
Illinois	1	(D)	(D)	-	-	-	(D)	(D)	-
Indiana	10	56	6,335	-	-	-	43	6.79	-
Iowa	-	-	-	-	-	-	-	-	-
Kansas	1,718	8,392	1,252,806	13,337	-	-	55,514	44.49	49.50
Kentucky	-	-	-	-	-	-	-	-	-
Louisiana	62	106	15,601	-	-	-	631	40.45	-
Maine	-	-	-	-	-	-	-	-	-
Maryland	20	20	700	-	-	-	15	21.43	-
Massachusetts	28	(D)	-	(D)	-	-	(D)	-	(D)
Michigan	2	(D)	(D)	(D)	-	-	(D)	-	-
Minnesota	-	-	-	-	-	-	-	-	-
Mississippi	27	63	8,228	150	-	-	164	18.77	-
Missouri	-	-	-	-	-	-	-	-	-
Montana	54	150	-	22,816	(D)	-	215	-	9.42
Nebraska	2,315	8,295	958,042	14,532	-	-	27,173	27.81	16.29
Nevada	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-
New Jersey	23	23	2,300	-	-	-	46	20.00	-
New Mexico	605	823	54,284	8,670	-	(D)	2,908	50.72	71.80
New York	23	(D)	(D)	-	77,004	-	(D)	-	-
North Carolina	-	-	-	-	-	-	-	-	-
North Dakota	1	(D)	-	-	(D)	-	(D)	-	-
Ohio	4	8	(D)	(D)	(D)	-	3	(D)	-
Oklahoma	315	1,455	222,259	1,340	-	-	10,896	48.94	(D)
Oregon	-	-	-	-	-	-	-	-	-
Pennsylvania	2	(D)	-	(D)	-	-	(D)	-	(D)
Rhode Island	-	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-
South Dakota	26	26	840	3,520	-	-	16	11.43	1.84
Tennessee	24	(D)	(D)	-	-	-	34	(D)	-
Texas	1,164	7,181	835,108	47,650	-	-	56,328	67.22	34.85
Utah	31	31	400	108	-	-	21	30.00	83.25
Vermont	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-
Washington	3	3	-	6	-	-	1	-	(D)
West Virginia	20	20	-	20	-	(D)	(D)	-	-
Wisconsin	13	53	11,473	-	-	-	604	52.68	-
Wyoming	46	112	4,840	2,505	-	-	74	0.90	27.93
Water Resources Regions									
Region 01 New England	29	30	-	297	-	-	37	-	124.93
Region 02 Mid-Atlantic	43	43	3,000	-	-	-	61	20.33	-
Region 03 South Atlantic-Gulf	27	54	4,860	-	-	-	802	165.00	-
Region 04 Great Lakes	25	29	331	(D)	(D)	-	33	-	-
Region 05 Ohio	26	30	128	72	(D)	(D)	11	(D)	(D)
Region 06 Tennessee	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	24	111	18,208	-	-	-	652	35.83	-
Region 08 Lower Mississippi	277	911	100,979	4,082	-	-	2,678	26.90	-
Region 09 Souris-Red-Rainy	1	(D)	-	-	(D)	-	(D)	-	-
Region 10 Missouri	3,022	10,705	1,214,239	47,363	-	-	35,344	28.44	11.82
Region 11 Arkansas-White-Red	2,342	13,739	1,986,401	27,321	-	-	108,120	54.62	25.64
Region 12 Texas-Gulf	502	1,631	135,706	41,600	-	-	8,702	65.48	43.16
Region 13 Rio Grande	493	715	41,665	2,953	-	-	2,264	53.64	43.10
Region 14 Upper Colorado	34	40	-	5,717	-	(D)	117	-	80.00
Region 15 Lower Colorado	82	169	15,019	-	-	-	2,046	136.21	-
Region 16 Great Basin	31	(D)	400	(D)	-	-	(D)	(D)	83.25
Region 17 Pacific Northwest	5	5	-	6	(D)	-	1	-	(D)
Region 18 California	321	797	65,973	40,936	-	-	6,138	62.49	33.54
Region 19 Alaska	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	Natural gas - con.						
	Farms with energy expenses of -						
	\$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	813	614	1,548	1,421	1,095	1,080	759
Alabama	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-
Arizona	-	-	-	17	-	17	13
Arkansas	34	40	49	19	18	37	6
California	29	-	97	29	68	62	38
Colorado	-	28	52	31	9	25	1
Connecticut	-	-	1	-	-	-	-
Delaware	-	-	-	-	-	-	-
Florida	-	-	-	-	-	27	-
Georgia	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-
Illinois	-	-	-	1	-	-	-
Indiana	-	-	9	1	-	-	-
Iowa	-	-	-	-	-	-	-
Kansas	58	82	305	356	271	328	318
Kentucky	-	-	-	-	-	-	-
Louisiana	-	-	-	18	44	-	-
Maine	-	-	-	-	-	-	-
Maryland	20	-	-	-	-	-	-
Massachusetts	-	28	-	-	-	-	-
Michigan	-	-	-	-	2	-	-
Minnesota	-	-	-	-	-	-	-
Mississippi	-	7	6	12	2	-	-
Missouri	-	-	-	-	-	-	-
Montana	26	-	20	-	4	4	-
Nebraska	120	208	733	504	391	318	41
Nevada	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-
New Jersey	-	-	23	-	-	-	-
New Mexico	332	66	66	91	39	35	9
New York	23	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-	-
North Dakota	-	-	-	-	-	1	-
Ohio	2	2	-	-	-	-	-
Oklahoma	4	50	58	43	44	50	79
Oregon	-	-	-	-	-	-	-
Pennsylvania	2	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-
South Dakota	22	-	4	-	-	-	-
Tennessee	-	22	1	1	-	-	-
Texas	69	78	99	295	203	176	244
Utah	27	-	4	-	-	-	-
Vermont	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-
Washington	3	-	-	-	-	-	-
West Virginia	20	-	-	-	-	-	-
Wisconsin	-	3	-	-	-	-	10
Wyoming	22	-	21	3	-	-	-
Water Resources Regions							
Region 01 New England	-	28	1	-	-	-	-
Region 02 Mid-Atlantic	20	-	23	-	-	-	-
Region 03 South Atlantic-Gulf	-	-	-	-	-	27	-
Region 04 Great Lakes	23	-	-	-	2	-	-
Region 05 Ohio	24	2	-	-	-	-	-
Region 06 Tennessee	-	-	-	-	-	-	-
Region 07 Upper Mississippi	-	3	9	2	-	-	10
Region 08 Lower Mississippi	25	59	56	48	64	19	6
Region 09 Souris-Red-Rainy	-	-	-	-	-	1	-
Region 10 Missouri	203	266	979	667	462	353	92
Region 11 Arkansas-White-Red	86	150	271	423	333	538	554
Region 12 Texas-Gulf	39	40	42	200	116	28	37
Region 13 Rio Grande	332	66	33	35	17	34	9
Region 14 Upper Colorado	-	-	33	-	-	1	-
Region 15 Lower Colorado	-	-	-	17	33	17	15
Region 16 Great Basin	27	-	4	-	-	-	-
Region 17 Pacific Northwest	5	-	-	-	-	-	-
Region 18 California	29	-	97	29	68	62	36
Region 19 Alaska	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	LP gas, propane, and butane									
	Farms	Pumps powered	Acres in the open by water source		Square feet under protection by water source		Expenses (\$1,000)	Expenses per irrigated acre for operations with only acres in the open (dollars)		
			Water from wells	Surface water	Water from wells	Surface water		Water from wells only	Surface water only	
United States	4,841	11,176	792,039	152,156	5,397,330	6,024,114	24,256	25.77	25.65	
Alabama	25	25	125	(D)	-	-	3	20.00	(D)	
Alaska	-	-	-	-	-	-	-	-	-	
Arizona	1	(D)	(D)	(D)	-	-	(D)	-	-	
Arkansas	186	791	(D)	7,812	-	-	2,050	26.51	21.32	
California	296	598	20,510	36,208	-	-	2,263	79.52	19.11	
Colorado	124	148	4,520	1,772	-	-	321	58.41	32.11	
Connecticut	4	6	48	(D)	-	-	(D)	31.25	(D)	
Delaware	-	-	-	-	-	-	-	-	-	
Florida	29	58	5,916	-	-	-	642	108.50	-	
Georgia	-	-	-	-	-	-	-	-	-	
Hawaii	-	-	-	-	-	-	-	-	-	
Idaho	47	47	1,001	322	2,370	-	32	-	75.71	
Illinois	40	(D)	2,007	75	-	-	(D)	23.85	500.00	
Indiana	171	217	12,159	5,099	(D)	-	346	17.50	25.85	
Iowa	36	36	324	(D)	-	-	(D)	38.89	22.86	
Kansas	219	416	33,336	7,306	-	-	2,058	59.06	11.16	
Kentucky	1	(D)	(D)	(D)	-	-	(D)	(D)	-	
Louisiana	89	242	20,759	(D)	-	-	383	17.91	-	
Maine	-	-	-	-	-	-	-	-	-	
Maryland	30	51	1,748	3,440	(D)	-	170	10.87	44.50	
Massachusetts	224	494	206	6,232	-	-	677	-	(D)	
Michigan	-	-	-	-	-	-	-	-	-	
Minnesota	15	15	15	-	10,140	-	3	-	-	
Mississippi	343	2,007	240,546	11,214	-	-	4,630	17.46	19.94	
Missouri	192	673	62,457	5,760	-	-	992	14.49	15.18	
Montana	23	23	-	1,771	-	-	23	-	12.99	
Nebraska	2,146	3,925	262,546	51,922	-	-	7,808	25.57	17.40	
Nevada	-	-	-	-	-	-	-	-	-	
New Hampshire	1	(D)	(D)	(D)	-	(D)	(D)	-	-	
New Jersey	-	-	-	-	-	-	-	-	-	
New Mexico	101	101	2,071	-	-	-	345	166.73	-	
New York	2	(D)	(D)	-	-	-	(D)	(D)	-	
North Carolina	54	54	-	1,485	-	-	14	-	9.09	
North Dakota	-	-	-	-	-	-	-	-	-	
Ohio	25	25	(D)	(D)	-	(D)	2	1.00	-	
Oklahoma	11	18	1,827	20	-	(D)	93	48.53	(D)	
Oregon	-	-	-	-	-	-	-	-	-	
Pennsylvania	43	(D)	(D)	-	4,791,600	5,749,920	(D)	50.00	-	
Rhode Island	18	(D)	(D)	(D)	-	9,000	8	12.56	-	
South Carolina	-	-	-	-	-	-	-	-	-	
South Dakota	-	-	-	-	-	-	-	-	-	
Tennessee	2	(D)	(D)	-	-	-	(D)	(D)	-	
Texas	116	694	38,295	-	-	-	866	22.62	-	
Utah	108	108	1,080	2,133	-	-	81	74.30	29.43	
Vermont	-	-	-	-	-	-	-	-	-	
Virginia	23	23	468	(D)	(D)	-	21	-	-	
Washington	-	-	-	-	-	-	-	-	-	
West Virginia	-	-	-	-	-	-	-	-	-	
Wisconsin	44	47	1,884	456	-	-	8	3.46	3.63	
Wyoming	52	175	(D)	5,294	-	-	256	(D)	25.73	
Water Resources Regions										
Region 01 New England	247	519	652	6,502	-	(D)	689	14.75	111.71	
Region 02 Mid-Atlantic	55	98	1,814	3,620	5,227,200	5,749,920	173	10.80	44.50	
Region 03 South Atlantic-Gulf	130	159	6,459	1,485	143,220	-	677	106.67	9.09	
Region 04 Great Lakes	6	6	114	(D)	-	(D)	4	15.09	-	
Region 05 Ohio	204	255	13,212	4,179	(D)	-	336	16.25	28.80	
Region 06 Tennessee	-	-	-	(D)	-	-	(D)	(D)	12.50	
Region 07 Upper Mississippi	166	249	10,360	4,941	(D)	-	317	19.60	22.55	
Region 08 Lower Mississippi	703	3,508	384,215	19,546	-	-	7,547	18.00	19.94	
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-	
Region 10 Missouri	2,427	4,401	276,598	70,572	-	-	8,738	26.54	17.89	
Region 11 Arkansas-White-Red	261	487	54,949	1,656	-	(D)	2,491	44.69	23.65	
Region 12 Texas-Gulf	61	577	18,680	-	-	-	551	29.51	-	
Region 13 Rio Grande	68	68	751	-	-	-	266	354.31	-	
Region 14 Upper Colorado	61	94	(D)	497	-	-	88	60.00	17.10	
Region 15 Lower Colorado	1	(D)	(D)	(D)	-	-	(D)	-	-	
Region 16 Great Basin	108	(D)	1,080	2,133	-	-	81	74.30	29.43	
Region 17 Pacific Northwest	47	47	1,001	322	2,370	-	32	-	75.71	
Region 18 California	296	598	20,510	36,208	-	-	2,263	79.52	19.11	
Region 19 Alaska	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	LP gas, propane, and butane - con.						
	Farms with energy expenses of -						
	\$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	1,533	910	1,336	512	327	185	65
Alabama	50	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-
Arizona	-	-	1	-	-	-	-
Arkansas	29	23	46	30	32	13	13
California	26	22	180	44	2	-	22
Colorado	63	24	-	37	-	-	-
Connecticut	3	1	-	-	-	-	-
Delaware	-	-	-	-	-	-	-
Florida	-	-	27	-	-	-	2
Georgia	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-
Idaho	44	-	3	-	-	-	-
Illinois	-	16	24	-	-	-	-
Indiana	48	72	53	-	-	-	-
Iowa	18	-	18	-	-	-	-
Kansas	18	58	64	33	15	15	16
Kentucky	-	-	1	-	-	-	-
Louisiana	-	-	49	39	1	-	-
Maine	-	-	-	-	-	-	-
Maryland	-	19	1	-	10	-	-
Massachusetts	108	30	56	24	5	-	1
Michigan	-	-	-	-	-	-	-
Minnesota	15	-	-	-	-	-	-
Mississippi	25	44	58	36	92	79	9
Missouri	46	42	39	29	25	11	-
Montana	-	23	-	-	-	-	-
Nebraska	674	455	636	197	142	42	-
Nevada	-	-	-	-	-	-	-
New Hampshire	-	1	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-
New Mexico	34	1	33	33	-	-	-
New York	2	-	-	-	-	-	-
North Carolina	54	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	-
Ohio	23	2	-	-	-	-	-
Oklahoma	2	-	1	5	3	-	-
Oregon	-	-	-	-	-	-	-
Pennsylvania	43	-	-	-	-	-	-
Rhode Island	14	3	1	-	-	-	-
South Carolina	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-
Tennessee	-	-	2	-	-	-	-
Texas	19	50	20	5	-	22	-
Utah	108	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-
Virginia	22	-	1	-	-	-	-
Washington	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-
Wisconsin	44	-	-	-	-	-	-
Wyoming	1	24	22	-	-	3	2
Water Resources Regions							
Region 01 New England	125	35	57	24	5	-	1
Region 02 Mid-Atlantic	24	19	2	-	10	-	-
Region 03 South Atlantic-Gulf	101	-	27	-	-	-	2
Region 04 Great Lakes	4	2	-	-	-	-	-
Region 05 Ohio	82	72	52	-	-	-	-
Region 06 Tennessee	25	-	-	-	-	-	-
Region 07 Upper Mississippi	83	23	52	-	8	-	-
Region 08 Lower Mississippi	62	81	170	134	142	92	22
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-
Region 10 Missouri	738	561	703	221	157	45	2
Region 11 Arkansas-White-Red	51	42	56	56	3	37	16
Region 12 Texas-Gulf	-	50	-	-	-	11	-
Region 13 Rio Grande	34	1	-	33	-	-	-
Region 14 Upper Colorado	26	2	33	-	-	-	-
Region 15 Lower Colorado	-	-	1	-	-	-	-
Region 16 Great Basin	108	-	-	-	-	-	-
Region 17 Pacific Northwest	44	-	3	-	-	-	-
Region 18 California	26	22	180	44	2	-	22
Region 19 Alaska	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	Diesel and biodiesel fuel								
	Farms	Pumps powered	Acres in the open by water source		Square feet under protection by water source		Expenses (\$1,000)	Expenses per irrigated acre for operations with only acres in the open (dollars)	
			Water from wells	Surface water	Water from wells	Surface water		Water from wells only	Surface water only
United States	27,923	102,865	8,403,653	2,846,720	96,010,759	39,750,381	340,042	30.24	31.41
Alabama	211	650	21,079	41,753	(D)	-	1,615	27.43	26.28
Alaska	6	8	(D)	72	-	-	(D)	(D)	6.00
Arizona	67	320	(D)	44,973	-	(D)	2,224	77.88	35.65
Arkansas	2,192	22,155	2,095,105	283,732	-	522,720	66,878	28.51	28.59
California	2,640	8,043	342,850	786,921	1,158,708	10,226,760	62,402	87.11	45.60
Colorado	358	544	19,066	26,878	-	-	1,699	56.95	29.47
Connecticut	68	182	1,475	1,139	(D)	646,840	180	(D)	111.60
Delaware	229	963	60,831	17,569	(D)	-	3,735	23.92	135.90
Florida	2,009	9,067	395,225	535,868	58,304,600	7,927,920	26,792	50.43	13.89
Georgia	850	1,959	150,653	58,597	-	(D)	7,270	34.60	35.73
Hawaii	21	83	(D)	6,747	-	-	391	(D)	57.02
Idaho	69	174	2,197	37,444	-	-	476	4.76	12.78
Illinois	500	1,300	154,901	12,581	43,200	-	2,901	17.71	16.55
Indiana	573	1,457	173,543	27,600	1,668,544	-	3,672	17.98	10.95
Iowa	187	420	41,056	4,140	-	-	596	12.64	18.48
Kansas	1,281	3,183	299,350	45,989	-	-	14,020	43.35	33.64
Kentucky	86	229	15,735	7,429	-	18,000	246	13.57	3.80
Louisiana	995	5,551	626,047	73,069	-	-	16,625	23.45	32.79
Maine	187	406	(D)	20,339	(D)	(D)	892	(D)	31.62
Maryland	297	907	57,370	16,227	1,583,120	-	2,173	26.28	47.43
Massachusetts	249	410	1,090	4,725	-	-	608	92.00	115.52
Michigan	866	2,306	161,406	66,342	-	330,680	4,078	13.29	28.74
Minnesota	257	360	33,602	4,268	-	-	901	24.30	19.78
Mississippi	880	6,155	750,886	31,553	(D)	-	19,097	24.58	18.60
Missouri	984	5,554	554,915	46,877	324,000	(D)	12,728	21.23	13.51
Montana	346	1,545	(D)	70,316	-	-	2,752	-	39.16
Nebraska	6,054	17,664	1,917,011	144,488	-	-	54,281	26.97	20.25
Nevada	49	101	27,512	(D)	-	(D)	3,603	130.30	-
New Hampshire	25	(D)	(D)	722	-	21,100	31	-	16.81
New Jersey	438	1,439	36,542	19,207	7,852,576	4,321,300	3,411	60.06	57.53
New Mexico	163	346	10,243	8,200	-	(D)	1,132	106.32	8.00
New York	269	631	12,385	18,551	14,139,708	55,000	1,286	55.38	33.84
North Carolina	581	917	7,958	39,245	84,000	924,960	1,472	32.81	30.09
North Dakota	50	100	(D)	1,498	-	-	210	28.01	11.45
Ohio	183	308	2,988	9,434	183,368	9,532,520	277	15.17	18.08
Oklahoma	326	782	53,082	35,947	-	(D)	1,774	21.19	19.74
Oregon	201	482	2,760	17,695	-	-	373	15.03	17.66
Pennsylvania	293	423	14,060	3,676	5,113,318	62,460	482	18.88	51.17
Rhode Island	26	(D)	675	1,191	217,448	-	41	(D)	16.72
South Carolina	144	308	15,640	9,190	(D)	-	597	14.58	50.35
South Dakota	146	257	33,814	28,905	-	-	950	9.61	22.76
Tennessee	270	701	89,410	5,310	-	39,600	820	7.66	25.77
Texas	771	1,636	128,955	60,397	(D)	(D)	6,480	42.00	20.20
Utah	274	476	11,862	51,889	-	-	1,756	94.24	12.51
Vermont	43	84	(D)	422	80,000	(D)	18	(D)	45.31
Virginia	297	436	4,927	31,821	(D)	(D)	618	(D)	17.04
Washington	232	367	6,619	29,872	-	8	1,165	31.64	26.06
West Virginia	6	6	-	(D)	-	-	(D)	-	6.23
Wisconsin	429	1,034	40,575	19,092	27,000	-	3,644	29.85	130.86
Wyoming	245	358	675	31,800	(D)	-	650	-	19.98
Water Resources Regions									
Region 01 New England	561	1,091	13,701	28,192	2,602,948	992,300	1,753	46.19	52.22
Region 02 Mid-Atlantic	1,572	4,373	180,646	92,534	29,447,602	6,029,360	11,232	33.51	55.78
Region 03 South Atlantic-Gulf	3,874	12,977	585,696	675,831	59,698,540	10,102,128	37,429	44.44	18.27
Region 04 Great Lakes	1,307	3,259	200,625	95,920	142,304	9,827,200	5,677	16.18	25.18
Region 05 Ohio	595	1,457	130,548	25,026	1,869,728	(D)	2,781	17.04	14.53
Region 06 Tennessee	120	267	6,894	27,555	-	39,600	716	21.71	22.83
Region 07 Upper Mississippi	1,292	2,982	285,757	51,353	110,200	-	8,590	20.18	62.26
Region 08 Lower Mississippi	4,253	34,533	3,624,990	307,409	(D)	522,720	96,603	24.61	32.49
Region 09 Souris-Red-Rainy	44	76	(D)	2,541	-	-	(D)	(D)	13.74
Region 10 Missouri	8,019	21,998	2,144,494	347,529	326,544	(D)	63,846	26.28	23.03
Region 11 Arkansas-White-Red	1,717	7,630	686,962	128,734	-	(D)	29,612	38.30	20.19
Region 12 Texas-Gulf	667	1,395	116,281	59,504	(D)	(D)	6,016	43.11	20.13
Region 13 Rio Grande	230	498	15,447	9,396	-	-	1,622	114.37	3.64
Region 14 Upper Colorado	87	134	(D)	5,205	-	(D)	280	62.50	46.90
Region 15 Lower Colorado	70	350	(D)	55,158	-	(D)	2,333	77.88	30.97
Region 16 Great Basin	326	580	40,049	57,274	-	(D)	5,383	120.34	12.51
Region 17 Pacific Northwest	525	1,161	11,576	94,004	-	8	3,394	26.50	32.73
Region 18 California	2,637	8,013	342,850	776,736	1,158,708	10,226,760	62,294	87.11	46.24
Region 19 Alaska	6	8	(D)	72	-	-	(D)	(D)	6.00
Region 20 Hawaii	21	83	(D)	6,747	-	-	391	(D)	57.02

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	Diesel and biodiesel fuel - con.						
	Farms with energy expenses of -						
	\$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	5,753	3,698	6,501	4,327	3,612	2,629	1,403
Alabama	61	56	37	7	33	12	5
Alaska	5	-	-	-	1	-	-
Arizona	8	16	18	3	4	3	15
Arkansas	159	111	323	284	379	578	358
California	486	285	421	409	464	291	284
Colorado	25	75	163	61	16	18	-
Connecticut	45	6	1	15	-	1	-
Delaware	26	52	29	68	24	22	8
Florida	601	181	383	297	239	190	118
Georgia	210	134	246	51	137	8	64
Hawaii	1	-	1	4	10	2	3
Idaho	34	-	7	-	23	5	-
Illinois	85	74	108	138	87	6	2
Indiana	72	71	237	110	26	56	1
Iowa	34	106	21	8	18	-	-
Kansas	125	208	439	214	111	122	62
Kentucky	67	2	4	7	3	2	1
Louisiana	80	54	161	228	222	157	93
Maine	71	62	32	8	7	5	2
Maryland	69	48	61	36	45	37	1
Massachusetts	163	12	42	23	5	3	1
Michigan	194	200	244	95	90	40	3
Minnesota	72	19	138	6	20	2	-
Mississippi	70	63	161	196	172	134	84
Missouri	147	179	187	119	160	132	60
Montana	49	72	109	69	19	5	23
Nebraska	689	753	1,634	1,365	932	552	129
Nevada	15	-	19	2	1	1	11
New Hampshire	22	-	-	2	1	-	-
New Jersey	97	40	100	105	35	57	4
New Mexico	43	66	42	7	-	-	5
New York	140	20	59	20	10	13	7
North Carolina	306	90	120	1	58	6	-
North Dakota	31	10	7	-	1	-	1
Ohio	132	15	20	11	3	2	-
Oklahoma	94	31	120	42	4	30	5
Oregon	76	78	28	15	4	-	-
Pennsylvania	212	58	4	12	2	5	-
Rhode Island	21	-	2	2	1	-	-
South Carolina	30	25	76	4	2	3	4
South Dakota	45	-	52	28	20	-	1
Tennessee	84	69	54	31	32	-	-
Texas	231	101	159	122	79	43	36
Utah	54	20	110	35	20	35	-
Vermont	36	7	-	-	-	-	-
Virginia	103	61	98	30	1	4	-
Washington	61	65	56	8	33	3	6
West Virginia	6	-	-	-	-	-	-
Wisconsin	160	79	87	20	36	41	6
Wyoming	106	24	81	9	22	3	-
Water Resources Regions							
Region 01 New England	328	80	77	50	14	9	3
Region 02 Mid-Atlantic	514	234	290	266	116	132	20
Region 03 South Atlantic-Gulf	1,279	462	906	373	453	210	191
Region 04 Great Lakes	387	258	361	136	94	67	4
Region 05 Ohio	238	43	133	100	49	30	2
Region 06 Tennessee	29	52	-	-	30	9	-
Region 07 Upper Mississippi	263	242	390	173	152	65	7
Region 08 Lower Mississippi	312	332	727	699	824	856	503
Region 09 Souris-Red-Rainy	23	19	-	-	1	1	-
Region 10 Missouri	1,065	1,165	2,321	1,664	1,055	614	135
Region 11 Arkansas-White-Red	278	194	401	258	188	243	155
Region 12 Texas-Gulf	211	78	117	122	64	39	36
Region 13 Rio Grande	63	52	90	6	-	14	5
Region 14 Upper Colorado	23	23	28	1	12	-	-
Region 15 Lower Colorado	8	16	18	3	4	6	15
Region 16 Great Basin	69	20	129	40	21	36	11
Region 17 Pacific Northwest	171	143	91	23	60	8	29
Region 18 California	486	285	421	409	464	288	284
Region 19 Alaska	5	-	-	-	1	-	-
Region 20 Hawaii	1	-	1	4	10	2	3

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	Gasoline, ethanol, and blends								
	Farms	Pumps powered	Acres in the open by water source		Square feet under protection by water source		Expenses (\$1,000)	Expenses per irrigated acre for operations with only acres in the open (dollars)	
			Water from wells	Surface water	Water from wells	Surface water		Water from wells only	Surface water only
United States	6,160	8,999	52,381	51,530	2,349,078	5,696,100	3,680	16.92	34.77
Alabama	62	74	-	(D)	-	120,000	5	-	28.06
Alaska	18	28	14	27	(D)	21,280	(D)	(D)	29.89
Arizona	22	(D)	10	(D)	-	-	(D)	27.50	35.44
Arkansas	23	61	(D)	121	-	-	118	(D)	68.35
California	369	392	135	2,975	-	625,000	116	204.83	23.96
Colorado	196	227	72	2,780	(D)	(D)	78	(D)	27.84
Connecticut	99	(D)	-	(D)	(D)	19,200	(D)	-	29.31
Delaware	4	4	12	-	-	-	(Z)	16.67	-
Florida	133	294	645	-	-	-	28	43.80	-
Georgia	70	70	253	72	-	-	23	89.09	1.67
Hawaii	-	-	-	-	-	-	-	-	-
Idaho	99	99	3	2,803	2,370	600	48	-	23.93
Illinois	61	(D)	(D)	324	58,000	57,500	1,206	150.00	50.00
Indiana	129	140	127	450	(D)	(D)	34	190.68	58.81
Iowa	33	42	-	(D)	62,016	(D)	(D)	-	42.95
Kansas	75	111	8,916	910	-	172,000	240	24.70	16.67
Kentucky	257	(D)	(D)	3,211	44,200	2,068,594	(D)	62.50	41.33
Louisiana	-	-	-	-	-	-	-	-	-
Maine	165	302	(D)	318	(D)	248,280	26	36.64	30.83
Maryland	99	168	650	939	(D)	144,000	32	22.18	74.94
Massachusetts	190	(D)	720	(D)	(D)	70,000	(D)	2.51	44.02
Michigan	232	(D)	(D)	(D)	130,176	57,720	(D)	58.33	23.56
Minnesota	58	58	-	114	-	16,434	9	-	90.67
Mississippi	12	19	273	4,600	-	-	7	23.08	25.00
Missouri	220	329	507	804	175,988	339,640	99	30.45	58.11
Montana	179	970	(D)	2,885	-	(D)	77	100.00	22.14
Nebraska	36	120	8,960	2,448	-	-	108	8.33	11.63
Nevada	3	14	20,640	-	-	-	74	3.56	-
New Hampshire	91	96	(D)	(D)	9,472	(D)	(D)	-	40.24
New Jersey	235	258	1,028	645	-	-	27	16.41	15.26
New Mexico	232	266	33	4,093	-	(D)	103	50.00	22.76
New York	503	665	593	2,626	96,360	225,522	91	(D)	24.64
North Carolina	143	189	24	3,697	-	289,500	28	7.50	44.56
North Dakota	35	(D)	(D)	99	-	(D)	(D)	(D)	33.33
Ohio	222	232	140	739	(D)	(D)	54	68.10	48.98
Oklahoma	76	176	-	226	-	-	27	-	117.48
Oregon	203	255	1,825	1,032	-	120,000	143	47.72	56.88
Pennsylvania	513	664	(D)	(D)	408,936	309,970	166	101.53	40.87
Rhode Island	21	37	(D)	(D)	(D)	-	6	(D)	-
South Carolina	55	55	52	315	-	-	105	10.00	331.87
South Dakota	-	-	-	-	-	-	-	-	-
Tennessee	120	141	-	225	184,020	-	(D)	-	73.17
Texas	232	389	662	1,616	(D)	(D)	119	40.42	60.67
Utah	54	61	314	149	-	-	6	16.67	7.00
Vermont	43	129	268	(D)	56,560	-	10	(D)	110.65
Virginia	169	294	181	(D)	-	-	33	42.50	21.66
Washington	127	158	535	726	-	145,684	60	10.89	38.59
West Virginia	39	39	-	(D)	-	-	(D)	-	67.24
Wisconsin	107	107	19	326	123,500	228,000	9	-	18.14
Wyoming	96	143	(D)	1,397	(D)	-	47	-	33.82
Water Resources Regions									
Region 01 New England	597	882	1,611	2,361	382,232	(D)	120	15.11	40.70
Region 02 Mid-Atlantic	1,058	1,418	2,544	5,340	497,460	435,402	261	25.44	34.44
Region 03 South Atlantic-Gulf	475	764	1,065	8,807	-	241,500	192	54.66	165.75
Region 04 Great Lakes	756	838	635	2,639	(D)	(D)	149	79.03	23.08
Region 05 Ohio	742	905	1,338	5,533	(D)	2,336,738	193	82.26	39.06
Region 06 Tennessee	78	110	24	(D)	-	168,000	(D)	7.50	11.52
Region 07 Upper Mississippi	189	262	48	1,104	(D)	353,540	1,298	186.04	76.12
Region 08 Lower Mississippi	14	53	2,273	45	-	-	117	51.17	11.11
Region 09 Souris-Red-Rainy	55	(D)	(D)	137	-	2,418	(D)	(D)	32.67
Region 10 Missouri	479	1,460	18,558	6,795	16,280	341,400	478	18.12	21.11
Region 11 Arkansas-White-Red	124	236	106	318	-	(D)	40	13.21	108.43
Region 12 Texas-Gulf	212	349	662	1,416	(D)	(D)	99	40.42	54.68
Region 13 Rio Grande	186	240	33	4,062	-	51,000	101	50.00	22.58
Region 14 Upper Colorado	296	364	(D)	3,984	-	-	139	16.67	33.75
Region 15 Lower Colorado	22	(D)	10	(D)	-	-	(D)	27.50	35.44
Region 16 Great Basin	37	(D)	20,654	(D)	-	-	(D)	3.56	7.00
Region 17 Pacific Northwest	453	560	2,363	4,921	2,370	266,284	257	39.37	33.81
Region 18 California	369	392	135	2,975	-	625,000	116	204.83	23.96
Region 19 Alaska	18	28	14	27	(D)	21,280	(D)	(D)	29.89
Region 20 Hawaii	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 13. Energy Expense for All Well Pumps and Other Irrigation Pumps by Type of Energy Used: 2018 (continued)

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

Geographic area	Gasoline, ethanol, and blends - con.						
	Farms with energy expenses of -						
	\$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	5,616	381	138	5	20	3	17
Alabama	62	-	-	-	-	-	-
Alaska	17	-	1	-	-	-	-
Arizona	5	16	-	1	-	-	-
Arkansas	16	5	-	-	-	-	2
California	336	33	-	-	-	-	-
Colorado	172	24	-	-	-	-	-
Connecticut	95	4	-	-	-	-	-
Delaware	4	-	-	-	-	-	-
Florida	133	-	-	-	-	-	-
Georgia	70	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-
Idaho	72	27	-	-	-	-	-
Illinois	46	-	-	-	-	-	15
Indiana	125	4	-	-	-	-	-
Iowa	32	-	-	-	-	1	-
Kansas	45	15	-	-	15	-	-
Kentucky	223	31	3	-	-	-	-
Louisiana	-	-	-	-	-	-	-
Maine	165	-	-	-	-	-	-
Maryland	119	-	-	-	-	-	-
Massachusetts	180	-	10	-	-	-	-
Michigan	212	20	-	-	-	-	-
Minnesota	58	-	-	-	-	-	-
Mississippi	12	-	-	-	-	-	-
Missouri	189	19	12	-	-	-	-
Montana	155	24	-	-	-	-	-
Nebraska	16	-	16	-	4	-	-
Nevada	-	-	-	-	1	2	-
New Hampshire	89	2	-	-	-	-	-
New Jersey	235	-	-	-	-	-	-
New Mexico	199	33	-	-	-	-	-
New York	476	24	3	-	-	-	-
North Carolina	128	15	-	-	-	-	-
North Dakota	35	-	-	-	-	-	-
Ohio	218	2	2	-	-	-	-
Oklahoma	76	-	-	-	-	-	-
Oregon	157	23	23	-	-	-	-
Pennsylvania	482	10	21	-	-	-	-
Rhode Island	21	-	-	-	-	-	-
South Carolina	29	-	26	-	-	-	-
South Dakota	-	-	-	-	-	-	-
Tennessee	120	-	-	-	-	-	-
Texas	189	23	20	-	-	-	-
Utah	54	-	-	-	-	-	-
Vermont	38	5	-	-	-	-	-
Virginia	169	-	-	-	-	-	-
Washington	122	-	1	4	-	-	-
West Virginia	39	-	-	-	-	-	-
Wisconsin	107	-	-	-	-	-	-
Wyoming	74	22	-	-	-	-	-
Water Resources Regions							
Region 01 New England	579	8	10	-	-	-	-
Region 02 Mid-Atlantic	1,042	15	21	-	-	-	-
Region 03 South Atlantic-Gulf	442	7	26	-	-	-	-
Region 04 Great Lakes	709	46	1	-	-	-	-
Region 05 Ohio	702	33	7	-	-	-	-
Region 06 Tennessee	70	8	-	-	-	-	-
Region 07 Upper Mississippi	165	-	8	-	-	1	15
Region 08 Lower Mississippi	12	-	-	-	-	-	2
Region 09 Souris-Red-Rainy	55	-	-	-	-	-	-
Region 10 Missouri	384	58	18	-	19	-	-
Region 11 Arkansas-White-Red	117	5	2	-	-	-	-
Region 12 Texas-Gulf	189	3	20	-	-	-	-
Region 13 Rio Grande	133	53	-	-	-	-	-
Region 14 Upper Colorado	250	46	-	-	-	-	-
Region 15 Lower Colorado	5	16	-	1	-	-	-
Region 16 Great Basin	34	-	-	-	1	2	-
Region 17 Pacific Northwest	375	50	24	4	-	-	-
Region 18 California	336	33	-	-	-	-	-
Region 19 Alaska	17	-	1	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-

¹ Energy expenses for solar-powered pumps are not included.

Table 14. Solar Pumps and Other Pumps Without Direct Energy Expense: 2018

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

Geographic area	Farms ¹	Pumps powered ¹	Total acres irrigated ¹	Pumped well water only			Pumped surface water only		
				Farms	Pumps powered	Acres irrigated	Farms	Pumps powered	Acres irrigated
United States	3,047	4,747	150,375	2,110	3,073	58,274	740	1,340	70,134
Water Resources Regions									
Region 01 New England	33	33	(D)	8	8	(D)	25	25	(D)
Region 02 Mid-Atlantic	6	(D)	11	5	5	11	-	-	-
Region 03 South Atlantic-Gulf	66	146	2,112	66	146	2,112	-	-	-
Region 04 Great Lakes	-	-	-	-	-	-	-	-	-
Region 05 Ohio	1,587	2,530	118,932	1,244	1,754	51,982	214	535	46,995
Region 06 Tennessee	68	75	684	31	38	59	13	(D)	49
Region 07 Upper Mississippi	56	168	50	56	168	50	-	-	-
Region 08 Lower Mississippi	4	4	(Z)	4	4	(Z)	-	-	-
Region 09 Souris-Red-Rainy	39	45	10,161	27	27	81	12	18	10,080
Region 10 Missouri	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red	1	(D)	(D)	1	(D)	(D)	-	-	-
Region 12 Texas-Gulf	52	55	390	9	9	4	43	46	386
Region 13 Rio Grande	5	5	5	-	-	-	5	5	5
Region 14 Upper Colorado	18	18	7	18	18	7	-	-	-
Region 15 Lower Colorado	18	72	72	-	-	-	18	72	72
Region 16 Great Basin	14	14	3	14	14	3	-	-	-
Region 17 Pacific Northwest	16	16	58	9	9	33	7	7	25
Region 18 California	-	-	-	-	-	-	-	-	-
Region 19 Alaska	32	32	8	3	3	(D)	29	29	(D)
Region 20 Hawaii	48	48	66	48	48	66	-	-	-

¹ Operations with both well water and surface water are included. The individual categories may not sum back to the total.

Table 15. Expenses for Irrigation Water from Off-Farm Suppliers: 2018

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

Geographic area	Farms irrigating with off-farm water	Farms reporting cost for off-farm water									
		Farms reporting cost for off-farm water	Total cost (\$1,000)	Average cost per acre in the open ¹ (dollars)	Average cost per acre-foot ¹ (dollars)	Average cost per 10,000 sq. ft. under protection ² (dollars)	Farms by average cost per acre-foot ¹				
							\$1 to \$9	\$10 to \$19	\$20 to \$29	\$30 to \$59	\$60 or more
United States	102,010	74,012	1,103,195	96.74	42.37	742	9,185	10,402	8,200	12,906	28,247
Alabama	225	123	599	149.50	495.90	402	-	-	-	-	41
Alaska	34	34	15	154.00	165.00	738	-	-	-	-	10
Arizona	1,963	1,546	84,518	147.78	30.18	640	179	294	162	386	457
Arkansas	196	145	530	39.05	49.62	477	-	4	7	17	63
California	21,800	20,399	738,156	187.30	67.97	751	810	1,989	2,048	2,570	12,241
Colorado	10,604	7,029	15,804	23.88	14.19	3,576	1,478	1,478	740	1,524	1,648
Connecticut	30	19	319	455.10	734.03	970	-	-	-	-	2
Delaware	10	4	(Z)	-	-	-	-	-	-	-	-
Florida	259	116	1,093	85.23	124.12	621	-	-	-	-	92
Georgia	181	61	105	43.59	43.59	481	3	4	-	-	8
Hawaii	1,596	1,224	6,668	345.54	235.42	351	7	-	2	2	831
Idaho	11,185	7,970	41,858	35.09	16.78	931	1,762	1,929	1,132	1,454	1,572
Illinois	119	51	51	42.31	42.31	1,220	-	-	-	-	4
Indiana	153	63	88	150.00	150.00	161	-	-	-	-	6
Iowa	193	137	404	20.56	62.31	348	-	-	-	-	21
Kansas	444	231	799	34.13	41.55	956	15	-	15	49	57
Kentucky	545	518	2,492	1,234.35	2,186.57	1,047	-	-	-	-	145
Louisiana	145	69	128	169.44	254.17	5,593	-	-	-	-	31
Maine	79	41	193	283.72	2,486.17	(D)	-	-	-	-	29
Maryland	36	26	82	27.66	279.40	2,500	-	-	-	-	6
Massachusetts	198	105	61	623.12	432.72	(D)	-	-	6	-	38
Michigan	244	160	1,241	-	-	573	-	-	-	-	-
Minnesota	125	49	130	1,090.57	836.10	320	-	-	-	2	18
Mississippi	121	108	76	79.88	135.51	956	6	-	-	6	44
Missouri	307	221	412	186.79	257.02	728	-	12	-	7	95
Montana	6,531	3,412	14,196	18.14	14.81	1,843	1,014	773	498	733	355
Nebraska	2,161	1,534	15,070	29.52	32.96	1,086	84	121	191	564	537
Nevada	932	569	4,910	34.11	11.65	1,497	157	201	81	31	80
New Hampshire	119	13	62	33.33	2,000.00	-	-	-	-	-	1
New Jersey	121	85	77	632.43	632.43	-	-	-	-	-	45
New Mexico	6,430	3,937	9,014	45.81	32.40	(D)	436	477	489	822	1,675
New York	490	348	1,980	160.50	164.95	-	3	23	-	39	140
North Carolina	187	151	150	189.17	756.67	1,090	-	-	-	-	81
North Dakota	248	141	2,712	38.01	50.81	531	-	-	17	17	92
Ohio	328	285	882	250.14	522.74	1,413	-	-	-	-	108
Oklahoma	362	252	2,133	57.40	53.27	1,329	-	1	-	53	113
Oregon	7,444	5,102	22,388	43.15	24.22	613	641	508	434	1,061	2,281
Pennsylvania	312	164	90	266.54	270.41	956	-	21	-	-	40
Rhode Island	31	24	94	349.40	3,625.00	1,822	-	-	-	-	5
South Carolina	200	105	109	265.16	171.07	960	-	-	-	4	70
South Dakota	458	300	2,202	37.74	25.38	2,325	3	63	111	46	51
Tennessee	446	446	1,593	388.61	648.63	2,623	-	-	-	-	145
Texas	2,538	2,146	32,358	62.43	29.83	433	182	191	226	437	878
Utah	10,533	7,075	15,168	26.37	13.48	282	1,398	1,459	1,181	1,463	1,424
Vermont	108	85	41	200.00	200.00	789	-	-	-	-	2
Virginia	111	111	196	130.30	130.30	707	-	-	-	-	33
Washington	6,738	4,722	73,419	89.94	39.05	328	200	232	451	1,348	2,322
West Virginia	159	139	220	740.00	1,850.00	1,132	-	-	-	-	40
Wisconsin	129	73	288	34.90	201.29	909	-	-	-	-	55
Wyoming	4,102	2,344	8,020	15.43	8.64	1,526	807	622	409	249	215
Water Resources Regions											
Region 01 New England	489	228	730	304.73	1,354.36	1,004	-	-	6	-	75
Region 02 Mid-Atlantic	571	334	376	150.62	404.49	1,555	-	-	-	16	126
Region 03 South Atlantic-Gulf	1,129	667	2,188	93.87	134.17	505	9	4	-	10	326
Region 04 Great Lakes	847	603	3,678	162.65	166.05	658	3	44	-	23	142
Region 05 Ohio	1,279	1,120	4,155	1,074.39	1,882.56	1,807	-	-	-	-	341
Region 06 Tennessee	303	257	544	261.69	480.68	1,298	-	-	-	-	109
Region 07 Upper Mississippi	521	332	923	40.71	176.14	473	-	-	-	20	100
Region 08 Lower Mississippi	278	225	692	32.29	42.71	2,573	-	4	5	12	42
Region 09 Souris-Red-Rainy	82	59	25	131.87	209.95	531	-	-	-	-	45
Region 10 Missouri	14,009	8,297	44,062	23.68	18.61	1,110	1,754	1,536	1,326	1,883	1,520
Region 11 Arkansas-White-Red	2,288	1,539	5,503	27.96	24.66	895	197	116	141	326	566
Region 12 Texas-Gulf	2,125	1,821	31,287	63.91	30.64	433	153	149	188	417	682
Region 13 Rio Grande	5,496	3,418	8,866	40.23	28.41	5	331	429	383	618	1,630
Region 14 Upper Colorado	11,353	7,586	14,889	24.45	12.38	656	1,737	1,782	901	1,318	1,667
Region 15 Lower Colorado	2,341	1,765	91,807	152.20	31.09	640	194	295	192	469	537
Region 16 Great Basin	8,760	5,803	16,816	26.33	12.81	284	1,302	1,197	951	1,185	1,076
Region 17 Pacific Northwest	26,408	18,065	136,053	53.16	25.35	601	2,641	2,845	2,060	4,007	6,036
Region 18 California	22,101	20,635	733,918	184.98	68.09	735	857	2,001	2,045	2,596	12,386
Region 19 Alaska	34	34	15	154.00	165.00	738	-	-	-	-	10
Region 20 Hawaii	1,596	1,224	6,668	345.54	235.42	351	7	-	2	2	831

¹ Average cost per acre and average cost per acre-foot do not include farms with off-farm water costs for irrigating square feet under protection.

² Average cost per 10,000 square feet does not include farms with off-farm water costs for irrigating acreage in the open.

Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018

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

Geographic area	Expenditures (all types) during survey year										
	Farms	Acres irrigated affected by expenditure	Expenditures ¹ (\$1,000)	Average expenditure per affected acre (dollars)	Average per farm (dollars)	Farms with expenditures 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	81,298	14,038,331	2,038,526	145	25,075	28,988	22,647	11,757	7,609	4,140	6,157
Alabama	421	18,705	6,995	374	16,616	152	152	5	69	5	38
Alaska	117	226	210	931	1,799	56	53	7	1	-	-
Arizona	947	221,475	32,470	147	34,287	155	291	279	94	45	83
Arkansas	1,176	730,424	48,157	66	40,950	174	188	184	327	187	116
California	14,428	2,314,339	693,045	299	48,035	4,225	3,760	2,065	1,653	934	1,791
Colorado	4,460	628,716	65,178	104	14,614	1,917	1,294	400	371	276	202
Connecticut	279	1,802	1,775	985	6,361	148	64	30	30	3	4
Delaware	109	15,666	3,023	193	27,733	11	50	25	2	1	20
Florida	3,135	319,490	70,489	221	22,484	1,220	890	416	313	148	148
Georgia	1,437	242,628	71,976	297	50,088	379	345	158	181	115	259
Hawaii	652	16,017	3,287	205	5,041	384	170	31	44	16	7
Idaho	4,938	1,014,631	100,871	99	20,427	2,097	1,406	641	306	166	322
Illinois	690	143,415	16,522	115	23,945	252	111	115	85	72	55
Indiana	641	109,582	11,187	102	17,453	272	123	114	56	29	47
Iowa	296	10,601	1,349	127	4,559	147	36	103	7	-	3
Kansas	1,394	749,718	70,503	94	50,576	144	376	309	193	106	266
Kentucky	494	8,802	1,187	135	2,402	345	131	8	3	4	3
Louisiana	606	264,916	20,982	79	34,624	132	87	169	91	60	67
Maine	473	6,844	2,744	401	5,801	335	78	45	6	-	9
Maryland	429	20,392	2,853	140	6,650	191	125	58	37	17	1
Massachusetts	361	10,149	2,386	235	6,610	160	97	67	23	13	1
Michigan	1,394	158,771	29,823	188	21,394	386	369	307	106	144	82
Minnesota	560	78,115	8,623	110	15,398	160	218	59	82	14	27
Mississippi	677	437,662	26,887	61	39,715	94	130	116	160	71	106
Missouri	893	168,103	13,276	79	14,866	324	225	125	135	28	56
Montana	2,784	445,984	71,318	160	25,617	1,220	754	439	96	64	211
Nebraska	3,001	1,146,966	77,065	67	25,680	389	894	610	449	349	310
Nevada	664	146,843	16,824	115	25,338	155	200	124	59	56	70
New Hampshire	356	678	402	592	1,128	165	187	4	-	-	-
New Jersey	552	29,396	17,910	609	32,446	156	169	88	44	36	59
New Mexico	3,205	300,426	33,404	111	10,422	1,062	1,098	573	315	111	46
New York	941	10,335	3,809	369	4,048	525	205	164	25	22	-
North Carolina	964	40,352	9,730	241	10,093	471	215	138	41	70	29
North Dakota	298	71,298	8,610	121	28,894	75	118	36	35	4	30
Ohio	594	13,007	5,248	404	8,836	258	173	135	14	-	14
Oklahoma	797	355,910	38,239	107	47,979	242	211	87	119	19	119
Oregon	5,524	396,601	56,200	142	10,174	2,433	1,743	648	430	104	166
Pennsylvania	826	7,338	5,822	793	7,049	471	316	22	2	1	14
Rhode Island	90	607	371	612	4,125	60	11	16	1	2	-
South Carolina	474	23,936	7,429	310	15,673	94	257	41	43	21	18
South Dakota	281	82,478	5,768	70	20,528	85	113	11	11	28	33
Tennessee	416	21,767	5,741	264	13,801	262	44	55	2	-	53
Texas	5,088	1,596,637	179,776	113	35,333	1,126	1,432	924	746	290	570
Utah	4,364	394,409	53,060	135	12,159	1,907	1,364	478	299	101	215
Vermont	237	1,007	780	775	3,291	126	74	33	-	2	2
Virginia	517	14,236	5,648	397	10,925	298	119	47	2	26	25
Washington	5,417	622,241	82,103	132	15,157	2,406	1,383	687	410	264	267
West Virginia	208	5,768	3,641	631	17,505	69	91	21	3	19	5
Wisconsin	812	129,313	11,644	90	14,340	394	119	179	44	37	39
Wyoming	1,881	489,609	32,183	66	17,109	679	588	361	44	60	149
Water Resources Regions											
Region 01 New England	1,631	20,513	7,969	388	4,886	902	443	194	60	18	14
Region 02 Mid-Atlantic	2,674	95,766	38,036	397	14,224	1,252	798	322	98	80	124
Region 03 South Atlantic-Gulf	6,457	652,193	169,914	261	26,315	2,284	1,858	802	642	359	512
Region 04 Great Lakes	2,604	229,210	37,567	164	14,427	1,070	666	453	138	178	99
Region 05 Ohio	1,877	105,125	18,354	175	9,778	894	547	258	59	57	62
Region 06 Tennessee	515	7,412	1,631	220	3,166	356	87	48	19	-	5
Region 07 Upper Mississippi	1,980	312,269	33,045	106	16,690	778	406	359	220	114	103
Region 08 Lower Mississippi	2,308	1,467,982	85,701	58	37,132	296	313	501	595	278	325
Region 09 Souris-Red-Rainy	151	27,735	7,049	254	46,683	41	53	-	16	4	37
Region 10 Missouri	9,030	2,444,919	202,163	83	22,388	2,406	2,790	1,633	882	588	731
Region 11 Arkansas-White-Red	3,435	1,595,962	171,957	108	50,060	643	884	576	547	220	565
Region 12 Texas-Gulf	4,329	1,141,237	118,993	104	27,487	1,121	1,298	679	630	237	364
Region 13 Rio Grande	2,726	309,686	48,883	158	17,932	838	881	494	260	141	112
Region 14 Upper Colorado	4,736	393,510	42,511	108	8,976	2,355	1,434	483	209	150	105
Region 15 Lower Colorado	1,136	270,994	38,020	140	33,468	270	291	306	97	79	93
Region 16 Great Basin	3,783	506,618	74,320	147	19,646	1,358	1,241	507	296	129	252
Region 17 Pacific Northwest	16,538	2,109,356	244,481	116	14,783	7,320	4,650	2,064	1,110	533	861
Region 18 California	14,619	2,331,601	694,435	298	47,502	4,364	3,784	2,040	1,686	959	1,786
Region 19 Alaska	117	226	210	931	1,799	56	53	7	1	-	7
Region 20 Hawaii	652	16,017	3,287	205	5,041	384	170	31	44	16	-

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Expenditures (all types) during survey year - con.							
	Primary purpose of expenditures							
	New expansion		Water conservation		Energy conservation		Scheduled replacement or maintenance	
	Acres	Dollars	Acres	Dollars	Acres	Dollars	Acres	Dollars
United States	1,707,313	634,328,409	2,514,490	362,623,599	665,701	88,960,424	9,150,827	952,613,963
Alabama	7,826	5,519,372	824	55,650	-	-	10,055	1,420,234
Alaska	105	122,350	6	36,000	-	-	115	52,128
Arizona	(D)	14,653,000	76,513	(D)	(D)	(D)	102,774	10,574,497
Arkansas	82,490	9,282,370	116,877	12,823,975	8,836	561,186	522,221	25,489,313
California	268,270	193,707,703	481,426	141,998,888	120,203	33,383,885	1,444,440	323,954,971
Colorado	34,612	20,495,393	192,081	14,853,249	8,974	1,328,390	393,049	28,501,169
Connecticut	134	(D)	(D)	(D)	(D)	191,380	1,639	893,897
Delaware	(D)	330,968	-	-	(D)	1,164,000	11,003	1,527,945
Florida	33,999	34,356,800	46,728	8,438,968	4,489	467,000	234,274	27,225,926
Georgia	66,592	36,777,224	23,812	268,800	2,466	3,098,600	149,758	31,831,516
Hawaii	1,661	1,221,600	1,116	374,813	900	48,000	12,340	1,642,116
Idaho	90,768	27,914,971	103,095	18,525,007	95,309	7,315,222	725,459	47,115,576
Illinois	16,423	5,639,250	16,337	670,800	26,400	699,000	84,255	9,512,734
Indiana	6,802	5,482,779	16,707	163,300	5,370	150,388	80,703	5,390,687
Iowa	586	(D)	51	(D)	-	-	9,964	981,530
Kansas	52,312	11,220,190	95,797	5,661,260	56,405	996,100	545,204	52,625,371
Kentucky	622	446,649	235	85,300	48	28,650	7,897	626,135
Louisiana	64,643	12,416,700	85,702	4,474,736	971	392,000	113,600	3,698,532
Maine	3,342	1,708,466	275	178,700	-	-	3,227	856,812
Maryland	446	518,530	821	99,000	-	-	19,125	2,235,453
Massachusetts	1,186	857,474	1,297	427,800	1,036	35,000	6,630	1,066,022
Michigan	60,822	18,240,014	25,504	2,649,475	9,290	676,380	63,155	8,257,262
Minnesota	4,626	4,349,425	6,630	622,700	12,555	589,180	54,304	3,061,705
Mississippi	45,811	9,324,396	88,376	5,415,910	1,110	33,600	302,365	12,113,378
Missouri	26,164	5,499,760	18,894	1,480,516	21,680	179,200	101,365	6,116,066
Montana	68,453	36,966,206	49,377	11,740,508	31,687	2,086,700	296,467	20,525,053
Nebraska	94,038	13,757,700	242,532	16,465,964	77,544	3,847,340	732,852	42,993,980
Nevada	10,198	1,721,800	21,288	4,100,035	1,950	274,905	113,407	10,727,649
New Hampshire	22	(D)	56	(D)	-	-	600	393,537
New Jersey	6,966	10,293,000	5,330	4,583,730	833	273,000	16,267	2,760,579
New Mexico	32,064	8,434,828	63,161	8,358,083	261	53,000	204,940	16,558,017
New York	1,337	1,989,590	1,107	100,000	168	63,000	7,723	1,656,650
North Carolina	1,992	2,513,389	1,675	138,400	-	-	36,685	7,078,123
North Dakota	(D)	(D)	-	-	(D)	(D)	45,275	4,875,880
Ohio	4,916	3,755,600	1,560	532,100	-	-	6,531	960,682
Oklahoma	128,909	13,026,750	16,978	676,750	-	-	210,023	24,535,880
Oregon	52,919	14,200,466	60,905	13,952,113	34,794	5,805,332	247,983	22,242,297
Pennsylvania	2,011	4,736,680	43	(D)	62	(D)	5,222	971,702
Rhode Island	152	(D)	(D)	(D)	(D)	40,500	276	130,243
South Carolina	6,112	4,313,800	2,298	129,840	1,505	281,700	14,021	2,703,733
South Dakota	8,037	1,416,000	1,561	96,725	6,650	557,500	66,230	3,698,095
Tennessee	5,419	3,544,550	136	86,680	-	-	16,212	2,109,820
Texas	202,552	49,405,001	253,984	23,530,802	42,116	11,355,430	1,097,985	95,485,144
Utah	45,442	9,015,858	69,134	19,621,928	16,473	3,026,600	263,360	21,395,567
Vermont	300	311,955	70	128,140	-	-	637	339,895
Virginia	5,444	3,640,800	670	130,700	-	-	8,122	1,876,632
Washington	39,694	18,344,107	101,868	11,927,511	22,089	4,206,250	458,590	47,625,087
West Virginia	350	549,400	1,177	2,132,000	-	-	4,241	959,636
Wisconsin	15,059	1,361,879	6,227	952,628	32,356	1,939,406	75,671	7,390,284
Wyoming	43,705	5,960,400	214,226	17,631,488	9,092	2,742,000	222,586	5,848,823
Water Resources Regions								
Region 01 New England	5,030	3,718,714	1,652	611,040	1,221	266,880	12,610	3,372,606
Region 02 Mid-Atlantic	16,912	20,045,078	8,574	5,632,530	4,289	1,482,600	65,991	10,875,853
Region 03 South Atlantic-Gulf	117,872	83,685,480	74,871	9,171,172	9,460	3,867,300	449,990	73,190,358
Region 04 Great Lakes	65,458	21,557,859	40,240	3,397,775	9,478	739,780	114,034	11,871,729
Region 05 Ohio	11,298	9,765,578	4,444	(D)	5,398	(D)	83,985	6,321,907
Region 06 Tennessee	1,136	887,525	825	44,130	-	-	5,451	698,892
Region 07 Upper Mississippi	33,091	8,811,854	29,399	1,865,022	65,011	2,767,586	184,768	19,600,904
Region 08 Lower Mississippi	187,292	33,195,146	289,743	19,549,973	25,061	1,110,986	965,886	31,844,865
Region 09 Souris-Red-Rainy	(D)	2,837,272	-	-	(D)	460,000	17,871	3,751,800
Region 10 Missouri	253,250	66,884,411	549,399	35,098,171	134,613	9,582,740	1,507,657	90,597,581
Region 11 Arkansas-White-Red	243,457	32,804,475	238,159	15,424,185	82,426	12,808,370	1,031,920	110,919,791
Region 12 Texas-Gulf	130,350	37,909,193	174,963	18,563,605	19,662	265,050	816,262	62,255,044
Region 13 Rio Grande	60,942	14,387,350	26,795	10,696,408	261	53,000	221,688	23,746,548
Region 14 Upper Colorado	52,175	14,152,689	117,295	11,294,214	10,943	2,124,300	213,097	14,939,298
Region 15 Lower Colorado	(D)	17,138,500	77,531	(D)	(D)	(D)	144,917	13,353,045
Region 16 Great Basin	52,796	31,799,522	86,987	20,682,828	27,583	1,920,865	339,252	19,916,977
Region 17 Pacific Northwest	144,815	38,984,610	300,232	58,548,568	135,392	16,885,444	1,528,917	130,062,378
Region 18 California	285,063	194,419,203	492,259	143,032,128	120,203	33,383,885	1,434,076	323,600,143
Region 19 Alaska	105	122,350	6	36,000	-	-	115	52,128
Region 20 Hawaii	1,661	1,221,600	1,116	374,813	900	48,000	12,340	1,642,116

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Expenditures (all types) during survey year - con.							
	Primary source of funding assistance							
	EQIP		Other USDA programs		Non-USDA assistance		No funding assistance	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States	2,513	502,040	1,874	240,081	8,520	1,933,481	90,008	11,362,729
Alabama	-	-	9	116	20	4,216	513	14,373
Alaska	1	(D)	6	(D)	-	-	128	218
Arizona	38	7,180	51	7,180	56	5,469	1,169	201,646
Arkansas	125	26,851	44	13,946	269	128,811	1,327	560,816
California	273	55,400	285	51,652	1,580	371,114	16,244	1,836,173
Colorado	257	47,854	140	24,858	214	52,051	4,687	503,953
Connecticut	-	-	-	-	16	(D)	352	(D)
Delaware	17	3,402	-	-	12	(D)	114	(D)
Florida	93	2,136	200	26,896	145	22,490	3,936	267,968
Georgia	41	(D)	72	(D)	161	17,433	1,688	215,275
Hawaii	-	-	1	(D)	49	(D)	773	15,395
Idaho	45	10,367	100	4,227	474	136,027	5,438	864,010
Illinois	-	-	-	-	172	31,842	735	111,573
Indiana	-	-	-	-	82	14,684	639	94,898
Iowa	-	-	-	-	3	(D)	360	(D)
Kansas	-	-	13	15,980	438	184,375	1,459	549,363
Kentucky	-	-	18	144	31	424	506	8,234
Louisiana	52	10,075	13	1,820	102	28,933	753	224,088
Maine	12	(D)	13	2,333	2	(D)	497	3,486
Maryland	-	-	-	-	100	2,930	413	17,462
Massachusetts	40	824	8	(D)	65	(D)	353	3,231
Michigan	20	3,400	20	200	178	18,779	1,645	136,392
Minnesota	18	7,455	-	-	52	4,940	593	65,720
Mississippi	120	81,313	28	5,730	179	27,763	722	322,856
Missouri	20	7,520	21	207	88	25,705	983	134,671
Montana	137	21,496	47	9,799	237	68,815	3,001	345,874
Nebraska	118	23,807	81	19,253	668	214,061	2,774	889,845
Nevada	65	7,790	21	6,006	128	28,705	639	104,342
New Hampshire	-	-	-	-	40	140	374	538
New Jersey	28	1,473	45	(D)	32	(D)	655	24,699
New Mexico	178	18,719	87	446	389	47,504	3,631	233,757
New York	2	(D)	23	46	68	(D)	972	9,422
North Carolina	26	26	-	-	206	3,724	987	36,602
North Dakota	17	5,100	-	-	21	6,655	305	59,543
Ohio	-	-	-	-	66	192	627	12,815
Oklahoma	-	-	13	10,400	117	29,025	950	316,485
Oregon	158	21,300	20	9,949	181	28,378	6,316	336,974
Pennsylvania	-	-	-	-	41	801	891	6,537
Rhode Island	6	(D)	-	-	-	-	98	(D)
South Carolina	14	(D)	52	(D)	47	6,708	550	15,722
South Dakota	-	-	-	-	9	8,230	300	74,248
Tennessee	-	-	-	-	45	2,429	492	19,338
Texas	115	39,417	135	12,510	945	292,689	5,595	1,252,021
Utah	248	31,024	89	1,173	370	41,361	4,611	320,851
Vermont	2	(D)	4	(D)	31	111	237	800
Virginia	-	-	-	-	34	123	592	14,113
Washington	69	5,362	9	6,021	261	26,314	6,128	584,544
West Virginia	-	-	173	185	3	3	144	5,580
Wisconsin	21	562	-	-	38	11,470	919	117,281
Wyoming	137	52,217	33	3,888	55	28,796	2,193	404,708
Water Resources Regions								
Region 01 New England	58	2,008	21	3,933	154	5,053	1,745	9,519
Region 02 Mid-Atlantic	47	5,145	92	(D)	246	(D)	2,840	82,981
Region 03 South Atlantic-Gulf	180	12,660	333	29,980	574	57,511	7,703	552,042
Region 04 Great Lakes	22	(D)	24	(D)	240	21,676	3,009	203,838
Region 05 Ohio	-	-	167	305	159	11,617	1,949	93,203
Region 06 Tennessee	-	-	-	-	91	470	596	6,942
Region 07 Upper Mississippi	39	(D)	2	(D)	222	44,703	2,170	259,545
Region 08 Lower Mississippi	279	120,749	87	19,396	513	159,875	2,602	1,167,962
Region 09 Souris-Red-Rainy	17	5,100	-	-	53	12,255	91	10,380
Region 10 Missouri	317	100,509	185	39,408	1,040	349,542	9,564	1,955,460
Region 11 Arkansas-White-Red	113	44,275	54	39,312	699	294,541	3,797	1,217,834
Region 12 Texas-Gulf	81	15,178	135	12,510	837	229,687	4,608	883,862
Region 13 Rio Grande	163	14,650	71	606	407	29,064	3,114	265,366
Region 14 Upper Colorado	274	18,455	96	2,802	144	20,143	5,029	352,110
Region 15 Lower Colorado	40	7,380	51	7,180	98	41,300	1,342	215,134
Region 16 Great Basin	175	33,945	190	8,459	498	81,781	3,853	382,433
Region 17 Pacific Northwest	436	55,311	74	23,716	938	195,525	18,619	1,834,804
Region 18 California	271	55,200	285	51,652	1,558	371,048	16,476	1,853,701
Region 19 Alaska	1	(D)	6	(D)	-	-	128	218
Region 20 Hawaii	-	-	1	(D)	49	(D)	773	15,395

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Purchase of new or replacement equipment and machinery during survey year								
	Farms	Acres irrigated affected by expenditure	Expenditures ¹ (\$1,000)	Average per farm (dollars)	Farms with expenditures 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	70,323	8,655,357	1,316,415	18,720	28,430	24,972	7,902	4,700	4,319
Alabama	356	11,591	5,839	16,403	166	106	45	5	34
Alaska	104	188	137	1,318	57	44	3	-	-
Arizona	654	83,451	20,402	31,195	116	370	53	76	39
Arkansas	924	502,710	25,394	27,483	186	266	283	152	37
California	12,400	1,339,432	334,214	26,953	4,270	4,477	1,634	970	1,049
Colorado	3,574	343,311	52,133	14,587	1,770	1,066	267	284	187
Connecticut	278	1,402	1,324	4,762	163	63	44	4	4
Delaware	84	9,382	2,333	27,773	11	28	23	6	16
Florida	2,990	219,843	36,389	12,170	1,266	1,114	353	140	117
Georgia	1,222	159,453	63,309	51,808	329	379	147	146	221
Hawaii	648	11,771	2,451	3,782	384	225	16	17	6
Idaho	4,197	663,150	80,972	19,293	1,896	1,466	382	174	279
Illinois	632	80,960	13,618	21,547	282	170	77	48	55
Indiana	562	73,399	10,363	18,440	243	177	58	37	47
Iowa	260	6,844	897	3,451	147	82	27	1	3
Kansas	1,162	427,307	49,404	42,516	135	438	236	175	178
Kentucky	490	4,819	857	1,749	391	93	-	4	2
Louisiana	514	160,700	9,310	18,112	121	174	182	11	26
Maine	415	4,662	2,130	5,131	311	86	6	3	9
Maryland	323	15,885	2,280	7,060	140	119	27	36	1
Massachusetts	350	4,696	1,504	4,298	171	152	24	2	1
Michigan	1,289	95,865	23,396	18,151	406	499	151	180	53
Minnesota	489	45,266	7,029	14,374	183	189	42	48	27
Mississippi	585	343,113	13,945	23,838	100	200	142	87	56
Missouri	757	126,268	8,567	11,318	278	274	141	43	21
Montana	2,248	243,009	58,649	26,089	1,129	779	82	73	185
Nebraska	2,475	736,173	64,648	26,120	405	989	396	424	261
Nevada	422	78,314	7,841	18,580	131	115	95	52	29
New Hampshire	356	596	370	1,038	198	158	-	-	-
New Jersey	509	18,750	12,746	25,042	156	225	54	27	47
New Mexico	2,156	149,395	19,311	8,957	917	834	262	107	36
New York	891	9,116	2,396	2,689	569	240	77	5	-
North Carolina	868	30,021	7,474	8,610	464	263	68	47	26
North Dakota	293	45,200	7,733	26,393	75	154	39	1	24
Ohio	542	8,811	4,227	7,798	276	236	16	-	14
Oklahoma	761	202,463	28,563	37,534	253	216	127	52	113
Oregon	5,099	290,561	45,810	8,984	2,366	1,913	554	153	113
Pennsylvania	795	6,369	1,992	2,505	474	291	17	6	7
Rhode Island	85	455	216	2,544	60	23	1	1	-
South Carolina	427	12,848	5,166	12,098	113	235	40	21	18
South Dakota	272	59,486	4,989	18,341	85	115	14	29	29
Tennessee	390	13,442	4,327	11,096	269	65	3	22	31
Texas	4,385	1,007,461	131,456	29,979	1,190	1,686	744	377	388
Utah	3,673	253,313	40,545	11,039	1,767	1,368	231	153	154
Vermont	235	695	549	2,337	132	98	3	2	-
Virginia	482	10,811	4,911	10,188	297	133	25	3	24
Washington	5,229	456,173	57,786	11,051	2,569	1,590	537	343	190
West Virginia	208	1,849	1,753	8,426	95	89	-	19	5
Wisconsin	807	91,203	9,256	11,470	413	218	105	47	24
Wyoming	1,456	193,375	25,503	17,516	505	682	49	87	133
Water Resources Regions									
Region 01 New England	1,556	12,032	5,819	3,739	940	515	77	10	14
Region 02 Mid-Atlantic	2,465	65,607	25,736	10,440	1,214	898	175	78	100
Region 03 South Atlantic-Gulf	5,872	436,814	120,598	20,538	2,295	2,140	642	365	430
Region 04 Great Lakes	2,429	134,451	28,413	11,697	1,154	783	227	197	68
Region 05 Ohio	1,750	83,395	15,847	9,056	1,000	570	55	64	61
Region 06 Tennessee	467	5,945	1,108	2,373	341	97	26	-	3
Region 07 Upper Mississippi	1,813	181,764	26,266	14,488	791	553	246	135	88
Region 08 Lower Mississippi	1,895	1,043,252	41,500	21,900	274	586	642	270	123
Region 09 Souris-Red-Rainy	150	26,629	6,657	44,380	41	53	16	5	35
Region 10 Missouri	7,285	1,431,458	162,763	22,342	2,163	3,044	755	705	618
Region 11 Arkansas-White-Red	2,989	897,791	126,026	42,163	620	1,050	546	361	412
Region 12 Texas-Gulf	3,702	732,488	85,502	23,096	1,231	1,370	588	269	244
Region 13 Rio Grande	1,715	169,643	32,700	19,067	664	605	237	123	86
Region 14 Upper Colorado	3,929	206,702	32,198	8,195	2,266	1,197	210	151	105
Region 15 Lower Colorado	787	104,068	23,135	29,397	177	397	59	110	44
Region 16 Great Basin	3,023	302,143	50,837	16,817	1,194	1,234	288	157	150
Region 17 Pacific Northwest	15,233	1,456,332	193,912	12,730	7,285	5,135	1,417	713	683
Region 18 California	12,511	1,352,884	334,809	26,761	4,339	4,476	1,677	970	1,049
Region 19 Alaska	104	188	137	1,318	57	44	3	-	-
Region 20 Hawaii	648	11,771	2,451	3,782	384	225	16	17	6

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Purchase of new or replacement equipment and machinery during survey year - con.							
	Primary purpose of expenditures							
	New expansion		Water conservation		Energy conservation		Scheduled replacement or maintenance	
	Acres	Dollars	Acres	Dollars	Acres	Dollars	Acres	Dollars
United States	795,913	376,229,626	801,070	218,970,092	263,692	52,279,553	6,794,682	668,935,891
Alabama	5,765	4,936,372	774	43,150	-	-	5,052	859,894
Alaska	79	74,350	3	21,000	-	-	106	41,733
Arizona	12,841	11,880,000	11,683	2,210,037	-	-	58,927	6,311,722
Arkansas	38,838	4,452,100	28,282	1,173,680	2,240	149,386	433,350	19,618,913
California	112,256	76,860,228	173,080	84,241,533	65,376	12,551,965	988,720	160,560,055
Colorado	17,919	16,554,973	58,290	10,572,150	5,796	1,130,690	261,306	23,875,065
Connecticut	101	483,000	-	-	14	151,380	1,287	689,400
Delaware	(D)	321,495	-	-	(D)	744,000	6,761	1,267,445
Florida	9,922	11,439,000	18,670	3,783,568	3,065	256,000	188,186	20,909,989
Georgia	37,341	29,736,124	28	9,600	1,894	2,738,600	120,190	30,824,828
Hawaii	1,387	750,600	980	326,263	-	-	9,404	1,374,184
Idaho	35,195	19,364,228	55,316	16,261,507	51,858	5,688,165	520,781	39,658,433
Illinois	8,653	5,106,500	1,728	408,000	840	34,000	69,739	8,069,490
Indiana	5,267	4,972,779	2,212	75,500	2,810	102,388	63,110	5,212,443
Iowa	301	144,730	51	2,890	-	-	6,492	749,530
Kansas	21,778	5,732,287	13,341	4,862,500	11,520	450,600	380,668	38,358,713
Kentucky	460	372,092	168	22,500	33	4,650	4,158	457,835
Louisiana	38,121	5,455,300	32,469	1,085,040	-	-	90,110	2,769,212
Maine	1,509	1,185,066	55	108,700	-	-	3,098	835,803
Maryland	398	436,530	-	-	-	-	15,487	1,843,865
Massachusetts	376	400,724	428	292,000	-	-	3,892	811,522
Michigan	23,314	13,747,600	17,304	1,604,360	1,010	386,380	54,237	7,657,932
Minnesota	3,302	4,017,025	80	2,400	8,955	580,000	32,929	2,429,664
Mississippi	29,432	2,485,773	33,328	1,740,246	-	-	280,353	9,719,368
Missouri	18,601	2,690,360	6,793	895,112	16,400	172,000	84,474	4,809,906
Montana	30,080	31,373,256	15,982	10,318,781	5,455	1,138,700	191,492	15,818,277
Nebraska	58,925	10,566,500	49,198	13,123,228	13,560	2,984,280	614,490	37,973,986
Nevada	3,110	361,300	4,200	2,203,785	1,950	274,905	69,054	5,000,804
New Hampshire	22	7,300	28	400	-	-	546	361,887
New Jersey	3,485	7,389,000	1,485	3,066,000	763	271,500	13,017	2,019,963
New Mexico	19,133	2,958,857	23,129	6,398,922	-	-	107,133	9,952,946
New York	1,211	766,390	807	85,000	-	-	7,098	1,544,950
North Carolina	1,051	662,264	52	84,200	-	-	28,918	6,727,417
North Dakota	5,289	3,080,272	-	-	-	-	39,911	4,652,880
Ohio	2,154	3,075,350	1,416	242,500	-	-	5,241	908,802
Oklahoma	(D)	5,007,750	(D)	272,125	-	-	184,383	23,283,322
Oregon	34,665	11,807,166	28,218	10,390,190	22,383	4,749,532	205,295	18,862,947
Pennsylvania	1,180	1,010,300	(D)	2,100	(D)	45,600	5,106	933,692
Rhode Island	88	96,574	-	-	167	40,500	200	79,200
South Carolina	2,286	2,614,400	12	3,840	78	70,200	10,472	2,477,233
South Dakota	2,635	1,353,000	1,199	91,675	-	-	55,652	3,544,095
Tennessee	2,933	2,463,210	-	-	-	-	10,509	1,864,215
Texas	104,956	34,510,743	56,401	5,559,070	13,870	9,656,180	832,234	81,730,382
Utah	37,227	8,559,508	38,817	14,402,414	2,048	1,583,200	175,221	15,999,837
Vermont	278	297,955	47	113,250	-	-	370	137,895
Virginia	(D)	3,141,800	(D)	40,700	-	-	6,520	1,728,274
Washington	18,378	14,835,146	48,862	7,767,860	9,523	3,103,100	379,410	32,080,352
West Virginia	69	252,900	39	840,000	-	-	1,741	659,636
Wisconsin	9,748	998,349	2,685	872,428	15,936	631,652	62,834	6,753,637
Wyoming	22,317	5,441,100	61,948	13,349,888	4,092	2,590,000	105,018	4,122,318
Water Resources Regions								
Region 01 New England	2,290	2,431,664	511	401,100	181	191,880	9,050	2,793,907
Region 02 Mid-Atlantic	9,993	12,471,725	2,358	3,150,800	2,819	1,061,100	50,437	9,052,094
Region 03 South Atlantic-Gulf	56,770	49,299,730	18,862	3,935,848	5,037	3,064,800	356,145	64,297,842
Region 04 Great Lakes	25,879	15,190,195	19,311	2,043,810	1,030	386,780	88,231	10,792,219
Region 05 Ohio	7,088	8,921,521	1,923	1,281,800	2,823	106,638	71,561	5,537,406
Region 06 Tennessee	533	444,910	754	29,950	-	-	4,658	633,227
Region 07 Upper Mississippi	19,139	7,445,774	4,967	900,018	19,431	785,652	138,227	17,134,616
Region 08 Lower Mississippi	106,250	14,053,853	97,909	4,793,846	18,640	321,386	820,453	22,331,040
Region 09 Souris-Red-Rainy	2,662	2,520,272	-	-	6,300	460,000	17,667	3,676,800
Region 10 Missouri	119,184	55,179,621	126,901	23,845,051	24,182	7,132,980	1,161,191	76,604,968
Region 11 Arkansas-White-Red	62,234	13,949,864	51,838	8,758,449	29,996	10,812,870	753,723	92,505,190
Region 12 Texas-Gulf	58,624	27,976,743	46,783	3,822,740	-	-	627,081	53,702,582
Region 13 Rio Grande	49,301	9,253,030	11,414	6,523,208	-	-	108,928	16,923,950
Region 14 Upper Colorado	40,180	10,223,718	35,871	9,133,788	1,735	895,600	128,916	11,944,474
Region 15 Lower Colorado	14,031	13,852,000	11,751	2,330,037	-	-	78,286	6,953,383
Region 16 Great Basin	28,107	22,800,672	40,969	14,911,364	19,178	1,408,465	213,889	11,716,362
Region 17 Pacific Northwest	63,406	32,337,656	149,349	47,994,647	66,964	13,099,437	1,176,613	100,480,490
Region 18 California	128,776	77,051,728	178,616	84,766,373	65,376	12,551,965	980,116	160,439,424
Region 19 Alaska	79	74,350	3	21,000	-	-	106	41,733
Region 20 Hawaii	1,387	750,600	980	326,263	-	-	9,404	1,374,184

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Purchase of new or replacement equipment and machinery during survey year - con.							
	Primary source of funding assistance							
	EQIP		Other USDA programs		Non-USDA assistance		No funding assistance	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States	1,408	281,024	844	111,723	5,396	1,203,032	62,675	7,059,578
Alabama	-	-	9	116	12	1,416	335	10,059
Alaska	1	(D)	3	(D)	-	-	100	183
Arizona	18	2,420	17	5,780	40	5,373	579	69,878
Arkansas	45	8,608	22	4,392	132	88,752	725	400,958
California	141	36,766	124	16,734	829	203,952	11,306	1,081,980
Colorado	150	28,217	82	8,534	166	25,292	3,176	281,268
Connecticut	-	-	-	-	13	20	265	1,382
Delaware	10	2,002	-	-	5	17	69	7,363
Florida	39	975	29	13,300	136	9,288	2,786	196,280
Georgia	40	(D)	48	(D)	115	15,938	1,019	137,153
Hawaii	-	-	1	(D)	49	(D)	598	11,149
Idaho	40	7,301	21	1,120	336	84,493	3,800	570,236
Illinois	-	-	-	-	121	14,912	511	66,048
Indiana	-	-	-	-	62	12,568	500	60,831
Iowa	-	-	-	-	2	(D)	258	(D)
Kansas	-	-	3	720	269	102,454	890	324,133
Kentucky	-	-	18	144	31	424	441	4,251
Louisiana	13	6,500	13	1,820	43	10,874	445	141,506
Maine	10	801	10	1,433	-	-	395	2,428
Maryland	-	-	-	-	65	2,709	258	13,176
Massachusetts	28	(D)	2	(D)	51	2,322	269	1,946
Michigan	20	3,400	20	200	96	7,929	1,153	84,336
Minnesota	3	2,655	-	-	52	4,940	434	37,671
Mississippi	52	45,258	20	4,450	88	22,110	425	271,295
Missouri	3	525	10	196	59	23,773	685	101,774
Montana	87	12,004	18	3,000	129	34,642	2,014	193,363
Nebraska	54	8,347	22	6,106	423	141,243	1,976	580,477
Nevada	30	1,365	18	6,003	60	12,895	314	58,051
New Hampshire	-	-	-	-	40	(D)	316	(D)
New Jersey	25	1,455	1	(D)	29	(D)	454	16,967
New Mexico	107	9,297	44	142	170	14,768	1,835	125,188
New York	2	(D)	23	(D)	47	(D)	819	8,371
North Carolina	-	-	-	-	129	2,677	739	27,344
North Dakota	17	5,100	-	-	6	4,495	270	35,605
Ohio	-	-	-	-	41	41	501	8,770
Oklahoma	-	-	13	10,400	92	19,895	656	172,168
Oregon	118	11,194	16	9,269	136	26,406	4,829	243,692
Pennsylvania	-	-	-	-	35	323	760	6,046
Rhode Island	1	(D)	-	-	-	-	84	(D)
South Carolina	14	1,246	26	130	16	2,292	371	9,180
South Dakota	-	-	-	-	1	(D)	271	(D)
Tennessee	-	-	-	-	23	1,329	367	12,113
Texas	43	28,459	52	4,760	652	219,862	3,638	754,380
Utah	149	15,667	31	568	233	25,723	3,260	211,355
Vermont	-	-	2	(D)	31	(D)	202	564
Virginia	-	-	-	-	32	62	450	10,749
Washington	69	5,362	9	6,021	227	26,021	4,924	418,769
West Virginia	-	-	86	86	3	3	119	1,760
Wisconsin	21	562	-	-	23	8,070	763	82,571
Wyoming	58	31,410	31	3,088	46	20,810	1,321	138,067
Water Resources Regions								
Region 01 New England	39	931	12	1,833	135	2,593	1,370	6,675
Region 02 Mid-Atlantic	37	(D)	48	(D)	194	(D)	2,186	57,991
Region 03 South Atlantic-Gulf	99	7,987	112	16,182	374	33,045	5,287	379,600
Region 04 Great Lakes	20	3,400	22	220	124	9,822	2,263	121,009
Region 05 Ohio	-	-	80	206	126	9,986	1,544	73,203
Region 06 Tennessee	-	-	-	-	83	462	384	5,483
Region 07 Upper Mississippi	24	(D)	2	(D)	157	24,573	1,630	153,970
Region 08 Lower Mississippi	95	57,096	61	8,694	254	112,704	1,485	864,758
Region 09 Souris-Red-Rainy	17	5,100	-	-	50	11,655	83	9,874
Region 10 Missouri	155	54,168	71	12,194	652	202,997	6,407	1,162,099
Region 11 Arkansas-White-Red	79	36,480	22	18,880	444	175,313	2,444	667,118
Region 12 Texas-Gulf	9	4,220	52	4,760	593	170,440	3,048	553,068
Region 13 Rio Grande	68	4,388	38	342	183	16,988	1,426	147,925
Region 14 Upper Colorado	172	14,018	84	2,734	114	16,479	3,559	173,471
Region 15 Lower Colorado	18	2,420	17	5,780	67	15,719	685	80,149
Region 16 Great Basin	110	14,125	69	6,891	241	34,165	2,603	246,962
Region 17 Pacific Northwest	324	32,979	26	16,090	749	157,870	14,134	1,249,393
Region 18 California	141	36,766	124	16,734	807	203,886	11,439	1,095,498
Region 19 Alaska	1	(D)	3	(D)	-	-	100	183
Region 20 Hawaii	-	-	1	(D)	49	(D)	598	11,149

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	New well construction or deepening of wells during survey year								
	Farms	Acres irrigated affected by expenditure	Expenditures ¹ (\$1,000)	Average per farm (dollars)	Farms with expenditures 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	5,702	934,273	353,259	61,954	246	1,416	1,911	1,075	1,054
Alabama	18	636	164	9,111	-	8	10	-	-
Alaska	2	(D)	(D)	(D)	-	2	-	-	-
Arizona	56	9,744	4,352	77,714	-	-	32	-	24
Arkansas	252	37,511	4,533	17,986	4	42	178	25	3
California	1,340	254,760	204,108	152,319	29	145	295	302	569
Colorado	87	18,840	1,676	19,268	-	50	5	28	4
Connecticut	-	-	-	-	-	-	-	-	-
Delaware	14	1,506	571	40,750	-	3	-	11	-
Florida	240	11,811	8,670	36,124	26	107	63	4	40
Georgia	189	15,897	5,194	27,482	50	54	67	6	12
Hawaii	-	-	-	-	-	-	-	-	-
Idaho	139	48,856	9,308	66,966	-	46	42	12	39
Illinois	63	7,896	1,374	21,802	-	-	45	18	-
Indiana	18	1,394	511	28,383	-	6	1	11	-
Iowa	2	(D)	(D)	(D)	-	-	1	1	-
Kansas	299	76,663	16,503	55,193	15	48	70	94	72
Kentucky	5	(D)	163	32,631	-	3	-	1	1
Louisiana	103	7,764	3,721	36,122	-	11	48	26	18
Maine	39	620	368	9,428	-	35	3	-	1
Maryland	41	123	296	7,220	-	27	14	-	-
Massachusetts	62	553	494	7,960	30	22	-	10	-
Michigan	200	10,220	4,474	22,370	20	39	77	64	-
Minnesota	12	1,425	386	32,178	-	-	7	5	-
Mississippi	112	17,994	2,605	23,259	-	26	50	33	3
Missouri	120	9,738	1,435	11,962	-	38	78	4	-
Montana	-	-	-	-	-	-	-	-	-
Nebraska	257	30,741	7,638	29,719	-	22	90	144	1
Nevada	65	25,272	5,589	85,985	2	15	-	7	41
New Hampshire	33	(D)	(D)	(D)	33	-	-	-	-
New Jersey	88	2,896	3,629	41,234	-	25	9	28	26
New Mexico	215	24,317	6,668	31,014	-	42	123	40	10
New York	44	(D)	418	9,500	-	22	22	-	-
North Carolina	63	454	1,062	16,857	-	8	53	2	-
North Dakota	3	(D)	(D)	(D)	-	2	-	1	-
Ohio	38	1,669	770	20,263	-	23	1	12	2
Oklahoma	35	55,400	1,749	49,975	-	3	1	26	5
Oregon	153	13,397	2,360	15,422	-	23	120	9	1
Pennsylvania	33	553	927	28,102	-	25	1	7	1
Rhode Island	13	(D)	(D)	(D)	-	9	4	-	-
South Carolina	58	2,293	1,585	27,334	-	29	12	10	7
South Dakota	-	-	-	-	-	-	-	-	-
Tennessee	61	1,747	928	15,211	7	30	22	1	1
Texas	670	177,707	27,911	41,657	-	243	227	97	103
Utah	187	37,602	5,490	29,360	-	75	55	27	30
Vermont	-	-	-	-	-	-	-	-	-
Virginia	25	683	418	16,700	-	1	24	-	-
Washington	180	14,858	13,152	73,065	30	79	33	12	26
West Virginia	47	1,042	1,062	22,596	-	23	19	-	5
Wisconsin	13	2,286	368	28,288	-	-	9	4	-
Wyoming	8	3,950	373	46,563	-	5	-	-	3
Water Resources Regions									
Region 01 New England	147	1,286	981	6,673	63	66	7	10	1
Region 02 Mid-Atlantic	206	6,751	6,736	32,701	-	81	48	39	38
Region 03 South Atlantic-Gulf	596	30,886	16,783	28,159	76	231	208	22	59
Region 04 Great Lakes	249	11,626	5,677	22,799	20	45	99	83	2
Region 05 Ohio	130	7,460	1,139	8,758	7	78	39	5	1
Region 06 Tennessee	24	(D)	(D)	(D)	-	22	2	-	-
Region 07 Upper Mississippi	73	9,034	1,909	26,148	-	-	45	28	-
Region 08 Lower Mississippi	491	68,862	11,472	23,365	4	71	317	74	25
Region 09 Souris-Red-Rainy	3	(D)	(D)	(D)	-	2	-	1	-
Region 10 Missouri	445	62,397	11,331	25,462	15	105	127	186	12
Region 11 Arkansas-White-Red	455	185,836	24,512	53,874	-	74	121	158	102
Region 12 Texas-Gulf	573	126,451	19,395	33,848	-	185	254	65	69
Region 13 Rio Grande	175	8,363	6,978	39,876	-	64	66	35	10
Region 14 Upper Colorado	8	21	24	3,000	-	7	1	-	-
Region 15 Lower Colorado	61	20,024	6,082	99,703	-	-	32	-	29
Region 16 Great Basin	265	70,032	14,909	56,262	2	90	75	34	64
Region 17 Pacific Northwest	459	69,953	20,990	45,729	30	148	175	33	73
Region 18 California	1,340	254,760	204,108	152,319	29	145	295	302	569
Region 19 Alaska	2	(D)	(D)	(D)	-	2	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	New well construction or deepening of wells during survey year - con.							
	Primary purpose of expenditures							
	New expansion		Water conservation		Energy conservation		Scheduled replacement or maintenance	
	Acres	Dollars	Acres	Dollars	Acres	Dollars	Acres	Dollars
United States	317,756	125,712,011	77,392	20,167,229	8,823	7,014,600	530,302	200,365,407
Alabama	-	-	-	-	-	-	636	164,000
Alaska	-	-	-	-	-	-	(D)	(D)
Arizona	7,332	(D)	-	-	(D)	(D)	(D)	1,960,000
Arkansas	14,624	1,962,000	2,350	95,000	520	68,000	20,017	2,407,500
California	58,499	58,884,484	18,194	6,593,133	1,425	3,922,000	176,642	134,708,477
Colorado	7,094	970,000	-	-	-	-	11,746	706,302
Connecticut	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-
Florida	10,564	8,174,200	540	108,000	1,400	420,000	106	150,500
Georgia	14,153	4,637,128	-	-	72	336,000	1,672	220,931
Hawaii	-	-	-	-	-	-	-	-
Idaho	7,350	6,310,000	-	-	2,100	280,000	39,406	2,718,240
Illinois	(D)	(D)	(D)	(D)	-	-	6,846	1,236,544
Indiana	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Iowa	(D)	(D)	-	-	-	-	(D)	(D)
Kansas	12,104	4,107,488	-	-	-	-	64,559	12,395,290
Kentucky	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Louisiana	5,423	2,835,600	1,820	520,000	341	275,000	180	90,000
Maine	596	357,500	-	-	-	-	24	10,200
Maryland	-	-	-	-	-	-	123	296,000
Massachusetts	410	451,750	33	30,800	-	-	110	11,000
Michigan	9,241	3,621,246	(D)	(D)	(D)	(D)	499	498,700
Minnesota	100	55,000	-	-	-	-	1,325	331,133
Mississippi	6,927	1,574,200	7,987	532,000	(D)	(D)	(D)	(D)
Missouri	3,087	687,000	1,501	240,000	-	-	5,150	508,400
Montana	-	-	-	-	-	-	-	-
Nebraska	7,725	2,595,000	6,353	1,351,296	2,065	400,000	14,598	3,291,504
Nevada	1,400	1,260,000	-	-	-	-	23,872	4,329,045
New Hampshire	-	-	-	-	-	-	(D)	(D)
New Jersey	1,081	2,489,000	198	770,000	-	-	1,617	369,616
New Mexico	3,724	3,398,070	-	-	-	-	20,593	3,269,875
New York	(D)	418,000	-	-	-	-	-	-
North Carolina	454	1,062,000	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	(D)	(D)
Ohio	(D)	(D)	(D)	(D)	-	-	-	-
Oklahoma	52,200	1,265,000	2,320	320,000	-	-	880	164,136
Oregon	-	-	6,482	772,500	60	60,000	6,855	1,527,028
Pennsylvania	(D)	(D)	-	-	-	-	(D)	(D)
Rhode Island	8	48,000	-	-	-	-	(D)	(D)
South Carolina	1,399	1,306,400	-	-	150	150,000	744	129,000
South Dakota	-	-	-	-	-	-	-	-
Tennessee	1,740	926,500	-	-	-	-	7	1,400
Texas	81,701	11,782,708	25,928	5,604,000	-	-	70,078	10,523,800
Utah	189	94,500	891	1,296,000	-	-	36,522	4,099,800
Vermont	-	-	-	-	-	-	-	-
Virginia	(D)	(D)	-	-	-	-	(D)	(D)
Washington	653	472,000	-	-	-	-	14,205	12,679,751
West Virginia	23	46,000	1,019	1,016,000	-	-	-	-
Wisconsin	6	60,000	-	-	-	-	2,280	307,747
Wyoming	3,000	7,500	950	365,000	-	-	-	-
Water Resources Regions								
Region 01 New England	1,014	857,250	33	30,800	-	-	239	92,843
Region 02 Mid-Atlantic	2,281	3,955,380	1,198	1,520,000	1,400	420,000	1,872	841,116
Region 03 South Atlantic-Gulf	26,617	15,275,928	547	143,000	222	486,000	3,500	878,131
Region 04 Great Lakes	10,597	4,574,246	(D)	(D)	(D)	(D)	(D)	(D)
Region 05 Ohio	2,033	425,857	395	305,500	-	-	5,032	407,244
Region 06 Tennessee	22	(D)	-	-	-	-	(D)	(D)
Region 07 Upper Mississippi	(D)	(D)	(D)	(D)	-	-	8,366	1,656,780
Region 08 Lower Mississippi	26,644	6,386,600	13,635	1,332,000	971	356,600	27,612	3,396,900
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	(D)	(D)
Region 10 Missouri	21,386	4,611,000	7,303	1,716,296	2,065	400,000	31,643	4,603,279
Region 11 Arkansas-White-Red	86,398	9,621,796	2,320	320,000	-	-	97,118	14,570,651
Region 12 Texas-Gulf	58,551	7,800,900	25,928	5,604,000	-	-	41,972	5,989,800
Region 13 Rio Grande	6,124	3,438,070	-	-	-	-	2,239	3,540,302
Region 14 Upper Colorado	(D)	(D)	-	-	-	-	(D)	(D)
Region 15 Lower Colorado	7,332	(D)	-	-	(D)	(D)	(D)	3,689,875
Region 16 Great Basin	8,909	7,614,500	891	1,296,000	-	-	60,232	5,998,845
Region 17 Pacific Northwest	683	522,000	6,482	772,500	2,160	340,000	60,628	19,355,019
Region 18 California	58,499	58,884,484	18,194	6,593,133	1,425	3,922,000	176,642	134,708,477
Region 19 Alaska	-	-	-	-	-	-	(D)	(D)
Region 20 Hawaii	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	New well construction or deepening of wells during survey year - con.							
	Primary source of funding assistance							
	EQIP		Other USDA programs		Non-USDA assistance		No funding assistance	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States	107	10,937	218	19,951	962	186,321	4,415	717,064
Alabama	-	-	-	-	-	-	18	636
Alaska	-	-	-	-	-	-	2	(D)
Arizona	1	(D)	-	-	-	-	55	(D)
Arkansas	23	(D)	2	(D)	57	9,201	170	23,317
California	7	2,800	5	10,800	238	63,507	1,090	177,653
Colorado	-	-	-	-	5	534	82	18,306
Connecticut	-	-	-	-	-	-	-	-
Delaware	7	1,400	-	-	7	106	-	-
Florida	-	-	26	1,300	1	(D)	213	(D)
Georgia	-	-	24	72	-	-	165	15,825
Hawaii	-	-	-	-	-	-	-	-
Idaho	-	-	20	320	23	9,838	96	38,698
Illinois	-	-	-	-	17	1,700	46	6,196
Indiana	-	-	-	-	1	(D)	17	(D)
Iowa	-	-	-	-	1	(D)	1	(D)
Kansas	-	-	4	560	112	34,839	183	41,264
Kentucky	-	-	-	-	-	-	5	(D)
Louisiana	26	2,860	-	-	13	260	64	4,644
Maine	-	-	-	-	2	(D)	37	(D)
Maryland	-	-	-	-	21	90	20	33
Massachusetts	10	400	-	-	10	(D)	42	(D)
Michigan	-	-	-	-	31	4,700	169	5,520
Minnesota	-	-	-	-	-	-	12	1,425
Mississippi	-	-	8	1,280	19	1,087	85	15,627
Missouri	-	-	3	3	12	1,400	105	8,335
Montana	-	-	-	-	-	-	-	-
Nebraska	-	-	14	1,246	89	9,680	154	19,815
Nevada	-	-	-	-	37	6,500	28	18,772
New Hampshire	-	-	-	-	-	-	33	(D)
New Jersey	-	-	22	(D)	1	(D)	65	2,298
New Mexico	-	-	-	-	43	12,245	172	12,072
New York	-	-	-	-	-	-	44	(D)
North Carolina	26	(D)	-	-	27	(D)	10	320
North Dakota	-	-	-	-	1	(D)	2	(D)
Ohio	-	-	-	-	9	135	29	1,534
Oklahoma	-	-	-	-	-	-	35	55,400
Oregon	-	-	-	-	-	-	153	13,397
Pennsylvania	-	-	-	-	2	(D)	31	(D)
Rhode Island	4	8	-	-	-	-	9	(D)
South Carolina	-	-	26	130	16	1,161	16	1,002
South Dakota	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	22	1,100	39	647
Texas	-	-	20	1,000	43	14,055	607	162,652
Utah	-	-	-	-	75	10,557	112	27,045
Vermont	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	1	(D)	24	(D)
Washington	-	-	-	-	26	26	154	14,832
West Virginia	-	-	42	42	-	-	5	1,000
Wisconsin	-	-	-	-	-	-	13	2,286
Wyoming	3	(D)	2	(D)	-	-	3	3,000
Water Resources Regions								
Region 01 New England	14	408	-	-	12	14	121	864
Region 02 Mid-Atlantic	7	1,400	22	198	31	826	146	4,327
Region 03 South Atlantic-Gulf	26	(D)	76	(D)	52	(D)	442	25,731
Region 04 Great Lakes	-	-	-	-	41	5,002	208	6,624
Region 05 Ohio	-	-	42	42	-	-	88	7,418
Region 06 Tennessee	-	-	-	-	-	-	24	(D)
Region 07 Upper Mississippi	-	-	-	-	17	1,700	56	7,334
Region 08 Lower Mississippi	47	5,453	10	3,480	108	11,621	326	48,308
Region 09 Souris-Red-Rainy	-	-	-	-	1	(D)	2	(D)
Region 10 Missouri	3	150	19	2,049	109	13,150	314	47,048
Region 11 Arkansas-White-Red	2	(D)	4	(D)	120	36,679	329	148,397
Region 12 Texas-Gulf	-	-	20	1,000	33	12,615	520	112,836
Region 13 Rio Grande	-	-	-	-	33	165	142	8,198
Region 14 Upper Colorado	-	-	-	-	1	(D)	7	(D)
Region 15 Lower Colorado	1	(D)	-	-	5	10,280	55	(D)
Region 16 Great Basin	-	-	20	320	105	23,895	140	45,817
Region 17 Pacific Northwest	-	-	-	-	56	3,026	403	66,927
Region 18 California	7	2,800	5	10,800	238	63,507	1,090	177,653
Region 19 Alaska	-	-	-	-	-	-	2	(D)
Region 20 Hawaii	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Construction or improvement of permanent storage and distribution systems during survey year								
	Farms	Acres irrigated affected by expenditure	Expenditures ¹ (\$1,000)	Average per farm (dollars)	Farms with expenditures 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	7,512	1,034,744	132,137	17,590	2,284	3,464	956	463	345
Alabama	52	575	287	5,510	25	-	27	-	-
Alaska	17	17	39	2,306	3	14	-	-	-
Arizona	157	22,852	1,977	12,590	17	69	65	2	4
Arkansas	127	37,180	4,456	35,090	15	43	35	20	14
California	965	219,585	74,523	77,226	83	397	128	181	176
Colorado	900	92,486	6,241	6,935	304	398	156	26	16
Connecticut	1	(D)	(D)	(D)	-	-	-	-	1
Delaware	-	-	-	-	-	-	-	-	-
Florida	187	9,505	5,500	29,410	-	129	28	-	30
Georgia	79	2,366	1,253	15,864	9	23	23	24	-
Hawaii	10	2,504	189	18,900	-	7	1	1	1
Idaho	704	91,391	2,195	3,118	314	332	46	12	-
Illinois	40	(D)	(D)	(D)	20	15	5	-	-
Indiana	1	(D)	(D)	(D)	-	1	-	-	-
Iowa	39	798	163	4,169	3	36	-	-	-
Kansas	26	9,350	424	16,308	-	4	19	3	-
Kentucky	28	54	107	3,804	-	26	2	-	-
Louisiana	41	6,321	1,407	34,317	-	29	9	-	3
Maine	34	1,247	170	5,004	27	2	3	2	-
Maryland	33	2,503	34	1,030	24	9	-	-	-
Massachusetts	5	540	(D)	(D)	-	2	3	-	-
Michigan	74	888	562	7,595	-	54	20	-	-
Minnesota	2	(D)	(D)	(D)	2	-	-	-	-
Mississippi	43	2,078	769	17,894	13	6	13	11	-
Missouri	47	2,756	104	2,221	36	4	7	-	-
Montana	668	112,815	4,864	7,282	260	306	59	39	4
Nebraska	72	32,685	494	6,863	36	20	16	-	-
Nevada	140	20,532	617	4,409	89	30	16	5	-
New Hampshire	-	-	-	-	-	-	-	-	-
New Jersey	19	724	261	13,737	-	14	4	-	1
New Mexico	543	21,889	1,151	2,120	217	292	34	-	-
New York	96	393	802	8,354	-	74	-	22	-
North Carolina	87	344	632	7,263	58	-	28	1	-
North Dakota	4	4,640	100	25,000	-	-	4	-	-
Ohio	51	(D)	(D)	(D)	35	15	1	-	-
Oklahoma	71	7,671	3,357	47,286	-	26	18	1	26
Oregon	547	55,041	3,607	6,593	176	297	54	18	2
Pennsylvania	24	58	866	36,083	-	22	-	-	2
Rhode Island	5	(D)	(D)	(D)	-	4	-	1	-
South Carolina	36	1,088	93	2,569	25	4	7	-	-
South Dakota	13	(D)	122	9,346	-	5	8	-	-
Tennessee	9	117	87	9,667	-	8	-	1	-
Texas	301	21,715	3,799	12,622	84	149	24	33	11
Utah	361	29,643	2,256	6,249	77	218	35	27	4
Vermont	5	(D)	(D)	(D)	-	3	-	-	2
Virginia	24	(D)	151	6,271	-	22	1	-	1
Washington	279	25,624	2,869	10,283	112	130	3	28	6
West Virginia	31	148	101	3,242	5	23	3	-	-
Wisconsin	1	(D)	(D)	(D)	-	1	-	-	-
Wyoming	513	190,109	4,797	9,351	215	201	51	5	41
Water Resources Regions									
Region 01 New England	48	2,138	485	10,097	27	11	6	3	1
Region 02 Mid-Atlantic	86	3,502	1,223	14,215	29	49	4	-	4
Region 03 South Atlantic-Gulf	422	15,112	8,194	19,417	78	162	121	31	30
Region 04 Great Lakes	150	1,585	1,508	10,057	3	102	21	22	2
Region 05 Ohio	170	(D)	452	2,660	47	117	6	-	-
Region 06 Tennessee	52	(D)	15	279	52	-	-	-	-
Region 07 Upper Mississippi	64	736	215	3,358	25	34	5	-	-
Region 08 Lower Mississippi	155	44,043	5,681	36,650	14	64	39	26	12
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-
Region 10 Missouri	1,177	251,972	12,411	10,545	338	524	197	65	53
Region 11 Arkansas-White-Red	256	38,650	6,064	23,689	66	74	70	4	42
Region 12 Texas-Gulf	196	15,411	666	3,398	64	110	20	2	-
Region 13 Rio Grande	619	40,849	2,820	4,556	228	360	-	31	-
Region 14 Upper Colorado	834	132,802	3,817	4,576	350	353	124	2	5
Region 15 Lower Colorado	162	23,172	2,172	13,409	17	69	68	2	6
Region 16 Great Basin	455	48,708	2,302	5,060	166	233	20	32	4
Region 17 Pacific Northwest	1,644	187,295	8,945	5,441	671	784	129	49	11
Region 18 California	995	225,725	74,939	75,315	106	397	125	193	174
Region 19 Alaska	17	17	39	2,306	3	14	-	-	-
Region 20 Hawaii	10	2,504	189	18,900	-	7	1	1	1

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Construction or improvement of permanent storage and distribution systems during survey year - con.							
	Primary purpose of expenditures							
	New expansion		Water conservation		Energy conservation		Scheduled replacement or maintenance	
	Acres	Dollars	Acres	Dollars	Acres	Dollars	Acres	Dollars
United States	127,081	45,977,881	280,421	49,360,504	35,852	13,521,000	591,390	23,277,584
Alabama	-	-	50	12,500	-	-	525	274,000
Alaska	12	23,250	(D)	(D)	-	-	(D)	(D)
Arizona	-	-	3,348	810,000	-	-	19,504	1,166,575
Arkansas	1,283	92,300	12,240	3,410,321	1,600	10,000	22,057	943,750
California	27,499	28,218,684	90,693	28,675,287	22,005	11,695,020	79,388	5,933,900
Colorado	360	482,400	28,209	2,766,415	92	80,500	63,825	2,912,105
Connecticut	-	-	-	-	-	-	(D)	(D)
Delaware	-	-	-	-	-	-	-	-
Florida	2,366	4,165,600	1,800	300,000	104	91,000	5,235	943,100
Georgia	1,773	1,203,772	-	-	-	-	593	49,500
Hawaii	(D)	(D)	(D)	42,000	-	-	2,460	(D)
Idaho	(D)	(D)	10,896	594,100	(D)	(D)	55,016	1,179,947
Illinois	455	67,750	(D)	(D)	-	-	(D)	70,500
Indiana	-	-	-	-	-	-	(D)	(D)
Iowa	72	72,000	-	-	-	-	726	90,600
Kansas	3,750	180,000	2,600	94,000	-	-	3,000	150,000
Kentucky	18	45,000	21	37,500	15	24,000	-	-
Louisiana	-	-	4,180	1,262,000	341	55,000	1,800	90,000
Maine	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Maryland	8	2,000	-	-	-	-	2,495	32,000
Massachusetts	-	-	(D)	45,000	-	-	(D)	(D)
Michigan	68	94,000	820	468,000	-	-	-	-
Minnesota	-	-	(D)	(D)	-	-	-	-
Mississippi	1,090	575,000	18	240	-	-	970	194,220
Missouri	1,750	70,000	72	8,604	-	-	934	25,760
Montana	22,908	821,950	15,912	873,399	-	-	73,995	3,168,936
Nebraska	-	-	-	-	-	-	32,685	494,156
Nevada	5,385	52,500	8,225	530,250	-	-	6,922	34,500
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	(D)	(D)	(D)	(D)	-	-	-	-
New Mexico	515	20,500	1,650	468,600	30	20,000	19,694	642,176
New York	45	706,000	-	-	168	63,000	180	33,000
North Carolina	240	571,600	-	-	-	-	104	60,266
North Dakota	-	-	-	-	-	-	4,640	100,000
Ohio	-	-	(D)	39,600	-	-	293	(D)
Oklahoma	5,400	3,050,000	46	36,000	-	-	2,225	271,322
Oregon	(D)	(D)	22,007	1,084,600	(D)	(D)	30,449	1,122,237
Pennsylvania	(D)	(D)	(D)	(D)	-	-	-	-
Rhode Island	(D)	(D)	(D)	(D)	-	-	-	-
South Carolina	113	40,000	-	-	-	-	975	52,500
South Dakota	-	-	-	-	2,810	77,500	(D)	44,000
Tennessee	(D)	(D)	(D)	(D)	-	-	-	-
Texas	2,435	877,500	1,795	1,451,000	1,358	1,157,000	16,127	313,600
Utah	1,200	100,000	5,702	1,572,588	405	32,400	22,336	550,770
Vermont	-	-	-	-	-	-	(D)	(D)
Virginia	-	-	(D)	(D)	-	-	49	(D)
Washington	10,180	1,390,241	1,852	935,200	-	-	13,592	543,470
West Virginia	148	100,500	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	(D)	(D)
Wyoming	15,390	241,800	66,942	3,364,500	-	-	107,777	1,190,605
Water Resources Regions								
Region 01 New England	1,002	146,300	672	(D)	-	-	464	(D)
Region 02 Mid-Atlantic	577	948,500	424	236,000	-	-	2,501	38,000
Region 03 South Atlantic-Gulf	5,092	6,280,972	1,818	300,240	104	91,000	8,098	1,521,561
Region 04 Great Lakes	90	754,000	820	468,000	168	63,000	507	223,480
Region 05 Ohio	(D)	159,750	242	178,100	15	24,000	(D)	90,313
Region 06 Tennessee	-	-	(D)	12,500	-	-	(D)	2,025
Region 07 Upper Mississippi	512	(D)	79	(D)	-	-	145	74,500
Region 08 Lower Mississippi	1,715	316,900	16,120	4,217,321	1,941	65,000	24,267	1,081,550
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-
Region 10 Missouri	38,554	1,105,100	44,000	5,676,700	2,810	77,500	166,608	5,552,184
Region 11 Arkansas-White-Red	11,208	3,360,400	10,665	1,013,600	1,320	1,100,000	15,457	590,322
Region 12 Texas-Gulf	195	77,500	498	306,000	38	57,000	14,680	225,600
Region 13 Rio Grande	755	740,500	1,957	1,277,000	30	20,000	38,107	782,706
Region 14 Upper Colorado	2,594	607,600	58,366	1,436,615	92	80,500	71,750	1,691,888
Region 15 Lower Colorado	-	-	3,548	970,000	-	-	19,624	1,202,272
Region 16 Great Basin	5,705	82,500	14,015	1,655,938	405	32,400	28,583	531,270
Region 17 Pacific Northwest	31,460	2,968,925	30,645	2,309,799	6,924	215,580	118,266	3,450,914
Region 18 California	27,499	28,218,684	96,493	29,115,287	22,005	11,695,020	79,728	5,909,703
Region 19 Alaska	12	23,250	(D)	(D)	-	-	(D)	(D)
Region 20 Hawaii	(D)	(D)	(D)	42,000	-	-	2,460	(D)

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Construction or improvement of permanent storage and distribution systems during survey year - con.							
	Primary source of funding assistance							
	EQIP		Other USDA programs		Non-USDA assistance		No funding assistance	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States	262	53,831	190	17,054	464	84,645	6,596	879,214
Alabama	-	-	-	-	2	(D)	50	(D)
Alaska	-	-	3	3	-	-	14	14
Arizona	3	2,660	16	288	-	-	138	19,904
Arkansas	23	10,380	9	2,850	5	1,680	90	22,270
California	15	4,443	22	6,600	120	27,613	808	180,929
Colorado	45	8,987	30	1,988	28	3,880	797	77,631
Connecticut	-	-	-	-	1	(D)	-	-
Delaware	-	-	-	-	-	-	-	-
Florida	-	-	26	(D)	2	(D)	159	7,144
Georgia	-	-	-	-	23	575	56	1,791
Hawaii	-	-	-	-	-	-	10	2,504
Idaho	-	-	20	320	43	17,812	641	73,259
Illinois	-	-	-	-	15	(D)	25	460
Indiana	-	-	-	-	-	-	1	(D)
Iowa	-	-	-	-	-	-	39	798
Kansas	-	-	-	-	-	-	26	9,350
Kentucky	-	-	-	-	-	-	28	54
Louisiana	-	-	-	-	-	-	41	6,321
Maine	2	(D)	3	(D)	-	-	29	(D)
Maryland	-	-	-	-	-	-	33	2,503
Massachusetts	-	-	2	(D)	2	(D)	1	(D)
Michigan	-	-	-	-	-	-	74	888
Minnesota	-	-	-	-	-	-	2	(D)
Mississippi	5	490	-	-	6	600	32	988
Missouri	-	-	-	-	-	-	47	2,756
Montana	23	230	4	2,000	5	4,749	636	105,836
Nebraska	-	-	-	-	-	-	72	32,685
Nevada	20	5,300	-	-	16	7,960	104	7,272
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	3	(D)	-	-	1	(D)	15	(D)
New Mexico	-	-	-	-	67	1,854	476	20,035
New York	-	-	-	-	21	168	75	225
North Carolina	-	-	-	-	26	26	61	318
North Dakota	-	-	-	-	-	-	4	4,640
Ohio	-	-	-	-	16	(D)	35	371
Oklahoma	-	-	-	-	1	(D)	70	(D)
Oregon	-	-	2	(D)	14	(D)	531	54,527
Pennsylvania	-	-	-	-	-	-	24	58
Rhode Island	1	(D)	-	-	-	-	4	15
South Carolina	-	-	-	-	3	105	33	983
South Dakota	-	-	-	-	4	2,700	9	(D)
Tennessee	-	-	-	-	-	-	9	117
Texas	-	-	-	-	2	(D)	299	(D)
Utah	54	837	27	27	35	4,271	245	24,508
Vermont	2	(D)	-	-	-	-	3	3
Virginia	-	-	-	-	-	-	24	(D)
Washington	-	-	-	-	-	-	279	25,624
West Virginia	-	-	26	(D)	-	-	5	(D)
Wisconsin	-	-	-	-	-	-	1	(D)
Wyoming	66	20,157	-	-	6	7,536	441	162,416
Water Resources Regions								
Region 01 New England	3	(D)	5	1,300	3	(D)	37	185
Region 02 Mid-Atlantic	3	(D)	-	-	1	(D)	82	3,084
Region 03 South Atlantic-Gulf	-	-	26	(D)	62	2,767	334	(D)
Region 04 Great Lakes	2	(D)	-	-	21	(D)	127	1,361
Region 05 Ohio	-	-	26	38	16	(D)	128	365
Region 06 Tennessee	-	-	-	-	-	-	52	(D)
Region 07 Upper Mississippi	-	-	-	-	15	105	49	631
Region 08 Lower Mississippi	23	10,570	9	2,850	5	1,680	118	28,943
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-
Region 10 Missouri	67	12,589	28	3,680	19	15,985	1,063	219,718
Region 11 Arkansas-White-Red	19	6,880	4	(D)	1	(D)	232	31,090
Region 12 Texas-Gulf	-	-	-	-	2	(D)	194	(D)
Region 13 Rio Grande	-	-	-	-	67	1,854	552	38,995
Region 14 Upper Colorado	78	3,237	2	(D)	24	(D)	730	126,657
Region 15 Lower Colorado	5	2,860	16	288	-	-	141	20,024
Region 16 Great Basin	20	5,300	47	347	70	13,561	318	29,500
Region 17 Pacific Northwest	29	7,805	2	(D)	38	(D)	1,575	162,494
Region 18 California	13	4,243	22	6,600	120	27,613	840	187,269
Region 19 Alaska	-	-	3	3	-	-	14	14
Region 20 Hawaii	-	-	-	-	-	-	10	2,504

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Computers, control panels, and computer controlled valves and hardware for irrigation water management during survey year								
	Farms	Acres irrigated affected by expenditure	Expenditures ¹ (\$1,000)	Average per farm (dollars)	Farms with expenditures 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	10,207	2,569,167	75,910	7,437	3,128	5,145	1,346	473	115
Alabama	32	1,248	83	2,589	19	10	3	-	-
Alaska	1	(D)	(D)	(D)	1	-	-	-	-
Arizona	108	45,194	1,130	10,467	-	77	18	13	-
Arkansas	145	81,488	1,815	12,516	27	46	49	23	-
California	1,640	244,625	19,850	12,103	405	847	201	147	40
Colorado	330	151,945	1,584	4,799	100	190	31	9	-
Connecticut	60	81	115	1,910	57	-	2	1	-
Delaware	45	4,778	119	2,655	-	45	-	-	-
Florida	562	23,642	2,736	4,868	232	313	5	6	6
Georgia	374	43,168	1,291	3,451	205	140	16	7	6
Hawaii	90	1,475	221	2,455	72	10	6	2	-
Idaho	521	201,041	6,573	12,616	78	280	109	43	11
Illinois	170	53,824	1,373	8,076	5	129	22	14	-
Indiana	137	34,596	280	2,046	88	46	2	1	-
Iowa	44	2,795	215	4,879	4	40	-	-	-
Kansas	360	225,078	2,559	7,110	93	174	85	2	6
Kentucky	10	(D)	(D)	(D)	7	1	2	-	-
Louisiana	45	31,478	347	7,709	12	13	20	-	-
Maine	36	315	77	2,127	3	33	-	-	-
Maryland	96	1,841	163	1,694	79	12	5	-	-
Massachusetts	46	3,948	203	4,409	38	5	-	2	1
Michigan	193	50,716	1,020	5,286	21	132	39	-	1
Minnesota	139	31,062	980	7,054	50	49	25	15	-
Mississippi	148	40,922	1,206	8,149	35	52	58	1	2
Missouri	76	18,860	334	4,400	27	41	8	-	-
Montana	221	58,465	951	4,303	86	88	45	2	-
Nebraska	775	346,521	3,752	4,841	112	551	106	5	1
Nevada	70	7,648	1,305	18,640	18	15	22	15	-
New Hampshire	4	28	(Z)	100	4	-	-	-	-
New Jersey	81	4,919	821	10,139	42	25	10	-	4
New Mexico	240	60,149	786	3,277	100	101	34	5	-
New York	28	(D)	154	5,496	3	22	3	-	-
North Carolina	122	7,165	190	1,559	53	66	3	-	-
North Dakota	30	19,514	213	7,107	2	22	5	1	-
Ohio	60	2,120	74	1,228	56	3	1	-	-
Oklahoma	108	76,576	3,289	30,449	36	29	30	-	13
Oregon	549	30,706	1,844	3,359	253	244	42	10	-
Pennsylvania	76	320	33	434	74	-	2	-	-
Rhode Island	-	-	-	-	-	-	-	-	-
South Carolina	108	4,554	212	1,963	26	79	3	-	-
South Dakota	19	19,960	653	34,368	-	2	13	-	4
Tennessee	69	6,424	352	5,097	28	33	7	-	1
Texas	955	329,108	4,554	4,768	202	616	124	6	7
Utah	288	42,798	1,943	6,746	89	161	6	28	4
Vermont	29	229	27	939	27	2	-	-	-
Virginia	80	2,244	112	1,404	53	25	1	1	-
Washington	590	122,132	7,181	12,171	113	270	118	85	4
West Virginia	24	2,519	566	23,583	-	-	19	5	-
Wisconsin	126	35,111	1,778	14,111	58	30	13	21	4
Wyoming	147	94,446	817	5,557	35	76	33	3	-
Water Resources Regions									
Region 01 New England	173	4,581	408	2,356	129	38	2	3	1
Region 02 Mid-Atlantic	353	16,862	1,572	4,454	216	107	21	5	4
Region 03 South Atlantic-Gulf	1,240	81,190	4,689	3,782	555	617	43	13	12
Region 04 Great Lakes	326	80,120	1,399	4,291	98	183	42	2	1
Region 05 Ohio	195	13,790	838	4,300	116	45	31	2	1
Region 06 Tennessee	70	(D)	(D)	(D)	68	2	-	-	-
Region 07 Upper Mississippi	425	119,032	4,167	9,804	75	241	57	48	4
Region 08 Lower Mississippi	320	166,107	3,537	11,054	39	133	122	24	2
Region 09 Souris-Red-Rainy	3	(D)	(D)	(D)	2	-	-	1	-
Region 10 Missouri	1,528	654,285	7,338	4,803	377	924	210	12	5
Region 11 Arkansas-White-Red	559	417,140	7,057	12,625	75	308	147	7	22
Region 12 Texas-Gulf	750	210,096	2,994	3,993	179	485	81	1	4
Region 13 Rio Grande	272	60,003	986	3,624	120	97	55	-	-
Region 14 Upper Colorado	70	20,060	1,313	18,763	3	18	17	32	-
Region 15 Lower Colorado	120	56,228	1,298	10,814	4	80	18	18	-
Region 16 Great Basin	314	48,714	2,585	8,169	103	162	24	21	4
Region 17 Pacific Northwest	1,748	374,808	15,556	8,899	491	838	269	135	15
Region 18 California	1,650	244,005	19,909	12,066	405	857	201	147	40
Region 19 Alaska	1	(D)	(D)	(D)	1	-	-	-	-
Region 20 Hawaii	90	1,475	221	2,455	72	10	6	2	-

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Computers, control panels, and computer controlled valves and hardware for irrigation water management during survey year - con.							
	Primary purpose of expenditures							
	New expansion		Water conservation		Energy conservation		Scheduled replacement or maintenance	
	Acres	Dollars	Acres	Dollars	Acres	Dollars	Acres	Dollars
United States	297,548	18,102,307	1,024,603	22,904,059	343,919	12,009,385	903,097	22,894,185
Alabama	406	42,000	-	-	-	-	842	40,840
Alaska	(D)	(D)	-	-	-	-	-	-
Arizona	11,163	472,400	25,903	561,000	(D)	(D)	(D)	(D)
Arkansas	395	21,000	39,366	635,375	3,616	95,800	38,111	1,062,650
California	43,321	7,667,234	91,193	5,439,674	22,897	2,184,000	87,214	4,558,789
Colorado	4,339	177,600	98,611	881,434	2,990	50,000	46,005	474,676
Connecticut	(D)	(D)	-	-	(D)	(D)	(D)	9,600
Delaware	(D)	(D)	-	-	-	-	(D)	(D)
Florida	5,649	519,000	12,607	1,501,400	1,320	120,000	4,066	595,380
Georgia	10,823	656,300	23,784	259,200	500	24,000	8,061	351,000
Hawaii	(D)	(D)	(D)	(D)	900	48,000	443	164,432
Idaho	26,042	1,483,900	33,437	693,150	34,757	1,249,691	106,805	3,145,956
Illinois	6,445	340,000	14,304	233,300	25,560	665,000	7,515	134,700
Indiana	(D)	(D)	14,435	77,300	(D)	(D)	17,432	114,044
Iowa	179	83,290	-	-	-	-	2,616	131,400
Kansas	8,505	91,300	79,856	704,760	44,425	449,500	92,292	1,313,868
Kentucky	-	-	(D)	21,300	-	-	(D)	(D)
Louisiana	-	-	24,267	135,600	-	-	7,211	211,320
Maine	291	73,500	-	-	-	-	24	3,060
Maryland	-	-	821	99,000	-	-	1,020	63,588
Massachusetts	-	-	(D)	(D)	(D)	35,000	2,516	(D)
Michigan	27,137	426,500	6,960	293,115	8,200	200,000	8,419	100,630
Minnesota	(D)	85,400	6,418	585,000	(D)	9,180	20,050	300,908
Mississippi	(D)	(D)	35,359	1,000,106	(D)	(D)	3,775	173,110
Missouri	1,768	10,600	9,680	240,000	5,280	7,200	2,132	76,600
Montana	-	-	15,753	341,548	23,032	308,000	19,680	301,500
Nebraska	27,152	240,800	186,371	1,813,440	61,919	463,060	71,079	1,234,334
Nevada	3	3,000	3,223	804,300	-	-	4,422	497,500
New Hampshire	-	-	28	400	-	-	-	-
New Jersey	(D)	(D)	3,323	586,730	(D)	(D)	1,396	181,000
New Mexico	857	86,400	15,295	46,000	231	33,000	43,766	621,005
New York	(D)	79,200	-	-	-	-	405	74,700
North Carolina	27	8,700	1,475	41,100	-	-	5,663	140,440
North Dakota	(D)	202,200	-	-	(D)	(D)	(D)	(D)
Ohio	(D)	40,250	-	-	-	-	(D)	33,400
Oklahoma	58,170	3,104,000	3,671	48,625	-	-	14,735	135,900
Oregon	12,778	298,200	835	207,388	12,011	875,800	5,082	462,635
Pennsylvania	(D)	(D)	-	-	-	-	(D)	(D)
Rhode Island	-	-	-	-	-	-	-	-
South Carolina	1,477	120,500	-	-	1,277	61,500	1,800	30,000
South Dakota	5,400	(D)	(D)	(D)	(D)	480,000	10,450	110,000
Tennessee	707	105,840	21	1,680	-	-	5,696	244,205
Texas	7,543	333,000	131,559	1,364,217	26,888	542,250	163,118	2,314,362
Utah	21	4,150	7,694	271,926	14,020	1,411,000	21,063	255,810
Vermont	-	-	21	(D)	-	-	208	(D)
Virginia	702	49,000	-	-	-	-	1,542	63,345
Washington	8,960	916,620	50,745	3,096,451	12,566	1,103,150	49,861	2,064,488
West Virginia	-	-	19	266,000	-	-	2,500	300,000
Wisconsin	4,669	97,650	3,507	53,650	16,420	1,307,754	10,515	318,900
Wyoming	-	-	83,236	516,100	5,000	152,000	6,210	148,800
Water Resources Regions								
Region 01 New England	(D)	(D)	(D)	60,640	(D)	(D)	(D)	133,460
Region 02 Mid-Atlantic	1,704	(D)	(D)	685,730	(D)	(D)	(D)	754,643
Region 03 South Atlantic-Gulf	18,382	1,346,500	38,093	1,901,632	4,097	225,500	20,618	1,215,430
Region 04 Great Lakes	27,530	520,200	19,637	351,315	8,200	200,000	24,753	327,330
Region 05 Ohio	2,045	191,250	1,884	322,300	2,560	48,000	7,301	276,944
Region 06 Tennessee	7	840	21	(D)	-	-	(D)	(D)
Region 07 Upper Mississippi	11,860	586,750	24,172	870,050	45,580	1,981,934	37,420	727,908
Region 08 Lower Mississippi	1,068	27,800	108,445	1,911,149	2,360	68,000	54,234	1,530,275
Region 09 Souris-Red-Rainy	(D)	(D)	-	-	-	-	(D)	(D)
Region 10 Missouri	55,924	506,290	362,498	3,366,594	102,356	1,332,260	133,507	2,133,110
Region 11 Arkansas-White-Red	66,790	3,201,300	156,598	1,385,932	50,650	799,500	143,102	1,670,468
Region 12 Texas-Gulf	7,303	213,000	65,853	748,350	19,624	208,050	117,316	1,825,062
Region 13 Rio Grande	(D)	196,400	-	-	(D)	33,000	58,715	756,350
Region 14 Upper Colorado	(D)	160,000	-	900	9,020	1,081,000	1,920	71,500
Region 15 Lower Colorado	11,163	472,400	26,653	567,000	(D)	(D)	(D)	(D)
Region 16 Great Basin	7,344	1,107,150	9,792	326,226	8,000	480,000	23,578	651,550
Region 17 Pacific Northwest	40,460	1,598,720	107,655	4,899,337	59,334	3,228,641	167,359	5,828,979
Region 18 California	43,321	7,667,234	90,573	5,498,674	22,897	2,184,000	87,214	4,558,789
Region 19 Alaska	(D)	(D)	-	-	-	-	-	-
Region 20 Hawaii	(D)	(D)	(D)	(D)	900	48,000	443	164,432

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Computers, control panels, and computer controlled valves and hardware for irrigation water management during survey year - con.							
	Primary source of funding assistance							
	EQIP		Other USDA programs		Non-USDA assistance		No funding assistance	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States	379	110,008	311	69,638	935	345,981	8,582	2,043,540
Alabama	-	-	-	-	2	(D)	30	(D)
Alaska	-	-	-	-	-	-	1	(D)
Arizona	-	-	-	-	-	-	108	45,194
Arkansas	18	(D)	2	(D)	12	5,250	113	71,506
California	54	6,240	90	15,142	148	43,939	1,348	179,304
Colorado	14	8,610	14	9,576	14	22,045	288	111,714
Connecticut	-	-	-	-	2	(D)	58	(D)
Delaware	-	-	-	-	-	-	45	4,778
Florida	-	-	33	(D)	3	(D)	526	8,465
Georgia	-	-	-	-	23	920	351	42,248
Hawaii	-	-	-	-	-	-	90	1,475
Idaho	5	(D)	39	(D)	40	20,250	437	175,258
Illinois	-	-	-	-	18	15,075	152	38,749
Indiana	-	-	-	-	18	1,782	119	32,814
Iowa	-	-	-	-	-	-	44	2,795
Kansas	-	-	6	14,700	42	45,207	312	165,171
Kentucky	-	-	-	-	-	-	10	(D)
Louisiana	-	-	-	-	13	6,500	32	24,978
Maine	-	-	-	-	-	-	36	315
Maryland	-	-	-	-	14	131	82	1,710
Massachusetts	2	(D)	2	(D)	1	(D)	41	1,102
Michigan	-	-	-	-	33	5,295	160	45,421
Minnesota	15	4,800	-	-	-	-	124	26,262
Mississippi	47	33,203	-	-	29	337	72	7,382
Missouri	8	(D)	-	-	1	(D)	67	13,168
Montana	27	(D)	2	(D)	41	16,374	151	28,145
Nebraska	64	15,460	45	11,901	137	62,804	529	256,356
Nevada	15	1,125	3	3	15	1,350	37	5,170
New Hampshire	-	-	-	-	-	-	4	28
New Jersey	-	-	22	198	-	-	59	4,721
New Mexico	-	-	10	40	5	10,280	225	49,829
New York	-	-	-	-	-	-	28	(D)
North Carolina	-	-	-	-	16	905	106	6,260
North Dakota	-	-	-	-	5	720	25	18,794
Ohio	-	-	-	-	-	-	60	2,120
Oklahoma	-	-	-	-	23	7,730	85	68,846
Oregon	40	(D)	2	(D)	24	(D)	483	(D)
Pennsylvania	-	-	-	-	4	(D)	72	(D)
Rhode Island	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	6	990	102	3,564
South Dakota	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	4	5,400	15	14,560
Texas	40	4,400	20	1,000	216	56,674	679	267,034
Utah	20	3,800	-	-	-	-	268	38,998
Vermont	-	-	2	(D)	-	-	27	(D)
Virginia	-	-	-	-	-	-	80	2,244
Washington	-	-	-	-	8	(D)	582	(D)
West Virginia	-	-	19	19	-	-	5	2,500
Wisconsin	-	-	-	-	15	3,400	111	31,711
Wyoming	10	500	-	-	3	450	134	93,496
Water Resources Regions								
Region 01 New England	2	(D)	2	(D)	3	(D)	166	1,731
Region 02 Mid-Atlantic	-	-	22	(D)	18	(D)	313	16,285
Region 03 South Atlantic-Gulf	-	-	33	7,776	66	10,637	1,141	62,777
Region 04 Great Lakes	-	-	2	(D)	35	(D)	289	74,438
Region 05 Ohio	-	-	19	19	17	1,615	159	12,156
Region 06 Tennessee	-	-	-	-	-	-	70	(D)
Region 07 Upper Mississippi	15	4,800	-	-	32	18,275	378	95,957
Region 08 Lower Mississippi	73	42,243	2	(D)	33	(D)	212	111,676
Region 09 Souris-Red-Rainy	-	-	-	-	1	(D)	2	(D)
Region 10 Missouri	92	33,602	59	21,477	171	102,986	1,206	496,220
Region 11 Arkansas-White-Red	-	-	6	14,700	89	63,827	464	338,613
Region 12 Texas-Gulf	40	4,400	20	1,000	177	44,534	513	160,162
Region 13 Rio Grande	-	-	-	-	25	6,625	247	53,378
Region 14 Upper Colorado	-	-	10	40	4	470	56	19,550
Region 15 Lower Colorado	-	-	-	-	5	10,280	115	45,948
Region 16 Great Basin	20	(D)	23	(D)	35	8,350	236	(D)
Region 17 Pacific Northwest	83	14,527	23	7,171	76	15,332	1,566	337,778
Region 18 California	54	6,240	90	15,142	148	43,939	1,358	178,684
Region 19 Alaska	-	-	-	-	-	-	1	(D)
Region 20 Hawaii	-	-	-	-	-	-	90	1,475

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Clearing or leveling non-irrigated land for new irrigation acres (new expansion) during survey year								
	Farms	Acres irrigated affected by expenditure	Expenditures ¹ (\$1,000)	Average per farm (dollars)	Farms with expenditures 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	3,034	169,015	68,307	22,514	718	1,382	456	271	207
Alabama	57	1,655	541	9,491	25	25	3	2	2
Alaska	11	(D)	(D)	(D)	1	10	-	-	-
Arizona	34	3,352	909	26,724	16	-	16	-	2
Arkansas	83	27,350	2,755	33,192	-	25	20	28	10
California	487	26,695	22,077	45,333	78	187	61	80	81
Colorado	118	4,900	2,310	19,580	5	84	-	24	5
Connecticut	28	(D)	(D)	(D)	-	28	-	-	-
Delaware	-	-	-	-	-	-	-	-	-
Florida	163	5,498	10,059	61,712	-	143	-	18	2
Georgia	65	2,502	544	8,368	-	53	6	6	-
Hawaii	42	234	409	9,738	-	7	35	-	-
Idaho	128	3,286	431	3,370	65	54	9	-	-
Illinois	1	(D)	(D)	(D)	-	-	1	-	-
Indiana	1	(D)	(D)	(D)	-	1	-	-	-
Iowa	18	(D)	(D)	(D)	-	18	-	-	-
Kansas	37	6,175	1,109	29,976	-	-	34	-	3
Kentucky	20	22	20	1,010	18	2	-	-	-
Louisiana	86	21,099	4,126	47,974	-	15	38	18	15
Maine	-	-	-	-	-	-	-	-	-
Maryland	20	40	80	4,000	-	20	-	-	-
Massachusetts	2	(D)	(D)	(D)	-	2	-	-	-
Michigan	87	1,062	351	4,031	40	38	-	9	-
Minnesota	20	(D)	(D)	(D)	-	18	1	-	1
Mississippi	78	7,574	4,677	59,957	12	6	33	9	18
Missouri	41	958	2,042	49,800	8	2	8	15	8
Montana	74	15,465	4,771	64,473	4	23	-	-	47
Nebraska	40	236	355	8,885	-	18	22	-	-
Nevada	15	300	45	3,000	-	15	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-
New Jersey	56	(D)	263	4,696	40	-	15	-	1
New Mexico	249	7,835	1,971	7,916	133	110	-	-	6
New York	1	(D)	(D)	(D)	-	-	1	-	-
North Carolina	68	220	209	3,071	39	19	10	-	-
North Dakota	9	1,222	442	49,111	-	2	-	4	3
Ohio	2	(D)	(D)	(D)	-	-	-	2	-
Oklahoma	26	6,000	600	23,077	-	-	25	-	1
Oregon	166	3,231	815	4,911	75	69	7	15	-
Pennsylvania	4	38	2,004	501,000	-	2	-	-	2
Rhode Island	-	-	-	-	-	-	-	-	-
South Carolina	10	837	233	23,250	-	3	-	7	-
South Dakota	2	(D)	(D)	(D)	-	2	-	-	-
Tennessee	8	37	47	5,875	-	7	1	-	-
Texas	201	5,917	1,901	9,458	38	78	58	27	-
Utah	194	6,805	258	1,328	81	112	1	-	-
Vermont	4	(D)	(D)	(D)	-	4	-	-	-
Virginia	14	299	(D)	(D)	-	13	1	-	-
Washington	112	1,523	730	6,519	-	72	40	-	-
West Virginia	5	110	150	30,000	-	-	-	5	-
Wisconsin	28	(D)	206	7,353	19	-	7	2	-
Wyoming	119	2,998	270	2,269	21	95	3	-	-
Water Resources Regions									
Region 01 New England	30	428	(D)	(D)	-	30	-	-	-
Region 02 Mid-Atlantic	99	2,357	2,539	25,646	40	35	16	5	3
Region 03 South Atlantic-Gulf	308	11,011	11,482	37,280	18	237	16	35	2
Region 04 Great Lakes	114	(D)	519	4,555	59	43	1	11	-
Region 05 Ohio	28	(D)	(D)	(D)	18	9	1	-	-
Region 06 Tennessee	74	(D)	332	4,483	52	12	8	-	2
Region 07 Upper Mississippi	48	928	420	8,757	-	36	9	2	1
Region 08 Lower Mississippi	227	51,615	12,410	54,670	6	30	77	68	46
Region 09 Souris-Red-Rainy	5	(D)	(D)	(D)	-	2	-	-	3
Region 10 Missouri	214	18,202	5,482	25,619	36	102	25	4	47
Region 11 Arkansas-White-Red	131	16,827	2,671	20,390	35	11	76	-	9
Region 12 Texas-Gulf	189	5,677	1,841	9,741	38	66	58	27	-
Region 13 Rio Grande	246	3,705	759	3,087	100	146	-	-	-
Region 14 Upper Colorado	137	8,297	3,151	23,003	-	107	-	24	6
Region 15 Lower Colorado	93	8,520	1,422	15,291	70	-	16	-	7
Region 16 Great Basin	101	2,731	195	1,928	27	73	1	-	-
Region 17 Pacific Northwest	437	8,806	1,557	3,564	140	239	56	2	-
Region 18 California	500	26,968	22,597	45,194	78	187	61	93	81
Region 19 Alaska	11	(D)	(D)	(D)	1	10	-	-	-
Region 20 Hawaii	42	234	409	9,738	-	7	35	-	-

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Clearing or leveling non-irrigated land for new irrigation acres (new expansion) during survey year - con.							
	Primary source of funding assistance							
	EQIP		Other USDA programs		Non-USDA assistance		No funding assistance	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States	84	3,811	111	6,173	286	37,330	2,553	121,701
Alabama	-	-	-	-	2	(D)	55	(D)
Alaska	-	-	-	-	-	-	11	(D)
Arizona	-	-	1	(D)	-	-	33	(D)
Arkansas	4	320	5	3,000	16	5,005	58	19,025
California	-	-	22	990	47	1,237	418	24,468
Colorado	24	840	-	-	1	(D)	93	(D)
Connecticut	-	-	-	-	-	-	28	(D)
Delaware	-	-	-	-	-	-	-	-
Florida	-	-	30	960	3	(D)	130	(D)
Georgia	-	-	-	-	-	-	65	2,502
Hawaii	-	-	-	-	-	-	42	234
Idaho	-	-	-	-	9	2,334	119	952
Illinois	-	-	-	-	-	-	1	(D)
Indiana	-	-	-	-	1	(D)	-	-
Iowa	-	-	-	-	-	-	18	(D)
Kansas	-	-	-	-	15	1,875	22	4,300
Kentucky	-	-	-	-	-	-	20	22
Louisiana	13	715	-	-	-	-	73	20,384
Maine	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	20	40
Massachusetts	-	-	2	(D)	-	-	-	-
Michigan	-	-	-	-	18	855	69	207
Minnesota	-	-	-	-	-	-	20	(D)
Mississippi	10	1,540	-	-	24	2,718	44	3,316
Missouri	-	-	8	(D)	16	520	17	(D)
Montana	-	-	23	115	31	8,350	20	7,000
Nebraska	-	-	-	-	14	84	26	152
Nevada	-	-	-	-	-	-	15	300
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	1	(D)	55	170
New Mexico	33	396	-	-	38	6,575	178	864
New York	-	-	-	-	-	-	1	(D)
North Carolina	-	-	-	-	8	8	60	212
North Dakota	-	-	-	-	5	(D)	4	(D)
Ohio	-	-	-	-	-	-	2	(D)
Oklahoma	-	-	-	-	1	(D)	25	(D)
Oregon	-	-	-	-	7	7	159	3,224
Pennsylvania	-	-	-	-	-	-	4	38
Rhode Island	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	3	60	7	777
South Dakota	-	-	-	-	-	-	2	(D)
Tennessee	-	-	-	-	-	-	8	37
Texas	-	-	20	200	26	415	155	5,302
Utah	-	-	-	-	-	-	194	6,805
Vermont	-	-	-	-	-	-	4	(D)
Virginia	-	-	-	-	-	-	14	299
Washington	-	-	-	-	-	-	112	1,523
West Virginia	-	-	-	-	-	-	5	110
Wisconsin	-	-	-	-	-	-	28	(D)
Wyoming	-	-	-	-	-	-	119	2,998
Water Resources Regions								
Region 01 New England	-	-	2	(D)	-	-	28	(D)
Region 02 Mid-Atlantic	-	-	-	-	1	(D)	98	(D)
Region 03 South Atlantic-Gulf	-	-	30	960	8	3,460	270	6,591
Region 04 Great Lakes	-	-	-	-	19	1,022	95	(D)
Region 05 Ohio	-	-	-	-	-	-	28	(D)
Region 06 Tennessee	-	-	-	-	8	8	66	(D)
Region 07 Upper Mississippi	-	-	-	-	-	-	48	928
Region 08 Lower Mississippi	14	1,860	5	3,000	51	4,793	157	41,962
Region 09 Souris-Red-Rainy	-	-	-	-	1	(D)	4	(D)
Region 10 Missouri	-	-	8	8	49	8,954	157	9,240
Region 11 Arkansas-White-Red	13	715	-	-	21	6,325	97	9,787
Region 12 Texas-Gulf	-	-	20	200	26	415	143	5,062
Region 13 Rio Grande	57	1,236	-	-	33	1,650	156	819
Region 14 Upper Colorado	-	-	-	-	1	(D)	136	(D)
Region 15 Lower Colorado	-	-	1	(D)	5	4,925	87	(D)
Region 16 Great Basin	-	-	-	-	-	-	101	2,731
Region 17 Pacific Northwest	-	-	23	115	16	2,341	398	6,350
Region 18 California	-	-	22	990	47	1,237	431	24,741
Region 19 Alaska	-	-	-	-	-	-	11	(D)
Region 20 Hawaii	-	-	-	-	-	-	42	234

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Land leveling of previously irrigated land during survey year								
	Farms	Acres irrigated affected by expenditure	Expenditures ¹ (\$1,000)	Average per farm (dollars)	Farms with expenditures 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	6,137	675,775	92,498	15,072	1,286	2,991	1,134	504	222
Alabama	27	3,000	82	3,019	-	25	2	-	-
Alaska	-	-	-	-	-	-	-	-	-
Arizona	305	56,882	3,701	12,133	55	188	52	5	5
Arkansas	234	44,185	9,204	39,334	5	68	69	74	18
California	1,550	229,242	38,274	24,693	99	674	458	217	102
Colorado	289	17,234	1,233	4,268	80	161	48	-	-
Connecticut	1	(D)	(D)	(D)	-	1	-	-	-
Delaware	-	-	-	-	-	-	-	-	-
Florida	232	49,191	7,136	30,758	27	66	90	34	15
Georgia	33	19,242	385	11,674	-	25	-	7	1
Hawaii	33	33	17	500	33	-	-	-	-
Idaho	368	6,907	1,391	3,780	90	259	19	-	-
Illinois	1	(D)	(D)	(D)	-	1	-	-	-
Indiana	2	(D)	(D)	(D)	-	-	2	-	-
Iowa	-	-	-	-	-	-	-	-	-
Kansas	26	5,145	504	19,365	15	-	8	-	3
Kentucky	2	(D)	(D)	(D)	-	2	-	-	-
Louisiana	131	37,554	2,072	15,818	14	54	45	18	-
Maine	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	-
Massachusetts	1	(D)	(D)	(D)	-	-	-	-	1
Michigan	20	20	20	1,000	-	20	-	-	-
Minnesota	1	(D)	(D)	(D)	-	-	-	1	-
Mississippi	83	25,981	3,685	44,395	12	14	18	22	17
Missouri	71	9,523	792	11,158	15	17	35	4	-
Montana	211	16,230	2,083	9,873	73	91	16	31	-
Nebraska	22	610	178	8,091	-	21	1	-	-
Nevada	141	14,777	1,428	10,124	15	87	30	4	5
New Hampshire	21	(D)	(D)	(D)	21	-	-	-	-
New Jersey	7	(D)	190	27,143	-	-	4	3	-
New Mexico	882	36,841	3,517	3,987	257	514	100	1	10
New York	5	340	(D)	(D)	-	5	-	-	-
North Carolina	11	2,148	163	14,827	7	1	1	-	2
North Dakota	4	(D)	(D)	(D)	-	-	4	-	-
Ohio	-	-	-	-	-	-	-	-	-
Oklahoma	79	7,800	681	8,623	-	51	28	-	-
Oregon	161	3,665	1,765	10,962	99	25	24	-	13
Pennsylvania	-	-	-	-	-	-	-	-	-
Rhode Island	1	(D)	(D)	(D)	-	1	-	-	-
South Carolina	24	2,316	141	5,875	6	15	3	-	-
South Dakota	3	(D)	(D)	(D)	1	2	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-
Texas	278	54,729	10,156	36,531	42	125	24	58	29
Utah	615	24,248	2,568	4,176	196	359	35	25	-
Vermont	1	(D)	(D)	(D)	1	-	-	-	-
Virginia	1	(D)	(D)	(D)	-	-	1	-	-
Washington	77	1,931	385	5,000	54	16	6	-	1
West Virginia	5	100	10	2,000	-	5	-	-	-
Wisconsin	3	(D)	(D)	(D)	-	2	1	-	-
Wyoming	175	4,731	423	2,418	69	96	10	-	-
Water Resources Regions									
Region 01 New England	24	48	(D)	(D)	21	2	-	-	1
Region 02 Mid-Atlantic	16	687	230	14,375	-	8	5	3	-
Region 03 South Atlantic-Gulf	352	77,180	8,168	23,204	52	138	96	48	18
Region 04 Great Lakes	27	(D)	51	1,876	1	24	2	-	-
Region 05 Ohio	2	(D)	(D)	(D)	-	2	-	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	10	775	69	6,865	7	1	1	1	-
Region 08 Lower Mississippi	393	94,103	11,101	28,246	19	121	141	83	29
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-
Region 10 Missouri	457	26,605	2,838	6,209	143	252	31	31	-
Region 11 Arkansas-White-Red	273	39,718	5,625	20,606	80	94	62	28	9
Region 12 Texas-Gulf	251	51,114	8,595	34,241	42	102	24	58	25
Region 13 Rio Grande	728	27,123	4,639	6,373	223	400	91	-	14
Region 14 Upper Colorado	565	25,628	2,008	3,553	108	399	57	1	-
Region 15 Lower Colorado	308	58,982	3,911	12,696	55	188	52	8	5
Region 16 Great Basin	558	34,290	3,512	6,294	157	302	65	29	5
Region 17 Pacific Northwest	546	12,162	3,521	6,449	199	284	49	-	14
Region 18 California	1,594	227,259	38,073	23,885	146	674	458	214	102
Region 19 Alaska	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	33	33	17	500	33	-	-	-	-

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Land leveling of previously irrigated land during survey year - con.					
	Primary purpose of expenditures					
	Water conservation		Energy conservation		Scheduled replacement or maintenance	
	Acres	Dollars	Acres	Dollars	Acres	Dollars
United States	331,004	51,221,715	13,415	4,135,886	331,356	37,140,896
Alabama	-	-	-	-	3,000	81,500
Alaska	-	-	-	-	-	-
Arizona	35,579	2,646,300	-	-	21,303	1,054,200
Arkansas	34,639	7,509,599	860	238,000	8,686	1,456,500
California	108,266	17,049,261	8,500	3,030,900	112,476	18,193,750
Colorado	(D)	633,250	(D)	67,200	10,167	533,021
Connecticut	(D)	(D)	-	-	-	-
Delaware	-	-	-	-	-	-
Florida	13,111	2,746,000	-	-	36,080	4,389,957
Georgia	-	-	-	-	19,242	385,257
Hawaii	-	-	-	-	33	16,500
Idaho	3,446	976,250	(D)	(D)	(D)	(D)
Illinois	-	-	-	-	(D)	(D)
Indiana	-	-	-	-	(D)	(D)
Iowa	-	-	-	-	-	-
Kansas	-	-	460	96,000	4,685	407,500
Kentucky	-	-	-	-	(D)	(D)
Louisiana	22,966	1,472,096	289	(D)	14,299	(D)
Maine	-	-	-	-	-	-
Maryland	-	-	-	-	-	-
Massachusetts	-	-	-	-	(D)	(D)
Michigan	20	20,000	-	-	-	-
Minnesota	(D)	(D)	-	-	-	-
Mississippi	11,684	2,143,318	-	-	14,297	1,541,480
Missouri	848	96,800	-	-	8,675	695,400
Montana	1,730	206,780	3,200	640,000	11,300	1,236,340
Nebraska	610	178,000	-	-	-	-
Nevada	5,640	561,700	-	-	9,137	865,800
New Hampshire	-	-	-	-	(D)	(D)
New Jersey	-	-	-	-	(D)	190,000
New Mexico	23,087	1,444,561	-	-	13,754	2,072,015
New York	(D)	15,000	-	-	(D)	(D)
North Carolina	(D)	(D)	-	-	(D)	(D)
North Dakota	-	-	-	-	(D)	(D)
Ohio	-	-	-	-	-	-
Oklahoma	-	-	-	-	7,800	681,200
Oregon	3,363	1,497,435	-	-	302	267,450
Pennsylvania	-	-	-	-	-	-
Rhode Island	-	-	-	-	(D)	(D)
South Carolina	2,286	126,000	-	-	30	15,000
South Dakota	(D)	(D)	-	-	-	-
Tennessee	-	-	-	-	-	-
Texas	38,301	9,552,515	-	-	16,428	603,000
Utah	16,030	2,079,000	-	-	8,218	489,350
Vermont	(D)	(D)	-	-	-	-
Virginia	(D)	(D)	-	-	-	-
Washington	409	128,000	-	-	1,522	257,026
West Virginia	100	10,000	-	-	-	-
Wisconsin	(D)	(D)	-	-	(D)	(D)
Wyoming	1,150	36,000	-	-	3,581	387,100
Water Resources Regions						
Region 01 New England	(D)	(D)	-	-	(D)	(D)
Region 02 Mid-Atlantic	450	40,000	-	-	237	190,000
Region 03 South Atlantic-Gulf	15,551	2,890,452	-	-	61,629	5,277,394
Region 04 Great Lakes	(D)	20,650	-	-	44	30,000
Region 05 Ohio	-	-	-	-	(D)	(D)
Region 06 Tennessee	-	-	-	-	-	-
Region 07 Upper Mississippi	(D)	(D)	-	-	(D)	(D)
Region 08 Lower Mississippi	53,634	7,295,657	1,149	300,000	39,320	3,505,100
Region 09 Souris-Red-Rainy	-	-	-	-	-	-
Region 10 Missouri	8,697	493,530	3,200	640,000	14,708	1,704,040
Region 11 Arkansas-White-Red	16,738	3,946,204	460	96,000	22,520	1,583,160
Region 12 Texas-Gulf	35,901	8,082,515	-	-	15,213	512,000
Region 13 Rio Grande	13,424	2,896,200	-	-	13,699	1,743,240
Region 14 Upper Colorado	15,028	(D)	(D)	(D)	(D)	1,217,436
Region 15 Lower Colorado	35,579	2,646,300	-	-	23,403	1,264,200
Region 16 Great Basin	21,320	2,493,300	-	-	12,970	1,018,950
Region 17 Pacific Northwest	6,101	2,572,285	(D)	(D)	(D)	(D)
Region 18 California	108,383	17,058,661	8,500	3,030,900	110,376	17,983,750
Region 19 Alaska	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	33	16,500

See footnote(s) at end of table.

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Table 16. Expenditures for Irrigation Equipment, Facilities, Computer Technology, and Land Improvement: 2018 (continued)

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

Geographic area	Land leveling of previously irrigated land during survey year - con.							
	Primary source of funding assistance							
	EQIP		Other USDA programs		Non-USDA assistance		No funding assistance	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
United States	273	42,429	200	15,542	477	76,172	5,187	541,632
Alabama	-	-	-	-	2	(D)	25	(D)
Alaska	-	-	-	-	-	-	-	-
Arizona	16	1,600	17	612	16	96	256	54,574
Arkansas	12	1,390	4	132	47	18,923	171	23,740
California	56	5,151	22	1,386	198	30,866	1,274	191,839
Colorado	24	1,200	14	4,760	-	-	251	11,274
Connecticut	-	-	-	-	-	-	1	(D)
Delaware	-	-	-	-	-	-	-	-
Florida	54	1,161	56	2,260	-	-	122	45,770
Georgia	1	(D)	-	-	-	-	32	(D)
Hawaii	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	23	1,300	345	5,607
Illinois	-	-	-	-	1	(D)	-	-
Indiana	-	-	-	-	-	-	2	(D)
Iowa	-	-	-	-	-	-	-	-
Kansas	-	-	-	-	-	-	26	5,145
Kentucky	-	-	-	-	-	-	2	(D)
Louisiana	-	-	-	-	33	11,299	98	26,255
Maine	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	1	(D)	-	-
Michigan	-	-	-	-	-	-	20	20
Minnesota	-	-	-	-	-	-	1	(D)
Mississippi	6	(D)	-	-	13	(D)	64	24,248
Missouri	9	1,315	-	-	-	-	62	8,208
Montana	-	-	-	-	31	4,700	180	11,530
Nebraska	-	-	-	-	5	250	17	360
Nevada	-	-	-	-	-	-	141	14,777
New Hampshire	-	-	-	-	-	-	21	(D)
New Jersey	-	-	-	-	-	-	7	(D)
New Mexico	38	9,026	33	264	66	1,782	745	25,769
New York	-	-	-	-	-	-	5	340
North Carolina	-	-	-	-	-	-	11	2,148
North Dakota	-	-	-	-	4	(D)	-	-
Ohio	-	-	-	-	-	-	-	-
Oklahoma	-	-	-	-	-	-	79	7,800
Oregon	-	-	-	-	-	-	161	3,665
Pennsylvania	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	1	(D)
South Carolina	-	-	-	-	3	2,100	21	216
South Dakota	-	-	-	-	-	-	3	(D)
Tennessee	-	-	-	-	-	-	-	-
Texas	32	6,558	23	5,550	6	1,503	217	41,118
Utah	25	10,720	31	578	27	810	532	12,140
Vermont	-	-	-	-	-	-	1	(D)
Virginia	-	-	-	-	1	(D)	-	-
Washington	-	-	-	-	-	-	77	1,931
West Virginia	-	-	-	-	-	-	5	100
Wisconsin	-	-	-	-	-	-	3	(D)
Wyoming	-	-	-	-	-	-	175	4,731
Water Resources Regions								
Region 01 New England	-	-	-	-	1	(D)	23	(D)
Region 02 Mid-Atlantic	-	-	-	-	1	(D)	15	(D)
Region 03 South Atlantic-Gulf	55	4,647	56	2,260	12	3,975	229	66,298
Region 04 Great Lakes	-	-	-	-	-	-	27	(D)
Region 05 Ohio	-	-	-	-	-	-	2	(D)
Region 06 Tennessee	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	-	-	-	-	1	(D)	9	(D)
Region 08 Lower Mississippi	27	3,527	-	-	62	18,261	304	72,315
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-
Region 10 Missouri	-	-	-	-	40	5,470	417	21,135
Region 11 Arkansas-White-Red	-	-	18	4,892	24	11,997	231	22,829
Region 12 Texas-Gulf	32	6,558	23	5,550	6	1,503	190	37,503
Region 13 Rio Grande	38	9,026	33	264	66	1,782	591	16,051
Region 14 Upper Colorado	24	1,200	-	-	-	-	541	24,428
Region 15 Lower Colorado	16	1,600	17	612	16	96	259	56,674
Region 16 Great Basin	25	10,720	31	578	47	1,810	455	21,182
Region 17 Pacific Northwest	-	-	-	-	3	300	543	11,862
Region 18 California	56	5,151	22	1,386	198	30,866	1,318	189,856
Region 19 Alaska	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	33	33

¹ May not add due to rounding.

Table 18. Farms With Diminished Crop Yields Resulting From Irrigation Interruption by Cause: 2018

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

Geographic area	Total ¹		Shortage of surface water		Shortage of ground water		Irrigation equipment failure	
	Farms	Acres affected by irrigation interruption (see text)	Farms	Acres affected by irrigation interruption (see text)	Farms	Acres affected by irrigation interruption (see text)	Farms	Acres affected by irrigation interruption (see text)
United States	20,214	2,147,827	11,543	1,202,348	1,884	337,013	2,855	354,483
Alabama	112	1,958	60	1,108	52	1,100	2	(D)
Alaska	7	(D)	4	7	2	(D)	1	(D)
Arizona	225	52,588	97	12,991	17	4,892	66	23,867
Arkansas	146	53,627	51	13,066	24	3,320	43	25,339
California	1,792	156,570	436	72,991	401	35,992	240	20,566
Colorado	3,650	371,589	3,249	354,678	180	18,567	97	6,404
Connecticut	4	94	-	-	-	-	-	-
Delaware	47	14,153	-	-	-	-	1	(D)
Florida	339	26,771	27	5,589	-	-	82	2,467
Georgia	109	24,372	-	-	-	-	-	-
Hawaii	68	249	19	39	-	-	-	-
Idaho	880	144,234	367	58,329	49	27,669	167	23,320
Illinois	57	8,373	24	4,506	-	-	33	3,867
Indiana	52	7,565	-	-	-	-	26	4,305
Iowa	8	59	-	-	-	-	-	-
Kansas	226	23,400	33	6,405	35	5,237	85	13,334
Kentucky	68	2,545	-	-	-	-	-	-
Louisiana	73	6,807	13	1,040	-	-	45	2,758
Maine	86	626	35	545	38	52	30	(D)
Maryland	10	806	-	-	3	3	4	800
Massachusetts	96	881	-	-	-	-	10	(D)
Michigan	204	7,117	20	20	20	760	31	2,370
Minnesota	67	2,017	-	-	-	-	33	1,430
Mississippi	43	5,178	6	132	-	-	18	1,236
Missouri	160	23,141	68	16,004	-	-	48	7,778
Montana	1,052	162,877	604	110,443	63	7,608	244	43,016
Nebraska	291	39,801	99	14,300	-	-	113	17,689
Nevada	289	77,977	142	53,090	37	6,380	55	8,495
New Hampshire	64	64	-	-	21	21	-	-
New Jersey	27	1,297	-	-	-	-	2	(D)
New Mexico	2,113	37,630	1,627	19,186	114	10,890	233	7,093
New York	107	3,048	3	300	45	91	1	(D)
North Carolina	92	956	12	12	-	-	-	-
North Dakota	70	7,374	31	2,542	-	-	5	824
Ohio	2	(D)	-	-	-	-	-	-
Oklahoma	57	11,939	-	-	3	1,464	29	5,389
Oregon	1,293	139,357	918	99,593	168	26,350	173	4,430
Pennsylvania	111	404	-	-	21	210	-	-
Rhode Island	35	157	13	95	13	71	14	46
South Carolina	41	2,343	-	-	-	-	9	1,635
South Dakota	60	5,785	22	1,320	-	-	38	4,465
Tennessee	44	243	-	-	-	-	1	(D)
Texas	1,099	249,672	254	32,514	335	147,695	262	55,689
Utah	3,079	216,747	2,666	188,684	188	25,935	199	16,071
Vermont	72	301	30	55	13	38	28	192
Virginia	18	36	-	-	-	-	-	-
Washington	755	52,174	232	3,104	36	8,913	222	15,486
West Virginia	23	32	-	-	-	-	-	-
Wisconsin	50	8,414	-	-	-	-	22	396
Wyoming	841	194,267	381	129,660	6	3,753	143	32,118
Water Resources Regions								
Region 01 New England	313	2,028	48	640	72	144	80	647
Region 02 Mid-Atlantic	243	18,449	-	-	47	(D)	7	(D)
Region 03 South Atlantic-Gulf	630	55,438	53	5,741	-	-	93	4,802
Region 04 Great Lakes	342	8,566	53	(D)	55	820	54	2,584
Region 05 Ohio	198	11,275	-	-	-	-	44	7,365
Region 06 Tennessee	102	(D)	52	1,100	52	1,100	-	-
Region 07 Upper Mississippi	137	23,727	40	11,650	-	-	44	3,479
Region 08 Lower Mississippi	218	70,366	62	16,804	18	3,314	100	31,890
Region 09 Souris-Red-Rainy	64	10,944	31	(D)	-	-	31	8,394
Region 10 Missouri	2,326	351,858	1,151	223,375	113	11,326	507	78,597
Region 11 Arkansas-White-Red	1,132	169,552	781	76,849	83	55,561	184	33,017
Region 12 Texas-Gulf	954	187,713	211	27,781	328	109,415	198	40,563
Region 13 Rio Grande	1,729	42,929	1,390	35,893	95	1,941	119	3,013
Region 14 Upper Colorado	4,226	357,812	3,682	344,198	123	16,977	197	6,813
Region 15 Lower Colorado	301	54,407	97	12,991	17	4,892	100	25,227
Region 16 Great Basin	2,261	245,713	1,805	188,238	245	33,815	238	22,256
Region 17 Pacific Northwest	3,080	366,771	1,565	170,954	186	60,012	613	63,181
Region 18 California	1,883	168,839	499	83,171	448	37,412	245	21,666
Region 19 Alaska	7	(D)	4	7	2	(D)	1	(D)
Region 20 Hawaii	68	249	19	39	-	-	-	-

See footnote(s) at end of table.

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Table 18. Farms With Diminished Crop Yields Resulting From Irrigation Interruption by Cause: 2018 (continued)

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

Geographic area	Energy price increases or energy shortage		Water salinity too high		Loss of water rights		Cost of purchased water		Other	
	Farms	Acres affected by irrigation interruption (see text)	Farms	Acres affected by irrigation interruption (see text)	Farms	Acres affected by irrigation interruption (see text)	Farms	Acres affected by irrigation interruption (see text)	Farms	Acres affected by irrigation interruption (see text)
United States	292	28,245	214	54,748	257	24,113	901	76,466	5,713	518,795
Alabama	-	-	-	-	-	-	25	250	50	150
Alaska	-	-	-	-	-	-	-	-	1	(D)
Arizona	-	-	16	11,200	-	-	8	22,790	55	7,848
Arkansas	6	1,200	11	9,475	-	-	19	1,458	35	9,788
California	99	8,738	49	2,004	44	2,376	363	4,154	611	33,776
Colorado	-	-	23	207	54	6,116	67	13,634	552	57,198
Connecticut	-	-	-	-	-	-	-	-	4	94
Delaware	-	-	-	-	-	-	-	-	46	(D)
Florida	-	-	-	-	-	-	15	30	218	16,585
Georgia	24	600	-	-	-	-	-	-	76	24,258
Hawaii	-	-	-	-	-	-	4	30	49	210
Idaho	-	-	-	-	-	-	64	7,940	342	50,250
Illinois	-	-	-	-	-	-	-	-	-	-
Indiana	-	-	-	-	-	-	-	-	17	2,720
Iowa	-	-	-	-	-	-	-	-	8	59
Kansas	-	-	-	-	-	-	19	1,046	73	4,362
Kentucky	6	2,208	-	-	-	-	2	(D)	60	(D)
Louisiana	-	-	-	-	-	-	-	-	28	4,049
Maine	3	3	-	-	-	-	-	-	8	(D)
Maryland	3	3	-	-	-	-	-	-	3	3
Massachusetts	-	-	-	-	-	-	-	-	96	881
Michigan	-	-	-	-	-	-	-	-	113	3,947
Minnesota	-	-	-	-	-	-	-	-	34	587
Mississippi	-	-	-	-	-	-	6	36	12	2,060
Missouri	-	-	-	-	-	-	-	-	59	1,621
Montana	51	4,318	58	13,508	54	6,588	52	5,808	421	41,666
Nebraska	31	5,080	-	-	-	-	9	9	55	6,835
Nevada	-	-	-	-	-	-	-	-	85	12,472
New Hampshire	-	-	-	-	-	-	-	-	22	(D)
New Jersey	-	-	-	-	-	-	-	-	27	1,297
New Mexico	-	-	-	-	33	363	33	33	518	4,897
New York	-	-	-	-	-	-	3	30	53	2,177
North Carolina	-	-	-	-	-	-	-	-	80	944
North Dakota	-	-	-	-	-	-	-	-	34	4,008
Ohio	-	-	-	-	-	-	-	-	2	(D)
Oklahoma	-	-	-	-	-	-	-	-	28	6,550
Oregon	24	24	-	-	-	-	23	989	158	22,913
Pennsylvania	-	-	-	-	-	-	-	-	90	194
Rhode Island	-	-	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	29	108
South Dakota	-	-	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	43	(D)
Texas	11	3,850	57	18,354	20	400	33	3,986	349	48,589
Utah	27	2,214	-	-	4	2,800	102	10,650	403	37,878
Vermont	-	-	-	-	-	-	-	-	32	228
Virginia	-	-	-	-	-	-	-	-	18	36
Washington	7	7	-	-	26	1,950	32	3,203	283	23,251
West Virginia	-	-	-	-	-	-	-	-	23	32
Wisconsin	-	-	-	-	-	-	-	-	30	8,032
Wyoming	-	-	-	-	22	3,520	22	374	380	61,142
Water Resources Regions										
Region 01 New England	3	3	-	-	-	-	-	-	158	1,576
Region 02 Mid-Atlantic	3	3	-	-	-	-	-	-	188	16,902
Region 03 South Atlantic-Gulf	24	600	-	-	-	-	15	(D)	436	42,051
Region 04 Great Lakes	-	-	-	-	-	-	3	30	165	4,881
Region 05 Ohio	-	-	-	-	-	-	2	(D)	143	3,354
Region 06 Tennessee	-	-	-	-	-	-	25	250	50	(D)
Region 07 Upper Mississippi	-	-	-	-	-	-	-	-	53	8,598
Region 08 Lower Mississippi	12	3,408	11	9,475	-	-	12	1,236	48	13,329
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	2	(D)
Region 10 Missouri	59	8,248	58	13,508	28	3,168	88	6,201	889	97,600
Region 11 Arkansas-White-Red	-	-	-	-	24	672	64	11,820	174	28,155
Region 12 Texas-Gulf	11	3,850	57	18,354	20	400	14	3,853	319	42,728
Region 13 Rio Grande	-	-	-	-	37	5,267	56	3,166	314	6,889
Region 14 Upper Colorado	-	-	23	207	52	6,860	26	108	730	36,824
Region 15 Lower Colorado	-	-	16	11,200	-	-	8	22,790	131	9,667
Region 16 Great Basin	27	2,214	-	-	-	-	142	13,450	328	49,344
Region 17 Pacific Northwest	54	1,181	-	-	52	5,370	56	8,343	924	122,821
Region 18 California	99	8,738	49	2,004	44	2,376	386	5,143	611	33,776
Region 19 Alaska	-	-	-	-	-	-	-	-	1	(D)
Region 20 Hawaii	-	-	-	-	-	-	4	30	49	210

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

Table 19. Irrigated Farms by Size of Farm: 2018

[Excludes institutional, research, and experimental farms. 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	231,474	222,028,954	55,938,795	104,018	1,646,070	947,319	21,968	1,545,452	783,385
Alabama	1,069	755,249	163,338	367	8,139	1,320	163	12,477	1,576
Alaska	308	9,374	1,721	254	2,582	442	32	2,274	(D)
Arizona	3,054	2,728,642	945,570	1,492	21,862	15,050	339	23,792	13,489
Arkansas	3,173	5,142,393	4,246,491	311	6,277	2,555	226	16,535	8,728
California	42,093	16,682,862	8,408,282	24,595	379,284	273,977	4,206	291,619	216,298
Colorado	14,529	15,008,030	2,458,742	6,545	112,132	71,430	1,598	110,906	58,227
Connecticut	669	71,297	6,104	410	5,853	1,138	49	3,148	(D)
Delaware	521	412,855	201,305	42	623	261	73	5,206	1,713
Florida	7,615	4,207,457	1,331,739	4,961	67,296	39,595	565	38,406	22,907
Georgia	3,861	2,894,113	1,163,038	841	14,729	5,773	575	44,771	12,570
Hawaii	1,863	859,752	26,700	1,635	14,754	6,675	87	(D)	718
Idaho	14,867	7,331,473	3,393,063	7,277	107,593	80,613	1,569	112,018	81,456
Illinois	1,807	2,181,475	566,024	383	5,286	1,353	161	12,236	2,557
Indiana	2,039	2,242,201	582,661	534	8,366	1,667	67	4,472	382
Iowa	1,061	757,055	166,193	340	7,096	1,364	86	5,919	249
Kansas	4,249	12,476,720	2,386,816	279	3,974	843	43	3,168	927
Kentucky	1,188	332,495	58,234	441	8,141	1,155	217	14,536	1,068
Louisiana	1,862	1,918,931	1,072,033	435	8,821	3,594	83	5,926	4,675
Maine	990	232,175	35,695	531	8,766	992	191	12,800	2,597
Maryland	959	317,376	125,024	413	6,361	1,813	169	13,019	5,282
Massachusetts	1,335	105,147	19,311	937	17,990	5,803	152	11,962	2,034
Michigan	3,886	2,232,115	827,010	1,377	30,442	5,934	406	28,543	5,848
Minnesota	2,367	1,836,298	554,605	441	7,287	1,858	170	13,081	3,876
Mississippi	1,621	2,484,250	1,667,023	268	4,910	1,242	95	6,538	1,591
Missouri	2,705	2,818,743	1,429,074	646	11,804	2,437	281	20,704	2,800
Montana	8,887	25,620,445	2,140,162	3,130	64,050	42,688	772	53,078	31,785
Nebraska	13,013	23,550,244	7,666,152	510	10,371	4,705	443	32,217	22,769
Nevada	1,857	4,437,112	693,520	638	10,605	8,137	167	11,372	7,763
New Hampshire	731	63,546	3,218	447	7,643	1,040	79	6,039	(D)
New Jersey	1,585	250,582	89,941	837	(D)	(D)	325	23,363	6,763
New Mexico	10,093	5,672,426	675,330	7,049	76,075	51,057	907	63,950	35,161
New York	2,148	344,024	47,974	1,184	18,755	4,328	305	21,923	2,050
North Carolina	2,451	1,198,677	132,870	1,274	18,561	3,438	344	24,918	6,837
North Dakota	720	2,404,884	297,001	64	1,107	291	4	(D)	(D)
Ohio	1,601	298,020	39,258	874	10,824	2,615	300	20,439	2,087
Oklahoma	1,835	3,471,123	601,492	387	6,462	2,196	186	12,083	814
Oregon	13,794	10,520,208	1,579,108	7,735	116,165	68,165	1,491	107,005	56,592
Pennsylvania	2,766	264,235	40,596	1,616	(D)	(D)	552	37,518	4,757
Rhode Island	227	11,444	3,231	180	3,203	504	29	2,337	(D)
South Carolina	1,489	985,917	252,720	589	9,906	3,089	137	10,606	942
South Dakota	1,219	4,546,759	378,413	134	1,694	563	22	1,540	1,034
Tennessee	1,452	1,400,647	190,746	621	11,414	1,282	228	16,053	1,019
Texas	11,997	20,053,541	4,085,754	4,007	68,809	34,348	684	47,597	12,789
Utah	12,575	6,480,550	1,181,700	6,873	112,686	85,304	1,361	90,155	57,608
Vermont	573	65,691	3,022	356	7,413	1,077	60	4,272	466
Virginia	1,377	389,164	48,248	562	(D)	(D)	192	14,326	1,240
Washington	11,259	7,444,705	1,866,110	6,615	106,859	62,672	993	69,729	53,208
West Virginia	482	75,438	6,525	236	5,094	412	95	6,106	132
Wisconsin	2,127	1,446,654	518,312	910	16,587	2,701	81	5,643	712
Wyoming	5,525	14,994,440	1,561,596	1,435	40,279	25,404	608	43,329	24,336
Water Resources Regions									
Region 01 New England	4,164	524,450	69,036	2,578	44,441	10,013	558	40,349	5,729
Region 02 Mid-Atlantic	7,317	1,601,902	524,394	3,573	59,695	15,670	1,452	102,977	20,961
Region 03 South Atlantic-Gulf	16,770	10,017,021	3,042,488	8,050	119,006	53,509	1,765	128,896	44,800
Region 04 Great Lakes	7,093	3,278,600	1,129,500	3,074	58,770	10,739	657	46,811	8,190
Region 05 Ohio	4,904	2,544,562	444,046	2,059	32,842	5,243	700	47,355	2,890
Region 06 Tennessee	1,250	410,535	71,536	726	14,182	1,972	243	17,613	1,517
Region 07 Upper Mississippi	6,691	5,480,324	1,627,970	1,853	31,885	6,580	478	35,098	6,554
Region 08 Lower Mississippi	6,595	11,235,684	7,625,812	684	13,455	6,138	277	20,205	13,092
Region 09 Souris-Red-Rainy	587	1,130,845	207,655	98	2,063	283	50	(D)	(D)
Region 10 Missouri	32,856	80,020,280	13,107,678	5,485	113,586	63,906	2,187	155,552	87,840
Region 11 Arkansas-White-Red	9,554	22,713,444	4,877,419	1,722	28,145	11,874	582	40,138	12,796
Region 12 Texas-Gulf	9,986	11,669,233	2,695,393	3,587	60,770	29,985	611	42,445	9,705
Region 13 Rio Grande	8,740	4,629,864	709,642	6,341	68,336	46,951	712	49,952	31,932
Region 14 Upper Colorado	13,188	8,285,836	1,472,632	7,000	119,966	83,762	1,586	108,569	53,929
Region 15 Lower Colorado	3,838	3,723,087	1,035,373	1,764	25,745	17,969	470	31,957	16,149
Region 16 Great Basin	11,322	9,724,114	1,763,616	5,759	94,546	70,666	1,042	69,406	43,699
Region 17 Pacific Northwest	41,905	27,055,051	7,014,019	23,064	360,676	230,350	4,202	300,948	201,490
Region 18 California	42,543	17,114,996	8,492,165	24,712	380,625	274,592	4,277	295,828	219,398
Region 19 Alaska	308	9,374	1,721	254	2,582	442	32	2,274	(D)
Region 20 Hawaii	1,863	859,752	26,700	1,635	14,754	6,675	87	(D)	718

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Table 19. Irrigated Farms by Size of Farm: 2018 (continued)

[Excludes institutional, research, and experimental farms. 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	23,513	3,482,482	1,811,255	22,448	7,452,127	3,862,174	18,022	12,976,618	6,286,318
Alabama	118	18,244	3,379	104	34,753	10,855	64	47,649	14,439
Alaska	18	2,345	444	2	(D)	(D)	2	(D)	(D)
Arizona	130	18,432	10,220	361	111,029	61,174	238	181,010	121,165
Arkansas	187	29,315	17,648	358	123,990	75,422	462	331,834	253,481
California	4,576	677,208	515,507	3,574	1,159,118	906,626	2,113	1,437,044	1,009,584
Colorado	1,666	246,530	126,015	1,306	444,054	219,484	1,029	752,191	317,180
Connecticut	79	12,195	1,071	124	42,783	2,087	3	1,830	(D)
Delaware	30	5,422	2,048	111	36,718	19,844	130	80,698	48,251
Florida	845	121,358	82,819	372	129,449	50,286	281	208,445	71,591
Georgia	484	73,212	21,497	466	156,774	41,826	575	384,906	172,896
Hawaii	35	4,754	(D)	38	12,896	506	1	(D)	(D)
Idaho	1,596	235,915	163,625	1,899	612,638	387,727	907	621,650	401,859
Illinois	104	16,037	6,832	348	114,773	56,420	226	163,752	57,506
Indiana	173	24,231	11,317	321	102,701	43,050	256	208,702	74,451
Iowa	132	19,623	5,333	129	43,902	19,367	116	82,602	23,621
Kansas	198	31,177	14,285	232	76,225	31,466	672	511,747	156,847
Kentucky	323	46,729	3,874	156	52,780	(D)	6	(D)	3,138
Louisiana	188	30,559	14,854	202	71,139	38,778	265	201,129	109,070
Maine	212	30,176	3,393	13	(D)	(D)	15	(D)	1,302
Maryland	116	16,417	8,010	71	28,559	10,991	93	66,373	32,565
Massachusetts	178	24,684	4,169	26	(D)	(D)	36	22,652	1,731
Michigan	452	63,910	17,027	527	168,844	71,394	490	341,322	140,131
Minnesota	230	39,228	15,558	496	163,204	60,811	404	288,799	89,509
Mississippi	131	19,182	7,495	180	55,460	28,516	221	163,967	97,162
Missouri	354	51,600	13,413	208	70,136	24,998	245	179,920	82,347
Montana	953	142,702	78,339	884	286,009	129,518	737	557,361	233,822
Nebraska	970	146,655	95,860	2,130	765,881	423,513	2,982	2,194,793	1,254,057
Nevada	218	36,530	21,345	246	86,887	57,669	149	113,156	84,295
New Hampshire	112	16,559	1,163	88	30,301	(D)	5	3,004	(D)
New Jersey	127	18,607	11,070	167	52,811	17,679	91	60,221	23,979
New Mexico	608	87,691	38,752	636	205,452	60,442	260	188,703	92,398
New York	315	46,414	5,589	210	61,628	14,849	98	64,980	8,483
North Carolina	256	36,597	7,641	204	68,436	11,373	200	144,184	23,250
North Dakota	5	773	(D)	2	(D)	(D)	66	45,810	22,460
Ohio	239	30,959	4,796	72	19,803	2,990	25	15,264	5,485
Oklahoma	99	17,271	715	121	45,770	12,036	217	147,718	32,502
Oregon	1,470	214,149	121,035	1,137	376,315	183,941	502	364,510	131,340
Pennsylvania	407	54,713	3,435	112	40,512	4,955	43	32,175	2,088
Rhode Island	8	1,053	442	8	(D)	1,429	1	(D)	(D)
South Carolina	258	39,077	5,844	125	36,538	11,143	111	77,146	14,964
South Dakota	30	5,241	4,367	157	58,074	16,739	190	143,924	39,603
Tennessee	95	11,947	282	85	32,403	8,114	90	70,448	11,070
Texas	966	146,701	45,888	1,115	383,986	145,933	1,358	993,053	378,029
Utah	1,508	216,379	122,412	1,086	355,448	185,001	515	345,198	152,122
Vermont	65	10,126	416	64	22,084	515	28	21,796	548
Virginia	279	40,376	5,240	137	42,048	2,178	88	49,649	3,598
Washington	916	141,059	82,532	1,035	323,103	251,865	642	458,827	285,819
West Virginia	97	12,378	222	5	1,100	(D)	20	13,800	(D)
Wisconsin	103	15,794	4,735	332	114,578	41,744	303	234,242	68,851
Wyoming	854	134,248	79,077	666	215,881	111,216	451	342,409	135,154
Water Resources Regions									
Region 01 New England	614	87,420	10,354	289	98,829	6,616	86	58,753	5,514
Region 02 Mid-Atlantic	809	114,749	29,746	622	200,760	64,085	427	276,557	114,560
Region 03 South Atlantic-Gulf	2,147	315,938	123,702	1,336	442,233	128,743	1,331	925,832	307,807
Region 04 Great Lakes	799	115,929	26,299	944	306,750	113,076	711	502,080	185,441
Region 05 Ohio	871	120,335	11,219	459	149,503	24,572	149	121,440	40,800
Region 06 Tennessee	77	9,494	734	71	27,555	2,810	-	-	-
Region 07 Upper Mississippi	551	86,550	34,842	1,118	369,391	158,544	1,020	759,659	224,822
Region 08 Lower Mississippi	476	71,731	40,065	634	222,830	138,798	975	727,689	474,677
Region 09 Souris-Red-Rainy	41	5,763	(D)	63	(D)	(D)	49	31,700	(D)
Region 10 Missouri	3,276	493,877	277,939	4,002	1,411,863	753,675	4,802	3,542,921	1,718,315
Region 11 Arkansas-White-Red	644	106,127	36,814	821	283,980	94,583	1,274	942,291	318,230
Region 12 Texas-Gulf	917	135,006	43,381	1,071	375,654	144,521	1,106	791,938	346,383
Region 13 Rio Grande	496	72,208	42,147	490	154,294	50,390	168	131,664	71,707
Region 14 Upper Colorado	1,589	242,284	121,085	1,052	323,207	155,584	714	521,488	203,229
Region 15 Lower Colorado	286	38,454	15,692	433	133,199	66,949	238	181,010	121,165
Region 16 Great Basin	1,188	171,154	104,673	1,102	373,079	218,345	661	449,440	219,088
Region 17 Pacific Northwest	4,008	597,389	366,862	4,280	1,376,329	825,616	2,148	1,532,234	897,599
Region 18 California	4,671	690,975	524,949	3,621	1,170,178	911,616	2,160	1,477,884	1,022,074
Region 19 Alaska	18	2,345	444	2	(D)	(D)	2	(D)	(D)
Region 20 Hawaii	35	4,754	(D)	38	12,896	506	1	(D)	(D)

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Table 19. Irrigated Farms by Size of Farm: 2018 (continued)

[Excludes institutional, research, and experimental farms. 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	17,088	24,282,380	10,634,755	15,301	47,213,071	15,920,466	9,116	123,430,754	15,693,123
Alabama	159	233,906	36,889	84	335,311	71,283	10	64,770	23,597
Alaska	-	-	-	-	-	-	-	-	-
Arizona	261	369,135	201,984	115	387,539	234,446	118	1,615,843	288,042
Arkansas	668	960,418	779,476	758	2,185,572	1,829,095	203	1,488,452	1,280,086
California	1,432	1,927,941	1,374,078	1,014	2,973,893	1,592,513	583	7,836,755	2,519,699
Colorado	840	1,214,087	352,510	878	2,821,281	625,819	667	9,306,849	688,077
Connecticut	4	5,488	306	-	-	-	-	-	-
Delaware	58	64,867	24,433	74	201,212	93,661	3	18,109	11,094
Florida	240	327,062	106,852	171	465,814	218,713	180	2,849,627	738,976
Georgia	541	759,929	275,384	321	974,910	360,535	58	484,882	272,557
Hawaii	7	(D)	3,093	10	35,183	8,119	50	776,194	7,337
Idaho	756	1,081,399	561,044	591	1,771,518	867,579	272	2,788,742	849,160
Illinois	296	462,621	141,936	195	622,391	159,595	94	784,379	139,825
Indiana	242	362,416	101,842	394	1,160,561	274,427	52	370,752	75,525
Iowa	162	224,954	55,203	87	267,842	43,056	9	105,117	18,000
Kansas	808	1,231,771	374,897	1,303	3,966,706	807,119	714	6,651,952	1,000,432
Kentucky	2	(D)	(D)	35	127,329	27,077	8	76,710	19,752
Louisiana	389	572,643	298,652	269	790,778	438,266	31	237,936	164,144
Maine	5	5,785	1,196	15	(D)	(D)	8	(D)	(D)
Maryland	66	94,508	31,498	31	92,139	34,865	-	-	-
Massachusetts	5	7,205	1,171	-	-	-	1	(D)	(D)
Michigan	367	537,419	176,368	179	491,614	222,814	88	570,021	187,494
Minnesota	433	555,204	153,374	151	434,383	137,294	42	335,112	92,325
Mississippi	295	440,494	262,954	314	963,119	623,205	117	830,580	644,858
Missouri	455	664,919	360,526	457	1,409,277	732,032	59	410,383	210,521
Montana	578	802,457	270,920	628	2,024,603	387,209	1,205	21,690,185	965,881
Nebraska	2,981	4,211,891	2,393,770	2,127	6,445,794	2,427,613	870	9,742,642	1,043,865
Nevada	231	321,803	134,045	117	362,296	111,818	91	3,494,463	268,448
New Hampshire	-	-	-	-	-	-	-	-	-
New Jersey	23	29,655	16,342	14	38,379	8,281	1	(D)	(D)
New Mexico	185	309,082	67,395	255	789,840	145,620	193	3,951,633	184,505
New York	20	27,379	4,229	7	26,588	3,261	9	76,357	5,185
North Carolina	26	36,425	12,684	59	191,056	12,187	88	678,500	55,460
North Dakota	251	377,863	103,314	200	730,831	106,637	128	1,247,380	64,275
Ohio	37	56,689	9,509	51	122,571	11,114	3	21,471	662
Oklahoma	295	397,134	84,166	335	1,070,774	190,568	195	1,773,911	278,495
Oregon	702	970,564	302,358	275	904,561	245,110	482	7,466,939	470,567
Pennsylvania	24	34,666	2,063	11	28,834	16,147	1	(D)	(D)
Rhode Island	-	-	-	1	(D)	(D)	-	-	-
South Carolina	78	112,260	54,370	159	475,134	107,963	32	225,250	54,405
South Dakota	205	332,204	81,952	297	1,005,143	112,850	184	2,998,939	121,305
Tennessee	92	143,172	17,688	173	624,143	71,901	68	491,067	79,390
Texas	1,303	1,879,078	624,746	1,814	5,734,352	1,492,877	750	10,799,965	1,351,144
Utah	494	656,900	161,956	375	1,162,535	222,178	363	3,541,249	195,119
Vermont	-	-	-	-	-	-	-	-	-
Virginia	67	84,247	16,921	50	138,241	15,193	2	(D)	(D)
Washington	395	562,730	324,222	287	857,807	302,533	376	4,924,591	503,259
West Virginia	24	25,200	(D)	5	11,760	5,395	-	-	-
Wisconsin	207	266,846	107,772	130	384,621	165,831	61	408,343	125,966
Wyoming	379	527,434	168,625	485	1,559,061	347,302	647	12,131,799	670,482
Water Resources Regions									
Region 01 New England	14	18,478	2,673	16	45,775	9,365	9	130,405	18,772
Region 02 Mid-Atlantic	252	319,298	90,346	175	477,257	173,495	7	50,609	15,531
Region 03 South Atlantic-Gulf	981	1,353,962	475,269	792	2,408,869	765,695	368	4,322,285	1,142,963
Region 04 Great Lakes	516	749,374	241,608	289	808,679	328,896	103	690,207	215,251
Region 05 Ohio	234	369,580	84,245	335	1,004,304	149,031	97	699,203	126,046
Region 06 Tennessee	86	142,850	17,075	38	134,797	26,196	9	64,044	21,232
Region 07 Upper Mississippi	982	1,349,878	421,175	533	1,606,654	486,214	156	1,241,209	289,239
Region 08 Lower Mississippi	1,542	2,282,763	1,529,758	1,579	4,792,163	3,190,401	428	3,104,848	2,232,883
Region 09 Souris-Red-Rainy	81	(D)	16,283	174	608,079	117,373	31	351,334	54,447
Region 10 Missouri	5,001	7,150,877	3,240,722	4,564	14,362,143	3,710,757	3,539	52,789,461	3,254,524
Region 11 Arkansas-White-Red	1,485	2,125,374	711,099	1,965	6,123,849	1,729,204	1,061	13,063,540	1,962,819
Region 12 Texas-Gulf	1,021	1,500,857	476,280	1,269	3,969,623	1,011,548	404	4,792,940	633,590
Region 13 Rio Grande	187	301,783	105,053	182	534,226	220,883	164	3,317,401	140,579
Region 14 Upper Colorado	432	589,302	151,732	508	1,553,853	319,110	307	4,827,167	384,201
Region 15 Lower Colorado	294	419,135	206,910	191	607,693	258,305	162	2,285,894	332,234
Region 16 Great Basin	703	967,546	297,974	410	1,288,411	352,384	457	6,310,532	456,787
Region 17 Pacific Northwest	1,814	2,561,519	1,167,688	1,233	3,793,828	1,430,966	1,156	16,532,128	1,893,448
Region 18 California	1,456	1,960,468	1,395,772	1,038	3,057,685	1,632,524	608	8,081,353	2,511,240
Region 19 Alaska	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	7	(D)	3,093	10	35,183	8,119	50	776,194	7,337

Table 20. Irrigated Farms by North American Industrial Classification System: 2018 and 2013 (continued)

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

Geographic area	Vegetable and melon farming (1112)		Fruit and tree nut farming (1113)		Greenhouse, nursery, and floriculture farming (1114)	
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States2018	15,597	4,484,052	53,322	5,647,673	22,300	626,655
.....2013	13,859	3,872,226	53,875	4,118,335	27,398	666,106
2018 DATA						
Alabama	167	14,543	150	650	303	21,979
Alaska	50	558	1	(D)	178	429
Arizona	169	155,389	713	76,721	138	9,870
Arkansas	109	28,857	133	3,801	130	6,298
California	1,769	1,255,737	29,548	4,122,771	2,100	89,723
Colorado	413	91,951	744	6,435	400	16,860
Connecticut	93	443	151	484	316	4,206
Delaware	5	8,154	4	(D)	31	3,049
Florida	552	180,976	3,271	427,157	2,546	91,404
Georgia	380	86,915	1,183	133,207	449	26,272
Hawaii	403	6,040	588	8,578	674	2,346
Idaho	648	808,430	287	2,141	307	9,394
Illinois	237	21,406	56	116	332	12,970
Indiana	233	36,463	112	350	274	3,433
Iowa	74	4,108	57	456	261	3,387
Kansas	81	405	40	90	185	6,332
Kentucky	276	2,521	52	104	348	1,519
Louisiana	67	18,789	136	799	260	4,162
Maine	297	19,050	231	14,615	313	1,651
Maryland	302	25,025	26	52	263	10,639
Massachusetts	340	3,117	544	13,344	313	1,960
Michigan	487	183,630	675	34,853	959	25,332
Minnesota	274	50,639	82	778	325	5,241
Mississippi	97	7,899	123	2,489	169	5,497
Missouri	291	5,580	195	11,196	438	5,203
Montana	170	32,836	361	2,123	200	1,835
Nebraska	104	23,325	48	224	192	4,340
Nevada	8	18,887	43	2,271	48	792
New Hampshire	138	1,422	101	618	283	782
New Jersey	371	27,172	199	19,235	638	20,998
New Mexico	616	30,758	2,732	68,242	176	2,434
New York	540	15,564	358	10,170	830	13,516
North Carolina	447	56,650	382	13,922	839	10,350
North Dakota	53	34,949	-	-	34	110
Ohio	517	9,273	57	1,266	752	9,990
Oklahoma	134	10,120	102	335	180	17,817
Oregon	692	176,278	2,433	103,491	1,220	54,492
Pennsylvania	746	24,776	369	4,573	889	3,926
Rhode Island	100	1,403	33	232	71	1,559
South Carolina	425	37,654	157	9,409	270	14,508
South Dakota	60	392	-	-	84	1,064
Tennessee	317	4,030	130	635	404	8,529
Texas	404	190,269	1,934	74,237	764	49,333
Utah	361	9,330	333	20,694	188	5,732
Vermont	159	1,498	133	874	200	383
Virginia	335	12,918	228	482	392	4,590
Washington	620	509,834	3,644	424,454	788	19,045
West Virginia	77	5,774	78	157	162	(D)
Wisconsin	384	232,186	323	28,794	645	10,101
Wyoming	5	129	42	(D)	39	(D)
Water Resources Regions						
Region 01 New England	1,028	26,207	1,134	29,832	1,340	10,245
Region 02 Mid-Atlantic	1,802	108,366	797	27,469	2,358	52,901
Region 03 South Atlantic-Gulf	2,029	376,874	5,265	586,637	4,375	165,968
Region 04 Great Lakes	1,138	223,191	1,116	43,971	1,983	36,000
Region 05 Ohio	1,119	34,995	366	3,026	1,628	13,391
Region 06 Tennessee	340	1,578	114	744	481	7,961
Region 07 Upper Mississippi	882	288,191	448	27,384	1,374	31,464
Region 08 Lower Mississippi	208	61,689	187	11,898	335	7,250
Region 09 Souris-Red-Rainy	82	15,306	19	(D)	39	142
Region 10 Missouri	607	79,790	240	1,021	1,043	22,236
Region 11 Arkansas-White-Red	364	65,476	596	5,913	535	31,444
Region 12 Texas-Gulf	369	92,626	1,681	60,683	748	48,682
Region 13 Rio Grande	449	130,584	2,657	69,718	177	3,676
Region 14 Upper Colorado	403	6,053	785	7,723	161	4,135
Region 15 Lower Colorado	172	165,574	769	97,700	169	10,252
Region 16 Great Basin	297	57,926	264	20,965	194	5,436
Region 17 Pacific Northwest	2,089	1,497,476	6,769	532,205	2,410	83,256
Region 18 California	1,766	1,245,552	29,526	4,112,147	2,098	89,441
Region 19 Alaska	50	558	1	(D)	178	429
Region 20 Hawaii	403	6,040	588	8,578	674	2,346

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Table 20. Irrigated Farms by North American Industrial Classification System: 2018 and 2013 (continued)

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

Geographic area	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
United States 2018 2013	41,961 34,292	7,385,161 5,966,127	1,818 1,252	866,308 698,465	3,760 3,462	1,649,727 1,462,914	18,320 15,083	1,013,274 815,655
2018 DATA								
Alabama	15	15	-	-	-	-	29	130
Alaska	9	18	-	-	-	-	49	(D)
Arizona	874	28,922	-	-	2	(D)	306	(D)
Arkansas	64	14,772	-	-	5	775	95	8,928
California	3,150	593,135	91	66,300	891	547,209	1,453	54,885
Colorado	4,375	725,815	105	59,019	195	63,337	1,848	96,838
Connecticut	-	-	-	-	-	-	70	126
Delaware	-	-	6	18,030	1	(D)	180	62,702
Florida	503	57,923	-	-	39	15,369	324	3,869
Georgia	282	8,946	-	-	31	10,650	98	26,946
Hawaii	42	2,581	-	-	7	1,750	102	1,013
Idaho	5,251	521,643	132	33,880	473	318,144	2,047	46,966
Illinois	-	-	-	-	-	-	-	-
Indiana	73	4,402	-	-	53	10,660	60	8,957
Iowa	58	800	21	723	19	209	25	2,641
Kansas	299	92,475	92	66,105	76	29,247	20	1,055
Kentucky	149	1,274	2	(D)	22	(D)	74	665
Louisiana	53	6,132	-	-	-	-	69	14,219
Maine	27	54	-	-	-	-	34	65
Maryland	-	-	-	-	14	8,256	121	18,049
Massachusetts	-	-	-	-	28	336	11	11
Michigan	60	280	40	3,080	162	42,440	152	27,670
Minnesota	55	4,853	38	3,249	127	35,302	203	49,338
Mississippi	56	3,456	-	-	-	-	48	4,830
Missouri	98	8,813	-	-	56	13,641	186	7,375
Montana	3,784	1,321,507	94	41,804	27	10,454	1,286	57,397
Nebraska	1,703	493,549	522	411,230	45	17,858	236	134,977
Nevada	617	265,235	15	4,305	20	21,235	269	14,270
New Hampshire	21	21	-	-	-	-	29	58
New Jersey	45	221	-	-	7	1,750	114	252
New Mexico	2,538	150,897	22	5,280	138	76,572	997	20,151
New York	22	44	23	(D)	69	2,272	113	(D)
North Carolina	27	27	-	-	-	-	341	14,576
North Dakota	124	12,648	-	-	-	-	-	-
Ohio	-	-	6	2,235	23	(D)	16	(D)
Oklahoma	589	181,164	13	8,450	1	(D)	230	(D)
Oregon	4,277	593,543	164	8,045	116	14,914	1,416	34,640
Pennsylvania	76	119	25	100	135	1,279	271	4,081
Rhode Island	-	-	-	-	-	-	23	37
South Carolina	39	484	-	-	52	5,200	199	26,239
South Dakota	322	86,597	36	13,840	-	-	79	33,120
Tennessee	42	84	-	-	-	-	107	4,811
Texas	2,963	497,636	76	55,437	204	138,689	783	16,334
Utah	4,220	527,955	163	32,295	250	76,622	2,562	93,824
Vermont	-	-	-	-	24	78	7	10
Virginia	-	-	-	-	48	3,972	37	2,970
Washington	2,349	131,267	82	6,705	272	92,221	767	11,765
West Virginia	-	-	-	-	-	-	103	(D)
Wisconsin	37	150	18	5,202	128	50,641	108	17,766
Wyoming	2,673	1,045,704	32	20,941	-	-	623	77,028
Water Resources Regions								
Region 01 New England	48	75	-	-	50	358	174	307
Region 02 Mid-Atlantic	121	340	31	18,130	205	17,257	834	88,208
Region 03 South Atlantic-Gulf	900	70,171	-	-	122	31,219	1,008	75,340
Region 04 Great Lakes	157	2,486	84	9,175	320	77,901	294	46,317
Region 05 Ohio	184	3,664	5	1,395	45	(D)	192	7,742
Region 06 Tennessee	46	88	-	-	-	-	68	93
Region 07 Upper Mississippi	74	3,124	41	3,252	242	56,802	303	53,223
Region 08 Lower Mississippi	98	9,237	-	-	-	-	124	18,888
Region 09 Souris-Red-Rainy	57	9,842	-	-	15	(D)	19	(D)
Region 10 Missouri	8,327	2,525,286	774	532,522	186	75,970	2,109	289,893
Region 11 Arkansas-White-Red	1,962	517,130	103	113,502	155	118,177	484	18,426
Region 12 Texas-Gulf	2,494	350,273	41	8,130	218	115,870	654	21,024
Region 13 Rio Grande	1,994	154,944	-	-	77	35,649	968	12,387
Region 14 Upper Colorado	4,891	866,282	208	41,358	106	27,254	2,002	124,204
Region 15 Lower Colorado	1,277	47,678	-	-	2	(D)	407	(D)
Region 16 Great Basin	3,393	675,966	66	13,034	340	105,027	2,398	91,687
Region 17 Pacific Northwest	12,403	1,446,501	374	59,510	774	392,149	4,631	99,510
Region 18 California	3,484	699,475	91	66,300	896	559,969	1,500	56,417
Region 19 Alaska	9	18	-	-	-	-	49	(D)
Region 20 Hawaii	42	2,581	-	-	7	1,750	102	1,013

Table 21. Irrigated Farms by Market Value of Agricultural Products Sold: 2018 and 2013 (continued)

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

Geographic area	\$25,000 to \$49,999									
	Farms with irrigation				Water source ¹			Quantity of water applied ¹		
	Farms	Land in farms ² (acres)	Acres irrigated ²	Irrigated cropland harvested ² (acres)	Ground water used (acres)	On-farm surface water used (acres)	Off-farm water used (acres)	Ground water used (acre-feet)	On-farm surface water used (acre-feet)	Off-farm water used (acre-feet)
United States 2018	18,815	7,013,890	1,072,326	814,490	392,246	121,463	582,956	407,631	150,476	973,895
..... 2013	18,542	4,807,835	1,041,037	858,542	397,593	176,630	482,869	450,964	247,856	862,761
2018 DATA										
Alabama	29	960	105	105	80	25	80	80	25	80
Alaska	29	645	(D)	(D)	42	(D)	(D)	27	(D)	(D)
Arizona	212	136,301	8,145	3,068	6,213	221	1,699	19,970	221	4,022
Arkansas	149	30,797	17,332	17,332	16,350	2,345	13	14,417	3,326	9
California	4,345	355,446	100,196	70,421	40,963	14,533	52,475	74,201	39,856	124,093
Colorado	1,205	904,998	151,773	96,089	21,423	27,518	104,857	29,580	20,164	159,513
Connecticut	28	168	84	84	56	-	-	28	-	-
Delaware	38	2,312	1,284	1,284	1,254	-	17	35	-	4
Florida	628	57,204	15,579	12,092	8,624	6,286	567	6,428	3,962	378
Georgia	318	62,166	7,966	7,966	5,999	1,240	720	1,934	536	1,032
Hawaii	108	449	(D)	(D)	-	-	299	-	-	292
Idaho	1,389	513,880	119,498	66,239	11,049	11,786	96,657	17,009	15,923	180,449
Illinois	111	8,419	5,364	5,346	5,318	(D)	10	5,831	10	10
Indiana	163	20,254	4,411	4,411	3,740	264	(D)	1,361	163	396
Iowa	82	7,009	2,850	2,850	2,706	35	60	222	14	38
Kansas	260	657,389	22,067	22,067	21,007	-	1,050	19,469	-	495
Kentucky	205	16,537	1,460	1,460	(D)	737	621	9	154	169
Louisiana	135	33,710	5,065	3,665	2,727	2,260	(D)	1,554	927	10
Maine	47	7,843	114	114	(D)	(D)	-	35	25	-
Maryland	77	2,523	298	298	252	-	-	138	-	-
Massachusetts	179	7,906	1,607	1,607	431	1,148	-	79	756	-
Michigan	452	28,658	6,035	6,035	5,320	543	23	1,699	261	25
Minnesota	200	38,962	12,417	12,417	8,785	1,824	1,800	1,942	722	1,872
Mississippi	81	6,744	2,850	2,850	2,152	1,530	(D)	802	1,006	18
Missouri	194	34,086	17,554	17,126	16,846	294	336	8,885	124	165
Montana	763	567,651	99,712	64,601	7,446	13,846	80,471	13,525	25,622	102,007
Nebraska	530	299,855	61,500	58,708	55,298	1,070	6,144	30,474	710	6,816
Nevada	110	20,610	9,898	9,823	2,626	3,945	3,400	7,863	4,725	10,172
New Hampshire	21	(D)	94	94	(D)	(D)	-	8	16	5
New Jersey	70	5,708	2,948	2,948	1,433	1,515	(D)	-	136	-
New Mexico	448	133,221	18,503	13,708	12,616	7,029	7,174	17,269	3,564	16,843
New York	204	9,371	661	661	463	(D)	23	448	(D)	23
North Carolina	192	15,638	1,047	1,047	95	851	-	73	249	-
North Dakota	3	13	10	10	(D)	(D)	-	(D)	(D)	-
Ohio	250	12,369	651	651	(D)	272	(D)	55	75	20
Oklahoma	148	104,451	9,025	8,920	8,742	263	(D)	6,512	94	(D)
Oregon	887	134,579	37,632	25,024	7,248	4,150	26,148	11,951	8,545	36,009
Pennsylvania	284	11,070	1,969	1,969	932	918	(D)	926	247	11
Rhode Island	37	(D)	124	124	(D)	-	(D)	81	-	(Z)
South Carolina	121	24,182	2,104	904	857	1,239	(D)	174	345	53
South Dakota	118	62,027	12,226	11,628	5,705	-	6,528	3,263	-	9,154
Tennessee	169	7,140	596	596	324	148	34	112	87	31
Texas	1,004	1,225,918	86,432	81,329	76,014	4,603	5,781	68,939	9,533	6,499
Utah	989	481,167	104,751	93,234	9,273	1,080	95,992	12,054	351	147,160
Vermont	49	1,841	186	186	24	135	8	21	121	7
Virginia	74	15,611	229	229	203	-	-	101	-	-
Washington	887	447,880	31,857	18,581	13,011	387	19,295	21,025	195	32,771
West Virginia	57	1,860	(D)	(D)	12	41	(D)	(D)	36	(D)
Wisconsin	188	9,111	3,461	3,461	3,257	126	5	1,668	36	1
Wyoming	548	485,236	82,170	60,677	5,041	7,080	70,043	5,052	7,599	133,218
Water Resources Regions										
Region 01 New England	315	18,026	2,029	2,029	668	1,256	6	234	797	6
Region 02 Mid-Atlantic	605	39,366	7,002	7,002	4,424	2,307	52	1,859	341	38
Region 03 South Atlantic-Gulf	1,254	158,055	27,386	22,699	15,745	10,153	1,417	8,759	5,591	1,560
Region 04 Great Lakes	723	39,553	7,314	7,314	6,150	839	32	2,437	414	34
Region 05 Ohio	614	37,937	4,335	4,335	1,389	1,521	1,106	316	524	586
Region 06 Tennessee	244	13,353	(D)	(D)	376	192	32	145	(D)	30
Region 07 Upper Mississippi	541	69,755	34,894	34,876	33,395	1,215	89	17,051	439	(D)
Region 08 Lower Mississippi	298	41,700	21,296	19,896	18,607	4,855	(D)	15,549	3,486	14
Region 09 Souris-Red-Rainy	58	18,235	2,549	2,549	-	747	1,800	-	348	1,872
Region 10 Missouri	2,236	1,535,196	244,839	187,489	85,285	23,945	138,649	61,779	29,946	224,586
Region 11 Arkansas-White-Red	656	1,178,481	71,949	69,054	56,369	2,007	13,527	55,279	1,733	17,022
Region 12 Texas-Gulf	904	422,331	68,939	63,204	60,521	10,873	3,781	51,043	12,668	3,159
Region 13 Rio Grande	443	634,299	21,274	17,178	11,074	(D)	12,579	19,855	3,075	19,667
Region 14 Upper Colorado	920	666,518	132,473	76,125	7,815	21,110	103,878	9,218	15,196	160,904
Region 15 Lower Colorado	335	189,133	13,619	8,516	10,342	221	3,044	25,974	221	5,319
Region 16 Great Basin	889	458,442	99,306	93,781	7,774	5,025	88,202	13,917	5,076	139,395
Region 17 Pacific Northwest	3,277	1,130,545	208,689	127,214	27,918	19,313	162,189	46,179	30,643	275,633
Region 18 California	4,366	361,871	103,322	70,153	44,353	14,533	52,211	78,008	39,856	123,719
Region 19 Alaska	29	645	(D)	(D)	42	(D)	(D)	27	(D)	(D)
Region 20 Hawaii	108	449	(D)	(D)	-	-	299	-	-	292

See footnote(s) at end of table.

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Table 21. Irrigated Farms by Market Value of Agricultural Products Sold: 2018 and 2013 (continued)

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

Geographic area	\$50,000 to \$99,999									
	Farms with irrigation				Water source ¹			Quantity of water applied ¹		
	Farms	Land in farms ² (acres)	Acres irrigated ²	Irrigated cropland harvested ² (acres)	Ground water used (acres)	On-farm surface water used (acres)	Off-farm water used (acres)	Ground water used (acre-feet)	On-farm surface water used (acre-feet)	Off-farm water used (acre-feet)
United States2018	19,608	13,142,214	2,071,141	1,712,727	927,004	297,632	888,083	965,070	400,502	1,405,008
2013	19,564	11,605,795	1,866,346	1,527,446	829,274	268,792	825,148	1,045,698	354,278	1,471,693
2018 DATA										
Alabama	69	5,179	478	478	383	45	1	241	42	(Z)
Alaska	9	(D)	107	106	45	(D)	-	20	(D)	-
Arizona	170	77,726	8,112	5,373	2,489	-	5,622	2,530	-	32,938
Arkansas	276	184,857	138,766	131,266	123,969	14,005	774	148,738	10,740	946
California	4,191	789,624	171,358	142,024	77,057	48,062	62,066	170,329	138,358	156,879
Colorado	762	1,221,142	142,134	112,947	51,598	17,511	74,736	59,896	31,449	158,735
Connecticut	85	5,670	259	259	-	204	-	-	87	-
Delaware	34	13,065	5,489	5,489	5,488	-	-	1,783	-	-
Florida	753	149,542	31,404	20,112	19,896	653	10,818	14,687	235	32,598
Georgia	374	190,981	29,345	26,776	14,243	14,571	638	15,750	4,226	838
Hawaii	150	3,039	620	618	119	(D)	483	245	(D)	180
Idaho	1,194	441,151	179,673	141,589	28,671	20,690	130,726	35,272	21,437	244,879
Illinois	173	42,123	8,678	8,678	7,213	1,364	26	3,133	2,246	46
Indiana	202	37,366	13,130	13,128	10,665	2,372	35	5,581	2,024	(D)
Iowa	88	31,838	15,277	15,277	15,253	(D)	-	7,690	(D)	-
Kansas	370	302,841	38,510	36,900	37,578	-	908	32,360	-	1,131
Kentucky	147	21,087	1,240	1,240	796	(D)	156	391	99	147
Louisiana	208	108,911	45,074	41,616	38,201	10,321	-	47,646	9,537	-
Maine	81	9,713	754	754	55	610	(D)	42	364	33
Maryland	243	33,906	12,078	12,078	10,949	1,068	-	8,192	780	-
Massachusetts	173	4,726	1,154	1,154	50	1,004	(D)	15	153	67
Michigan	405	79,376	29,849	29,849	25,635	4,236	211	8,239	4,544	267
Minnesota	296	129,501	33,151	33,127	30,868	(D)	2,261	8,487	(D)	38
Mississippi	139	83,684	38,099	38,099	37,887	168	(D)	22,777	131	21
Missouri	239	46,606	16,480	15,080	13,510	2,878	159	9,440	781	65
Montana	710	2,629,305	237,779	173,816	11,021	51,205	175,540	15,405	55,738	146,385
Nebraska	1,250	1,044,135	181,147	174,143	135,461	6,032	43,614	91,487	3,199	40,800
Nevada	121	104,298	19,132	14,335	6,242	1,500	14,449	15,416	750	44,362
New Hampshire	77	5,729	862	631	355	65	407	37	(D)	56
New Jersey	205	23,807	3,704	3,704	1,929	1,807	-	1,645	741	-
New Mexico	430	681,107	39,124	35,824	25,355	-	16,074	43,077	-	32,182
New York	135	23,669	2,236	2,236	1,203	961	10	1,092	(D)	5
North Carolina	355	38,438	7,295	5,675	1,343	5,885	(D)	461	4,035	11
North Dakota	7	235	20	20	(D)	(D)	8	(D)	(D)	2
Ohio	239	21,262	2,780	2,714	951	1,607	116	413	408	23
Oklahoma	78	71,088	5,519	5,519	5,503	(D)	-	5,144	16	-
Oregon	1,066	694,101	115,570	76,898	16,047	24,345	76,278	22,211	25,469	114,628
Pennsylvania	494	30,080	2,934	2,394	1,219	1,335	199	852	145	149
Rhode Island	16	572	(D)	(D)	7	(D)	(D)	5	(D)	4
South Carolina	98	6,253	1,027	1,027	597	8	414	311	8	214
South Dakota	148	126,858	17,718	17,410	2,660	-	15,048	2,663	-	17,402
Tennessee	63	4,130	84	84	12	10	(D)	13	23	36
Texas	835	966,426	134,034	114,549	114,364	13,160	14,454	99,398	3,760	14,549
Utah	707	447,761	99,828	73,042	14,436	13,743	71,684	11,682	32,616	156,508
Vermont	59	6,251	(D)	(D)	12	(D)	4	20	(D)	4
Virginia	67	21,642	2,530	2,530	1,852	663	-	627	597	-
Washington	982	896,925	49,219	40,909	21,649	1,508	26,413	41,903	1,062	65,528
West Virginia	6	(D)	11	11	(D)	-	(D)	(D)	-	(D)
Wisconsin	250	35,850	7,484	7,484	6,903	828	-	2,183	774	(D)
Wyoming	379	1,247,572	179,793	123,663	5,250	32,941	143,582	5,523	43,633	142,313
Water Resources Regions										
Region 01 New England	436	26,422	3,061	2,830	467	1,885	531	99	626	164
Region 02 Mid-Atlantic	962	109,870	27,235	26,695	22,407	4,598	(D)	13,952	2,222	(D)
Region 03 South Atlantic-Gulf	1,643	393,732	69,666	54,185	36,450	21,269	11,915	31,453	8,648	33,682
Region 04 Great Lakes	742	143,237	39,287	39,287	33,450	6,023	221	12,299	5,538	272
Region 05 Ohio	688	86,624	8,507	8,439	5,383	2,293	494	2,826	768	377
Region 06 Tennessee	67	(D)	99	99	42	20	(D)	23	(D)	(D)
Region 07 Upper Mississippi	672	196,395	61,141	61,117	54,932	3,745	2,315	20,036	4,138	84
Region 08 Lower Mississippi	549	310,823	206,051	204,413	197,460	12,018	(D)	209,408	13,402	(Z)
Region 09 Souris-Red-Rainy	48	20,494	3,249	2,812	3,245	-	(D)	1,907	-	(D)
Region 10 Missouri	2,893	5,393,852	575,566	506,566	206,472	99,976	276,837	167,655	107,096	273,622
Region 11 Arkansas-White-Red	639	1,022,964	119,135	107,415	97,004	23,153	6,943	92,571	10,603	13,991
Region 12 Texas-Gulf	712	664,545	103,431	86,346	83,761	5,160	14,454	75,671	3,560	14,549
Region 13 Rio Grande	299	37,274	15,794	14,144	7,290	-	10,809	18,422	-	24,870
Region 14 Upper Colorado	635	713,055	136,389	73,221	4,555	(D)	118,035	5,573	36,307	210,314
Region 15 Lower Colorado	216	687,082	21,863	19,124	6,614	-	15,248	14,905	-	67,602
Region 16 Great Basin	763	450,505	123,237	96,967	20,978	9,033	96,290	27,438	21,216	182,398
Region 17 Pacific Northwest	3,232	2,062,201	377,081	269,615	68,581	44,703	265,656	99,549	47,508	444,370
Region 18 California	4,253	816,572	179,622	138,728	77,747	49,902	67,800	171,019	138,818	138,511
Region 19 Alaska	9	(D)	107	106	45	(D)	-	20	(D)	-
Region 20 Hawaii	150	3,039	620	618	119	(D)	483	245	(D)	180

See footnote(s) at end of table.

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Table 22. Irrigated Farms by Percent of Total Sales from Irrigated Crops and Livestock: 2018 and 2013

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

Geographic area	Farms by percent of total sales from -									
	Irrigated crops						Non-irrigated crops and 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 2018	26,169	29,227	22,309	30,666	40,969	82,134	82,134	61,093	62,078	26,169
..... 2013	19,009	28,253	18,970	29,242	40,442	93,321	93,321	59,448	57,459	19,009
2018 DATA										
Alabama	4	200	147	308	92	318	318	283	464	4
Alaska	-	27	43	31	15	192	192	26	90	-
Arizona	857	229	81	107	334	1,446	1,446	408	343	857
Arkansas	28	184	168	353	968	1,472	1,472	1,174	499	28
California	3,476	1,193	911	2,067	3,644	30,802	30,802	4,887	2,928	3,476
Colorado	1,953	1,632	1,657	2,067	3,255	3,965	3,965	4,589	4,022	1,953
Connecticut	-	209	119	94	101	146	146	195	328	-
Delaware	22	116	38	150	159	36	36	293	170	22
Florida	527	463	532	767	1,165	4,161	4,161	1,707	1,220	527
Georgia	117	473	481	751	895	1,144	1,144	1,348	1,252	117
Hawaii	42	140	96	284	264	1,037	1,037	397	387	42
Idaho	4,416	984	810	1,473	3,231	3,953	3,953	4,245	2,253	4,416
Illinois	-	527	288	369	308	315	315	530	962	-
Indiana	-	566	498	517	208	250	250	577	1,212	-
Iowa	4	355	187	247	70	198	198	170	689	4
Kansas	28	1,416	878	898	791	238	238	1,478	2,505	28
Kentucky	-	368	190	251	242	137	137	319	732	-
Louisiana	41	87	269	314	471	680	680	699	442	41
Maine	-	210	191	297	77	215	215	144	631	-
Maryland	-	186	111	234	174	254	254	310	395	-
Massachusetts	28	100	203	122	295	587	587	383	337	28
Michigan	20	1,051	529	713	813	760	760	1,366	1,740	20
Minnesota	-	508	506	533	468	352	352	890	1,125	-
Mississippi	13	180	155	365	588	320	320	847	441	13
Missouri	75	694	391	408	614	523	523	825	1,282	75
Montana	1,574	1,794	1,149	1,268	1,821	1,281	1,281	2,811	3,221	1,574
Nebraska	236	1,996	1,781	2,686	4,853	1,461	1,461	6,906	4,410	236
Nevada	399	166	169	164	345	614	614	483	361	399
New Hampshire	7	194	79	92	110	249	249	124	351	7
New Jersey	-	326	141	280	192	646	646	324	615	-
New Mexico	1,874	607	866	1,050	1,013	4,683	4,683	1,915	1,621	1,874
New York	23	372	262	450	429	612	612	632	881	23
North Carolina	82	511	444	297	302	815	815	398	1,156	82
North Dakota	-	428	74	44	91	83	83	94	543	-
Ohio	-	280	316	202	171	632	632	269	700	-
Oklahoma	115	472	378	383	286	201	201	453	1,066	115
Oregon	3,060	1,600	1,218	1,985	2,372	3,559	3,559	3,461	3,714	3,060
Pennsylvania	-	819	247	547	447	706	706	698	1,362	-
Rhode Island	-	14	29	69	34	81	81	60	86	-
South Carolina	77	265	209	384	112	442	442	376	594	77
South Dakota	22	524	333	134	152	54	54	240	903	22
Tennessee	-	581	304	262	130	175	175	284	993	-
Texas	1,413	2,168	1,763	1,619	2,333	2,701	2,701	3,345	4,538	1,413
Utah	2,618	1,046	1,174	1,747	3,141	2,849	2,849	4,504	2,604	2,618
Vermont	2	193	49	133	72	124	124	128	319	2
Virginia	-	446	289	246	125	271	271	269	837	-
Washington	2,098	977	599	1,181	1,697	4,707	4,707	2,405	2,049	2,098
West Virginia	-	104	34	190	78	76	76	123	283	-
Wisconsin	-	480	142	407	369	729	729	645	753	-
Wyoming	918	766	781	1,126	1,052	882	882	2,056	1,669	918
Water Resources Regions										
Region 01 New England	35	804	631	733	646	1,315	1,315	969	1,845	35
Region 02 Mid-Atlantic	45	1,806	793	1,447	1,181	2,045	2,045	1,888	3,339	45
Region 03 South Atlantic-Gulf	820	1,926	1,836	2,589	2,667	6,932	6,932	4,306	4,712	820
Region 04 Great Lakes	22	1,746	1,010	1,389	1,399	1,527	1,527	2,310	3,234	22
Region 05 Ohio	-	1,417	922	988	524	1,053	1,053	1,017	2,834	-
Region 06 Tennessee	-	349	200	377	133	191	191	304	755	-
Region 07 Upper Mississippi	12	1,705	1,042	1,435	1,022	1,475	1,475	1,953	3,251	12
Region 08 Lower Mississippi	41	554	642	955	2,187	2,216	2,216	2,864	1,474	41
Region 09 Souris-Red-Rainy	-	199	84	90	111	103	103	179	305	-
Region 10 Missouri	2,440	6,942	4,757	5,872	8,436	4,409	4,409	12,827	13,180	2,440
Region 11 Arkansas-White-Red	656	2,120	1,784	1,580	1,917	1,497	1,497	2,969	4,432	656
Region 12 Texas-Gulf	1,275	1,598	1,427	1,484	1,842	2,360	2,360	2,765	3,586	1,275
Region 13 Rio Grande	1,449	451	488	949	806	4,597	4,597	1,518	1,176	1,449
Region 14 Upper Colorado	2,375	1,071	1,425	1,995	3,300	3,022	3,022	4,949	2,842	2,375
Region 15 Lower Colorado	1,074	384	183	183	405	1,609	1,609	521	634	1,074
Region 16 Great Basin	2,252	1,079	1,088	1,207	2,697	2,999	2,999	3,590	2,481	2,252
Region 17 Pacific Northwest	9,873	3,696	2,920	4,989	7,698	12,729	12,729	10,750	8,553	9,873
Region 18 California	3,758	1,213	938	2,089	3,719	30,826	30,826	4,991	2,968	3,758
Region 19 Alaska	-	27	43	31	15	192	192	26	90	-
Region 20 Hawaii	42	140	96	284	264	1,037	1,037	397	387	42

Table 23. Methods Used in Deciding When to Irrigate: 2018

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

Geographic area	Farms reporting any method	Farms reporting method used ¹									
		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 supplier (see text)	Personal calendar schedule	Computer simulation models	When neighbors begin to irrigate
United States	231,474	180,560	93,052	27,629	5,199	18,773	16,701	38,566	46,477	1,928	12,765
Alabama	1,069	991	452	82	2	11	7	27	100	-	11
Alaska	308	260	197	29	13	-	3	-	69	-	-
Arizona	3,054	2,164	931	211	61	275	87	563	836	19	179
Arkansas	3,173	2,901	1,374	339	46	241	210	40	739	81	256
California	42,093	32,756	16,977	9,650	3,091	4,421	5,872	4,934	12,448	610	1,511
Colorado	14,529	9,243	4,287	577	76	1,049	657	6,248	2,742	49	1,704
Connecticut	669	627	386	6	-	-	9	-	66	-	10
Delaware	521	484	236	87	6	23	21	-	29	35	83
Florida	7,615	6,292	2,761	1,185	90	389	412	90	1,154	85	165
Georgia	3,861	3,371	1,051	417	18	171	300	6	580	57	98
Hawaii	1,863	1,618	795	21	36	41	69	46	381	3	3
Idaho	14,867	10,261	5,263	587	83	1,185	599	4,837	3,065	91	1,369
Illinois	1,807	1,708	874	153	36	65	257	-	253	42	115
Indiana	2,039	1,815	1,071	340	68	124	222	51	397	87	169
Iowa	1,061	909	504	114	-	4	45	-	163	25	21
Kansas	4,249	3,536	1,769	801	73	994	711	80	400	8	144
Kentucky	1,188	1,054	627	97	1	40	27	27	177	-	41
Louisiana	1,862	1,695	701	205	23	47	48	2	257	15	15
Maine	990	870	684	77	3	4	3	29	250	-	-
Maryland	959	856	502	63	-	17	16	-	157	4	11
Massachusetts	1,335	1,164	735	183	32	6	88	-	150	-	28
Michigan	3,886	3,512	2,588	285	5	251	447	30	802	24	257
Minnesota	2,367	2,086	1,504	258	28	132	313	56	291	3	245
Mississippi	1,621	1,396	668	435	33	62	32	32	235	9	89
Missouri	2,705	2,452	1,357	150	18	151	184	16	442	38	58
Montana	8,887	6,371	2,833	502	46	359	200	2,492	1,754	33	762
Nebraska	13,013	10,712	6,310	3,973	279	2,193	2,760	676	834	134	869
Nevada	1,857	1,317	551	73	15	203	36	591	633	-	220
New Hampshire	731	672	472	25	2	7	-	-	92	2	-
New Jersey	1,585	1,488	858	208	-	49	33	-	235	6	-
New Mexico	10,093	6,669	3,359	499	56	1,429	59	4,256	2,572	1	968
New York	2,148	2,031	1,224	247	27	23	108	3	368	1	32
North Carolina	2,451	2,220	893	71	1	80	1	44	284	36	1
North Dakota	720	682	477	120	5	95	58	23	133	5	49
Ohio	1,601	1,464	1,081	98	17	2	12	1	168	8	-
Oklahoma	1,835	1,542	653	89	28	71	62	89	191	13	70
Oregon	13,794	10,472	5,278	865	200	799	469	2,996	3,049	41	992
Pennsylvania	2,766	2,419	1,590	171	24	26	2	22	347	-	24
Rhode Island	227	223	134	51	-	-	11	5	14	-	9
South Carolina	1,489	1,325	334	174	-	47	7	1	156	12	25
South Dakota	1,219	1,109	585	194	26	44	98	-	147	-	71
Tennessee	1,452	1,289	454	197	42	66	30	1	147	34	-
Texas	11,997	10,170	4,384	927	188	388	592	764	1,938	163	325
Utah	12,575	7,686	3,082	228	90	1,811	119	6,095	2,385	41	651
Vermont	573	537	355	27	24	51	24	51	130	22	31
Virginia	1,377	1,242	721	67	22	30	15	-	269	1	22
Washington	11,259	8,927	5,602	1,920	208	711	963	1,380	2,992	46	468
West Virginia	482	385	266	54	5	-	-	-	5	23	-
Wisconsin	2,127	1,825	1,207	385	29	117	295	3	259	18	58
Wyoming	5,525	3,762	2,055	112	23	469	96	1,959	1,192	3	536
Water Resources Regions											
Region 01 New England	4,164	3,739	2,540	368	59	67	156	82	636	24	71
Region 02 Mid-Atlantic	7,317	6,562	3,957	681	38	144	107	22	1,035	69	121
Region 03 South Atlantic-Gulf	16,770	14,420	5,684	1,955	131	692	759	190	2,321	190	342
Region 04 Great Lakes	7,093	6,369	4,429	525	75	283	601	36	1,385	58	372
Region 05 Ohio	4,904	4,498	2,790	567	73	177	211	79	626	86	134
Region 06 Tennessee	1,250	1,126	476	74	2	29	2	2	158	-	-
Region 07 Upper Mississippi	6,691	6,023	3,659	764	83	295	773	41	885	68	429
Region 08 Lower Mississippi	6,595	5,977	2,826	1,068	129	409	389	47	1,218	157	261
Region 09 Souris-Red-Rainy	587	545	313	68	1	54	69	18	80	3	14
Region 10 Missouri	32,856	25,779	13,998	5,541	459	3,776	3,886	5,557	4,509	229	2,318
Region 11 Arkansas-White-Red	9,554	7,367	3,031	972	131	1,183	927	1,485	1,092	81	521
Region 12 Texas-Gulf	9,986	8,578	3,825	658	159	199	361	488	1,578	105	266
Region 13 Rio Grande	8,740	5,550	2,921	367	34	1,243	105	4,053	2,339	7	911
Region 14 Upper Colorado	13,188	8,155	3,663	218	30	976	129	5,611	2,881	4	1,329
Region 15 Lower Colorado	3,838	2,588	1,126	307	61	430	110	798	1,052	19	206
Region 16 Great Basin	11,322	7,406	2,907	259	101	1,599	168	5,224	2,165	44	785
Region 17 Pacific Northwest	41,905	30,869	16,755	3,545	493	2,776	2,015	9,789	9,542	171	3,118
Region 18 California	42,543	33,131	17,160	9,642	3,091	4,400	5,861	4,998	12,525	610	1,564
Region 19 Alaska	308	260	197	29	13	-	3	-	69	-	-
Region 20 Hawaii	1,863	1,618	795	21	36	41	69	46	381	3	3

¹ Respondents could choose more than one method.

Table 24. Technical and Financial Assistance Received During the Past Five Years for Irrigation or Drainage Improvements: 2018

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

Geographic area	Total ¹			USDA programs for water conservation and environmental improvements (CTA, EQIP, RCPP, WHIP, CIG) (see text)			Other USDA programs for stewardship (CSP) or easements (CRP, WRP, GRP, FRPP)		
	Farms	Farms receiving technical assistance	Farms receiving financial assistance	Farms	Farms receiving technical assistance	Farms receiving financial assistance	Farms	Farms receiving technical assistance	Farms receiving financial assistance
United States	23,714	16,979	16,079	12,427	8,909	10,020	3,020	1,868	2,290
Alabama	93	75	89	66	57	66	37	25	37
Alaska	13	13	9	10	9	9	-	-	-
Arizona	212	145	171	153	110	147	23	17	23
Arkansas	667	502	590	526	396	463	357	301	291
California	4,431	3,185	2,675	2,020	1,388	1,571	291	137	219
Colorado	1,554	1,313	1,162	1,047	962	887	160	132	128
Connecticut	39	39	35	34	34	32	2	2	-
Delaware	75	64	67	65	60	54	32	32	26
Florida	791	517	617	480	282	325	90	61	61
Georgia	469	260	314	237	147	189	81	49	57
Hawaii	87	77	49	46	43	42	2	2	-
Idaho	1,152	890	929	529	454	487	102	63	72
Illinois	172	52	157	1	1	-	17	-	17
Indiana	178	132	91	44	43	26	18	18	-
Iowa	87	69	28	17	-	17	17	-	17
Kansas	464	225	409	170	93	121	89	37	89
Kentucky	28	23	24	18	18	18	-	-	-
Louisiana	403	278	331	266	194	239	129	52	116
Maine	84	68	71	76	64	67	-	-	-
Maryland	112	96	60	67	64	43	-	-	-
Massachusetts	171	128	125	124	82	124	2	2	-
Michigan	373	236	182	49	20	29	43	23	23
Minnesota	248	174	135	80	76	47	1	-	1
Mississippi	369	197	337	298	160	277	115	84	101
Missouri	309	205	253	202	125	174	107	73	88
Montana	831	699	453	378	320	280	65	27	61
Nebraska	1,339	848	987	618	409	475	243	148	218
Nevada	362	284	260	264	232	199	98	47	52
New Hampshire	52	52	15	15	15	15	-	-	-
New Jersey	149	92	133	111	54	109	26	3	26
New Mexico	1,009	735	704	739	596	529	62	61	29
New York	258	169	219	176	153	150	54	31	26
North Carolina	197	95	159	46	13	33	-	-	-
North Dakota	143	128	126	85	62	54	18	18	-
Ohio	88	78	35	2	2	2	-	-	-
Oklahoma	74	57	21	14	14	-	-	-	-
Oregon	1,429	1,139	619	412	242	335	81	74	67
Pennsylvania	150	137	23	11	9	9	26	24	2
Rhode Island	57	48	33	52	43	33	5	5	5
South Carolina	154	58	111	124	41	98	26	26	-
South Dakota	97	52	68	30	22	30	5	1	5
Tennessee	118	52	108	63	41	63	28	6	28
Texas	1,110	595	865	718	383	579	207	78	176
Utah	1,202	908	867	826	603	706	73	70	38
Vermont	51	21	46	16	16	14	2	2	-
Virginia	58	35	24	-	-	-	-	-	-
Washington	1,211	1,058	502	402	284	284	190	134	95
West Virginia	122	33	122	122	33	122	45	-	45
Wisconsin	208	109	138	75	23	75	20	-	20
Wyoming	664	534	511	503	416	372	31	3	31
Water Resources Regions									
Region 01 New England	446	348	319	311	248	281	11	11	5
Region 02 Mid-Atlantic	696	515	468	402	288	363	112	64	80
Region 03 South Atlantic-Gulf	1,701	1,012	1,282	966	553	720	236	166	157
Region 04 Great Lakes	610	400	319	141	102	74	69	49	23
Region 05 Ohio	391	244	248	187	100	169	63	18	45
Region 06 Tennessee	102	51	89	24	24	24	25	-	25
Region 07 Upper Mississippi	636	348	452	144	80	136	65	8	65
Region 08 Lower Mississippi	1,403	984	1,250	1,089	769	974	635	452	535
Region 09 Souris-Red-Rainy	78	63	64	32	14	18	18	18	-
Region 10 Missouri	3,246	2,279	2,292	1,626	1,249	1,222	415	216	372
Region 11 Arkansas-White-Red	1,169	750	946	744	526	617	206	124	180
Region 12 Texas-Gulf	857	408	660	526	239	407	147	62	116
Region 13 Rio Grande	782	494	607	541	385	437	80	61	47
Region 14 Upper Colorado	1,423	1,241	1,058	1,053	960	864	59	56	55
Region 15 Lower Colorado	344	270	267	225	175	216	26	20	23
Region 16 Great Basin	1,421	1,085	964	886	686	688	187	113	106
Region 17 Pacific Northwest	3,887	3,214	2,080	1,466	1,075	1,197	376	294	237
Region 18 California	4,422	3,183	2,656	2,008	1,383	1,562	288	134	219
Region 19 Alaska	13	13	9	10	10	9	-	-	-
Region 20 Hawaii	87	77	49	46	43	42	2	2	-

See footnote(s) at end of table.

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Table 24. Technical and Financial Assistance Received During the Past Five Years for Irrigation or Drainage Improvements: 2018 (continued)

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

Geographic area	Non-USDA Federal programs (Bureau of Reclamation, EPA, or other)			State programs (including CREP), local water management, or water supply districts			Private businesses (equipment dealers, bankers, lenders)		
	Farms	Farms receiving technical assistance	Farms receiving financial assistance	Farms	Farms receiving technical assistance	Farms receiving financial assistance	Farms	Farms receiving technical assistance	Farms receiving financial assistance
United States	2,429	833	1,761	4,153	2,200	2,695	11,081	7,954	4,553
Alabama	34	25	9	34	25	9	54	45	20
Alaska	-	-	-	1	1	-	3	3	-
Arizona	16	-	16	-	-	-	75	51	24
Arkansas	55	22	40	83	31	59	170	90	119
California	299	140	189	835	433	522	2,155	1,749	642
Colorado	192	69	123	343	215	184	410	189	242
Connecticut	3	-	3	3	-	3	35	5	31
Delaware	4	-	4	4	-	4	10	4	9
Florida	23	3	20	399	262	292	160	133	67
Georgia	123	-	123	121	-	121	212	113	99
Hawaii	1	1	-	1	1	-	41	34	7
Idaho	149	19	149	136	44	92	569	372	376
Illinois	17	5	12	12	-	12	155	52	140
Indiana	-	-	-	-	-	-	150	105	65
Iowa	-	-	-	1	-	1	69	69	10
Kansas	1	1	-	21	20	16	356	162	272
Kentucky	-	-	-	6	2	4	4	2	2
Louisiana	41	-	41	54	39	41	125	84	67
Maine	2	-	2	2	-	2	23	16	7
Maryland	17	-	17	17	-	17	65	52	18
Massachusetts	11	-	11	45	2	45	59	46	13
Michigan	-	-	-	-	-	-	310	213	139
Minnesota	38	19	19	19	19	-	177	112	83
Mississippi	23	11	23	39	21	25	73	25	56
Missouri	9	-	9	41	37	26	88	46	44
Montana	24	24	1	112	80	36	441	364	167
Nebraska	78	50	33	204	154	153	754	436	418
Nevada	16	16	2	31	31	-	128	84	46
New Hampshire	-	-	-	4	4	-	33	33	-
New Jersey	30	-	30	35	4	35	69	36	54
New Mexico	166	67	133	99	-	99	317	251	94
New York	46	23	23	46	23	23	114	45	72
North Carolina	80	12	68	59	32	57	65	65	27
North Dakota	31	31	-	17	17	-	120	79	72
Ohio	-	-	-	-	-	-	86	76	33
Oklahoma	4	-	4	4	-	4	60	43	21
Oregon	112	49	65	357	154	257	858	823	84
Pennsylvania	15	4	13	15	4	11	117	104	14
Rhode Island	-	-	-	-	-	-	5	5	-
South Carolina	13	-	13	40	27	13	57	44	13
South Dakota	-	-	-	-	-	-	68	30	39
Tennessee	1	-	1	-	-	-	33	11	22
Texas	261	18	243	390	161	253	455	166	336
Utah	92	31	61	97	66	62	447	386	127
Vermont	32	2	30	35	3	32	35	5	30
Virginia	23	-	23	10	10	-	34	34	1
Washington	247	162	112	262	182	129	864	803	194
West Virginia	3	-	3	-	-	-	-	-	-
Wisconsin	-	-	-	5	3	2	135	86	63
Wyoming	97	29	93	114	93	54	238	172	74
Water Resources Regions									
Region 01 New England	48	2	46	86	8	80	188	108	81
Region 02 Mid-Atlantic	103	4	101	94	17	81	303	221	112
Region 03 South Atlantic-Gulf	261	51	221	668	352	501	532	380	220
Region 04 Great Lakes	42	42	-	45	43	2	484	324	229
Region 05 Ohio	12	-	12	16	3	13	213	157	75
Region 06 Tennessee	29	-	29	3	-	3	32	29	14
Region 07 Upper Mississippi	37	5	32	18	3	15	469	261	290
Region 08 Lower Mississippi	83	22	68	150	102	102	374	195	246
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	60	45	46
Region 10 Missouri	260	134	157	506	375	291	1,735	1,078	901
Region 11 Arkansas-White-Red	71	15	56	96	30	70	520	261	337
Region 12 Texas-Gulf	232	18	214	352	152	220	376	120	284
Region 13 Rio Grande	189	66	156	128	5	123	255	165	113
Region 14 Upper Colorado	142	56	87	277	177	156	240	160	84
Region 15 Lower Colorado	16	-	16	22	-	22	135	111	29
Region 16 Great Basin	113	47	68	771	70	55	639	525	198
Region 17 Pacific Northwest	491	230	309	771	416	449	2,336	2,037	645
Region 18 California	299	140	189	825	445	512	2,146	1,740	642
Region 19 Alaska	-	-	-	1	1	-	3	3	-
Region 20 Hawaii	1	1	-	1	1	-	41	34	7

¹ Respondents could choose more than one program.

Table 25. Barriers to Making Improvements to Reduce Energy Use or Conserve Water: 2018

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

Geographic area	Total ¹				Investigating improvements not a priority		
	Farms	Land in farms (acres)	Acres irrigated	Acre-feet applied ^{2,3}	Farms	Acres irrigated ³	Acre-feet applied ³
United States	123,565	116,761,572	29,511,478	43,081,007	40,513	5,936,080	8,215,677
Alabama	544	255,410	66,281	47,024	144	9,704	3,422
Alaska	201	4,827	1,081	954	92	206	248
Arizona	1,517	1,392,162	462,885	2,278,822	497	108,158	621,451
Arkansas	1,938	3,322,673	2,801,203	3,341,310	450	582,342	756,386
California	20,922	7,348,985	3,606,534	10,545,987	6,653	621,884	1,636,019
Colorado	8,086	9,104,203	1,524,544	2,313,796	2,243	223,230	378,614
Connecticut	195	26,414	2,504	2,536	29	400	162
Delaware	227	203,211	89,233	29,717	87	21,849	6,613
Florida	3,660	1,531,134	351,281	398,159	1,724	97,675	115,457
Georgia	1,722	907,161	350,880	217,274	586	110,115	68,374
Hawaii	1,002	411,528	17,243	26,064	344	2,490	3,309
Idaho	8,524	4,213,824	2,032,569	3,923,200	2,872	295,485	556,049
Illinois	970	1,122,428	301,867	192,639	419	79,065	47,123
Indiana	1,022	1,028,423	255,530	113,312	416	54,448	17,502
Iowa	496	384,528	88,744	30,512	207	32,784	10,160
Kansas	2,433	7,432,640	1,410,047	1,500,832	544	236,000	252,821
Kentucky	522	138,925	28,033	11,025	278	9,404	3,910
Louisiana	1,048	956,953	525,688	451,801	321	115,149	70,530
Maine	612	129,412	17,575	5,865	244	2,008	1,012
Maryland	633	221,121	77,582	46,140	325	36,460	19,228
Massachusetts	703	54,193	6,662	2,228	364	2,686	801
Michigan	2,026	1,198,862	408,231	227,469	665	89,522	50,602
Minnesota	1,122	800,039	248,112	119,301	392	53,242	17,041
Mississippi	946	1,398,445	910,736	629,499	343	304,378	208,080
Missouri	1,269	1,356,267	701,540	578,601	552	148,102	108,051
Montana	4,685	13,218,741	1,151,252	1,296,561	1,247	258,479	310,756
Nebraska	6,691	11,782,909	4,084,690	2,603,587	1,879	869,243	542,935
Nevada	1,070	1,878,004	388,010	1,072,309	269	67,776	203,598
New Hampshire	349	30,416	1,138	898	126	306	462
New Jersey	857	122,697	43,869	25,442	276	5,599	2,431
New Mexico	5,451	1,713,522	290,047	551,711	1,509	68,300	94,873
New York	1,124	174,611	22,028	12,464	466	5,199	6,921
North Carolina	1,028	853,995	73,574	20,916	430	14,001	5,049
North Dakota	442	1,070,372	169,228	87,724	201	31,843	12,517
Ohio	780	110,529	17,946	8,910	475	8,679	3,190
Oklahoma	898	1,588,253	236,192	277,600	337	37,319	40,039
Oregon	8,007	6,077,118	914,710	1,575,943	2,639	157,924	271,091
Pennsylvania	1,400	153,300	27,367	34,335	828	22,728	33,143
Rhode Island	133	5,824	1,431	379	45	266	154
South Carolina	698	573,193	151,865	119,588	240	19,407	15,642
South Dakota	531	1,236,052	173,227	157,777	116	33,183	29,368
Tennessee	530	342,798	54,006	30,387	214	17,902	6,652
Texas	6,759	11,320,139	2,348,698	2,953,044	2,348	440,900	562,951
Utah	7,588	4,715,049	790,579	1,547,429	2,205	190,606	335,038
Vermont	274	46,559	1,545	903	151	436	245
Virginia	860	271,677	31,718	8,218	360	9,731	2,972
Washington	6,272	4,098,453	1,023,460	2,141,512	1,963	179,274	410,327
West Virginia	213	33,968	379	165	73	115	46
Wisconsin	1,254	896,253	303,772	171,029	538	53,318	19,971
Wyoming	3,331	9,503,372	924,162	1,348,111	787	206,760	352,341
Water Resources Regions							
Region 01 New England	2,057	277,886	30,047	12,400	841	5,822	2,636
Region 02 Mid-Atlantic	3,950	921,991	272,577	149,875	1,922	96,822	69,546
Region 03 South Atlantic-Gulf	7,900	4,193,680	1,017,784	816,726	3,186	253,274	209,710
Region 04 Great Lakes	3,793	1,735,014	553,435	285,013	1,471	121,210	59,400
Region 05 Ohio	2,424	1,418,627	271,584	135,814	1,122	46,696	15,506
Region 06 Tennessee	625	183,808	24,890	21,048	216	6,281	2,786
Region 07 Upper Mississippi	3,316	2,485,453	750,532	423,800	1,438	200,924	95,600
Region 08 Lower Mississippi	3,668	6,061,228	4,423,858	4,368,132	1,003	1,022,772	1,022,735
Region 09 Souris-Red-Rainy	295	679,662	135,091	75,119	61	13,417	4,624
Region 10 Missouri	17,665	42,987,386	7,142,676	6,220,427	4,920	1,483,314	1,267,257
Region 11 Arkansas-White-Red	5,290	13,317,940	2,770,889	3,391,255	1,302	494,075	622,928
Region 12 Texas-Gulf	5,644	5,946,454	1,551,049	1,907,740	2,066	286,739	329,936
Region 13 Rio Grande	4,547	1,645,320	350,482	794,609	1,277	55,851	123,826
Region 14 Upper Colorado	7,566	3,996,111	830,874	1,205,703	2,230	191,998	302,573
Region 15 Lower Colorado	1,797	1,558,204	485,097	2,365,299	674	111,515	628,232
Region 16 Great Basin	6,936	5,909,515	1,157,152	2,553,112	1,860	214,403	448,755
Region 17 Pacific Northwest	23,661	15,293,359	4,051,109	7,764,386	7,816	702,406	1,362,196
Region 18 California	21,228	7,733,579	3,674,028	10,563,532	6,672	625,865	1,643,874
Region 19 Alaska	201	4,827	1,081	954	92	206	248
Region 20 Hawaii	1,002	411,528	17,243	26,064	344	2,490	3,309

See footnote(s) at end of table.

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Table 25. Barriers to Making Improvements to Reduce Energy Use or Conserve Water: 2018 (continued)

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

Table with 10 columns: Geographic area, Risk of reduced yield or poorer crop quality (Farms, Acres irrigated, Acre-feet applied), Physical field/crop condition limit system improvements (Farms, Acres irrigated, Acre-feet applied), Improvements will not reduce costs enough to cover installation costs (Farms, Acres irrigated, Acre-feet applied). Rows include United States, 50 States, Water Resources Regions, and 20 sub-regions.

See footnote(s) at end of table.

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Table 25. Barriers to Making Improvements to Reduce Energy Use or Conserve Water: 2018 (continued)

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

Geographic area	Will not be farming this operation long enough to justify improvements			Improvements will increase management time or cost		
	Farms	Acres irrigated ³	Acre-feet applied ³	Farms	Acres irrigated ³	Acre-feet applied ³
United States	16,669	2,869,704	4,506,778	12,960	3,955,556	6,122,443
Alabama	96	2,417	6,110	57	3,283	596
Alaska	32	243	123	19	19	17
Arizona	282	115,332	630,885	178	94,935	513,987
Arkansas	230	234,898	286,597	264	515,492	616,728
California	3,519	332,425	973,175	2,650	510,353	1,608,138
Colorado	892	112,311	149,826	652	103,053	151,575
Connecticut	28	133	61	-	-	-
Delaware	41	17,632	7,381	26	12,479	5,135
Florida	717	33,383	20,859	363	41,142	40,439
Georgia	132	5,999	5,350	178	21,873	8,370
Hawaii	263	2,669	2,812	160	1,049	778
Idaho	1,185	328,346	593,567	815	250,757	486,577
Illinois	80	8,884	7,236	121	41,975	39,773
Indiana	110	13,550	6,578	112	40,510	22,000
Iowa	33	4,048	2,270	52	4,676	1,491
Kansas	226	73,315	74,974	210	173,047	210,546
Kentucky	109	1,027	794	117	2,034	1,079
Louisiana	157	88,545	58,231	131	77,807	54,733
Maine	131	169	143	62	692	185
Maryland	98	2,324	1,629	51	9,035	6,656
Massachusetts	76	82	31	52	698	162
Michigan	331	32,136	13,977	299	91,372	62,441
Minnesota	200	60,732	34,452	173	72,479	35,414
Mississippi	106	130,289	88,963	121	122,372	88,092
Missouri	185	125,260	99,305	96	40,733	29,742
Montana	708	117,385	133,098	543	204,609	227,006
Nebraska	662	355,988	219,468	558	405,514	263,669
Nevada	45	10,800	21,765	72	81,117	213,380
New Hampshire	59	59	56	22	143	(D)
New Jersey	153	3,614	2,070	149	1,488	246
New Mexico	454	12,641	33,837	519	16,192	30,593
New York	104	3,939	1,390	148	3,086	881
North Carolina	159	2,024	1,090	115	7,209	1,961
North Dakota	6	2,884	2,994	33	6,320	2,567
Ohio	127	970	523	90	1,740	2,525
Oklahoma	104	32,147	48,614	107	34,772	48,311
Oregon	1,006	63,016	101,427	629	66,583	121,472
Pennsylvania	253	1,148	503	31	223	87
Rhode Island	26	852	81	37	73	49
South Carolina	125	45,843	37,443	58	21,194	12,885
South Dakota	43	13,247	11,966	26	13,708	5,208
Tennessee	42	4,997	948	59	(D)	2,679
Texas	712	187,584	272,838	1,040	438,723	574,960
Utah	1,087	82,313	160,736	613	93,516	144,465
Vermont	14	151	69	31	92	(D)
Virginia	151	2,714	963	88	2,686	388
Washington	842	136,879	305,594	496	126,419	262,863
West Virginia	67	130	45	45	(D)	21
Wisconsin	148	27,289	13,206	70	41,118	31,913
Wyoming	313	34,941	70,727	422	152,083	189,257
Water Resources Regions						
Region 01 New England	322	1,327	380	179	1,671	797
Region 02 Mid-Atlantic	692	28,614	12,971	353	26,635	12,918
Region 03 South Atlantic-Gulf	1,269	90,115	70,928	746	94,743	64,289
Region 04 Great Lakes	551	48,047	20,410	463	107,896	69,634
Region 05 Ohio	329	8,604	3,715	313	31,865	23,249
Region 06 Tennessee	57	316	114	145	554	344
Region 07 Upper Mississippi	346	60,640	37,085	407	124,038	87,038
Region 08 Lower Mississippi	468	473,979	401,290	449	636,922	638,155
Region 09 Souris-Red-Rainy	58	33,731	18,854	36	36,487	17,648
Region 10 Missouri	1,904	549,224	494,208	1,618	735,051	676,340
Region 11 Arkansas-White-Red	564	290,492	361,940	595	391,901	483,150
Region 12 Texas-Gulf	610	128,614	189,199	890	370,558	504,319
Region 13 Rio Grande	408	11,203	29,719	338	13,889	24,088
Region 14 Upper Colorado	642	32,788	51,613	668	136,529	142,828
Region 15 Lower Colorado	309	116,385	631,776	223	103,998	574,713
Region 16 Great Basin	1,083	107,336	194,570	577	165,124	341,618
Region 17 Pacific Northwest	3,243	552,952	1,011,896	2,111	472,819	909,986
Region 18 California	3,519	332,425	973,175	2,670	503,808	1,550,533
Region 19 Alaska	32	243	123	19	19	17
Region 20 Hawaii	263	2,669	2,812	160	1,049	778

¹ Data include only positive responses and respondents could choose more than one source of information.

² Total may not add due to rounding.

³ Acres irrigated and acre-feet applied are totals for all irrigation on these farms.

Table 26. Sources of Information Relied on for Reducing Irrigation Costs and Conserving Water: 2018 (continued)

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

Geographic area	NRCS, local Conservation district, other Federal or State agencies		Media reports or information in the press		Neighboring farmers		Electronic information services (DTN and other Internet links)	
	Farms	Acres irrigated ²	Farms	Acres irrigated ²	Farms	Acres irrigated ²	Farms	Acres irrigated ²
United States	21,872	9,126,823	15,031	4,577,249	47,136	11,370,987	23,376	10,102,887
Alabama	95	11,735	95	13,658	283	29,027	99	25,087
Alaska	19	79	-	-	31	62	11	33
Arizona	336	185,284	222	78,010	689	152,199	287	205,061
Arkansas	593	985,567	245	434,899	765	1,210,353	422	749,484
California	3,435	1,317,165	3,350	712,957	7,782	1,581,171	5,676	1,746,931
Colorado	2,010	420,646	839	97,342	4,116	572,077	842	351,423
Connecticut	74	665	85	815	31	514	32	315
Delaware	46	31,345	47	27,656	134	61,924	61	54,677
Florida	856	315,260	489	86,865	839	95,172	838	150,956
Georgia	348	225,766	212	101,233	510	224,498	392	171,764
Hawaii	101	7,422	61	1,857	302	2,329	119	4,630
Idaho	897	346,313	518	182,743	3,626	770,350	810	457,187
Illinois	66	15,801	107	28,191	339	107,021	341	116,969
Indiana	121	46,659	183	66,430	311	138,062	311	143,011
Iowa	22	(D)	59	17,256	138	37,432	183	38,070
Kansas	258	215,823	359	154,713	768	377,998	568	470,538
Kentucky	50	(D)	63	8,035	244	10,289	50	11,567
Louisiana	296	208,172	149	103,560	324	274,603	132	166,883
Maine	118	5,178	45	3,712	124	3,961	61	13,817
Maryland	27	5,303	54	14,103	86	24,291	61	14,377
Massachusetts	114	3,020	128	592	212	3,421	145	3,436
Michigan	294	91,154	332	92,411	820	243,206	594	211,653
Minnesota	232	85,569	215	39,418	338	82,289	376	100,574
Mississippi	280	438,881	118	116,392	330	401,295	215	350,474
Missouri	264	293,634	170	91,090	457	232,287	238	146,845
Montana	1,038	415,946	319	163,593	1,920	456,899	411	222,143
Nebraska	1,653	1,188,990	1,391	862,135	2,058	1,189,775	2,494	1,964,079
Nevada	309	100,857	102	78,002	578	242,086	98	102,935
New Hampshire	72	848	7	247	76	367	165	629
New Jersey	173	20,001	156	4,168	189	19,822	145	11,044
New Mexico	1,344	175,107	682	96,163	3,309	274,130	762	144,536
New York	160	9,418	251	4,114	360	6,914	306	7,979
North Carolina	152	6,973	94	2,333	231	12,603	156	9,378
North Dakota	122	76,600	43	38,214	122	72,812	99	66,872
Ohio	76	137	86	420	201	2,738	179	6,810
Oklahoma	118	63,554	103	92,767	247	64,650	161	38,956
Oregon	842	221,049	879	95,241	3,110	394,224	1,020	199,899
Pennsylvania	39	15,368	105	15,726	385	2,497	131	1,759
Rhode Island	50	248	5	800	45	559	40	668
South Carolina	129	70,480	40	9,871	162	46,204	185	58,484
South Dakota	89	37,267	83	33,965	280	78,090	159	78,598
Tennessee	50	15,587	43	64	165	21,375	201	29,404
Texas	913	648,299	729	245,306	1,836	632,713	991	525,063
Utah	1,511	290,102	384	96,105	3,689	354,210	494	135,364
Vermont	26	210	11	66	90	383	37	270
Virginia	33	1,867	1	(D)	257	5,008	111	634
Washington	1,124	150,227	999	152,603	2,415	354,785	1,476	458,777
West Virginia	72	187	44	(D)	3	15	32	5,454
Wisconsin	74	43,143	120	33,279	445	104,756	334	195,202
Wyoming	751	314,171	209	77,784	1,364	397,541	325	132,188
Water Resources Regions								
Region 01 New England	439	10,095	278	6,224	527	8,989	443	18,865
Region 02 Mid-Atlantic	428	81,875	542	63,589	1,073	116,718	624	91,771
Region 03 South Atlantic-Gulf	1,625	633,710	904	214,573	2,048	414,220	1,690	419,009
Region 04 Great Lakes	385	92,804	479	100,358	1,386	293,693	987	288,707
Region 05 Ohio	302	38,295	369	61,609	772	107,931	464	98,469
Region 06 Tennessee	34	8,527	52	134	123	9,139	110	10,206
Region 07 Upper Mississippi	346	118,068	480	113,499	1,134	315,489	1,169	406,648
Region 08 Lower Mississippi	1,178	1,793,183	463	696,631	1,397	1,975,916	758	1,339,875
Region 09 Souris-Red-Rainy	69	40,233	68	18,751	52	27,575	60	43,295
Region 10 Missouri	3,666	2,086,333	2,278	1,216,758	6,495	2,274,276	3,980	2,801,808
Region 11 Arkansas-White-Red	1,018	656,091	678	388,776	1,846	864,432	1,223	795,486
Region 12 Texas-Gulf	754	460,736	617	138,957	1,673	450,985	770	286,209
Region 13 Rio Grande	1,001	87,235	542	25,125	2,621	147,025	578	75,527
Region 14 Upper Colorado	2,274	348,614	685	104,788	3,668	407,022	423	86,099
Region 15 Lower Colorado	373	198,417	226	78,022	931	184,967	344	209,458
Region 16 Great Basin	1,276	359,405	476	173,105	3,564	619,862	540	227,611
Region 17 Pacific Northwest	3,147	791,856	2,460	461,444	9,654	1,555,449	3,405	1,149,442
Region 18 California	3,437	1,313,845	3,373	713,049	7,839	1,594,908	5,678	1,749,739
Region 19 Alaska	19	79	-	-	31	62	11	33
Region 20 Hawaii	101	7,422	61	1,857	302	2,329	119	4,630

¹ Respondents could choose more than one source of information.

² Acres irrigated are totals for all irrigation on these farms.

Table 27. Reasons for Discontinuing Irrigation: 2018 and 2013

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

Geographic area	Discontinued irrigation since previous census year					Reason for discontinuance ¹					
	Farms	Acres irrigated in previous census year ²	Square feet under protection in previous census year ²	Farms reporting discontinuance to be permanent		Sufficient soil moisture		Shortage of surface water		Shortage of ground water	
				Farms	Acres irrigated in previous census year ²	Farms	Acres irrigated in previous census year ²	Farms	Acres irrigated in previous census year ²	Farms	Acres irrigated in previous census year ²
United States2018	24,175	1,310,593	10,726,594	4,603	133,977	14,553	783,478	3,103	147,215	1,309	101,038
.....2013	41,455	2,519,094	11,759,756	3,711	125,540	9,559	504,584	2,903	318,768	1,284	157,862
2018 DATA											
Alabama	408	9,023	163,200	126	277	308	3,298	-	-	50	5,625
Alaska	8	122	(D)	2	(D)	5	22	-	-	-	-
Arizona	48	192	-	-	-	16	160	32	32	-	-
Arkansas	353	34,300	19,160	67	4,309	259	23,865	9	60	6	(D)
California	1,493	111,645	62,052	343	4,063	638	43,458	150	32,549	123	40,060
Colorado	1,273	77,420	273,320	149	12,793	154	14,298	767	43,906	206	15,287
Connecticut	201	731	-	43	43	154	688	47	43	-	-
Delaware	58	5,362	3,870	22	44	31	5,312	22	44	22	(D)
Florida	867	28,525	66,000	84	6,201	583	25,540	54	108	-	-
Georgia	905	98,386	166,730	163	18,450	737	77,744	-	-	-	-
Hawaii	331	5,097	711,280	50	84	248	5,014	-	-	41	216
Idaho	282	9,653	34,416	7	7	181	8,320	28	68	2	(D)
Illinois	340	25,971	77,400	89	5,166	235	22,388	17	-	-	-
Indiana	283	19,279	36,864	51	16	230	9,324	-	-	-	-
Iowa	164	6,528	14,100	41	(D)	110	6,402	-	-	-	-
Kansas	264	24,715	-	28	980	104	4,470	-	-	-	-
Kentucky	565	12,571	821,384	125	51	466	12,409	6	6	-	-
Louisiana	404	18,526	51,070	78	317	254	17,201	13	78	-	-
Maine	65	83	137,530	-	-	35	(D)	-	-	-	-
Maryland	201	5,596	23,296	33	53	182	5,577	-	-	-	-
Massachusetts	118	1,562	168,000	-	-	108	1,562	-	-	-	-
Michigan	852	20,568	1,185,760	223	7,659	568	12,182	-	-	-	-
Minnesota	216	18,304	61,140	50	96	163	(D)	-	-	-	-
Mississippi	260	19,281	29,000	62	654	178	16,973	13	298	-	-
Missouri	369	25,796	41,728	164	13,162	228	22,721	36	316	26	304
Montana	523	81,379	50,360	165	8,350	202	48,472	143	4,943	24	480
Nebraska	1,271	267,554	2,160	98	9,217	884	180,149	-	-	-	-
Nevada	66	501	600	18	33	-	-	33	423	15	30
New Hampshire	29	10	2,400	3	6	29	10	-	-	-	-
New Jersey	168	2,272	-	23	-	161	907	-	-	-	-
New Mexico	1,043	41,006	1,200	84	366	105	(D)	547	10,132	266	8,605
New York	528	4,557	1,146,600	108	110	413	4,440	23	1,035	-	-
North Carolina	656	29,275	684,462	81	-	526	22,150	-	-	-	-
North Dakota	4	4	12,000	-	-	-	-	-	-	-	-
Ohio	733	5,758	871,220	190	601	509	5,362	-	-	-	-
Oklahoma	284	7,830	360	77	1,807	203	4,525	-	-	-	-
Oregon	1,499	34,542	90,200	220	467	615	1,868	375	17,434	175	10,907
Pennsylvania	844	6,772	1,641,136	188	520	755	6,684	-	-	22	-
Rhode Island	20	20	197,800	-	-	20	20	20	20	20	20
South Carolina	463	2,204	1,380,960	131	249	362	1,389	25	25	-	-
South Dakota	422	102,771	-	44	132	356	99,559	-	-	-	-
Tennessee	475	3,556	82,380	113	100	475	3,556	21	-	21	-
Texas	2,517	73,244	38,640	615	24,725	1,633	28,345	161	8,761	124	14,663
Utah	659	21,137	(D)	54	108	61	1,627	443	19,571	108	4,779
Vermont	39	245	3,200	10	124	38	(D)	-	-	-	-
Virginia	420	12,458	89,584	133	153	286	11,354	-	-	23	-
Washington	659	20,298	96,155	166	11,969	372	6,273	109	163	35	(D)
West Virginia	104	214	66,780	27	27	37	166	-	-	-	-
Wisconsin	390	6,462	94,200	55	379	336	5,184	-	-	-	-
Wyoming	31	7,288	-	-	-	-	-	9	7,200	-	-
Water Resources Regions											
Region 01 New England	437	2,488	505,730	48	131	350	2,442	67	63	20	20
Region 02 Mid-Atlantic	1,668	29,610	2,713,886	320	363	1,451	27,059	45	1,079	67	44
Region 03 South Atlantic-Gulf	3,382	172,139	2,207,562	640	25,432	2,543	134,436	92	431	25	5,500
Region 04 Great Lakes	1,412	26,319	1,413,760	377	7,860	995	17,678	-	-	-	-
Region 05 Ohio	1,794	35,070	2,152,184	394	1,038	1,399	28,158	6	6	-	-
Region 06 Tennessee	442	4,709	(D)	113	117	411	4,578	21	-	46	125
Region 07 Upper Mississippi	1,078	66,485	147,504	268	13,943	768	51,334	17	-	-	-
Region 08 Lower Mississippi	815	66,417	47,490	163	4,867	555	54,430	18	78	5	-
Region 09 Souris-Red-Rainy	14	14	42,000	14	(D)	-	-	-	-	-	-
Region 10 Missouri	2,889	492,471	351,568	473	28,175	1,754	346,080	292	17,412	90	2,240
Region 11 Arkansas-White-Red	1,361	92,339	82,800	209	7,148	508	14,798	286	17,081	113	9,302
Region 12 Texas-Gulf	2,302	60,328	18,640	598	20,618	1,558	28,316	161	8,737	85	10,523
Region 13 Rio Grande	922	32,815	-	51	333	73	227	494	19,235	262	16,529
Region 14 Upper Colorado	735	36,553	-	51	6,863	52	7,200	579	23,348	151	4,208
Region 15 Lower Colorado	48	192	-	-	-	16	160	32	32	-	-
Region 16 Great Basin	535	10,906	3,007	75	144	61	1,627	286	9,262	69	1,353
Region 17 Pacific Northwest	2,439	63,671	218,371	414	12,680	1,168	16,461	487	16,699	212	10,918
Region 18 California	1,563	112,848	62,052	343	4,063	638	43,458	220	33,752	123	40,060
Region 19 Alaska	8	122	(D)	2	(D)	5	22	-	-	-	-
Region 20 Hawaii	331	5,097	711,280	50	84	248	5,014	-	-	41	216

See footnote(s) at end of table.

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Table 27. Reasons for Discontinuing Irrigation: 2018 and 2013 (continued)

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

Geographic area	Reason for discontinuance ¹ - con.									
	Irrigation is uneconomical		Loss of water rights		Sold or leased water rights or annual water allocation		Sold or leased irrigated land or irrigated area under protection		Restrictions on water use	
	Farms	Acres irrigated in previous census year ²	Farms	Acres irrigated in previous census year ²	Farms	Acres irrigated in previous census year ²	Farms	Acres irrigated in previous census year ²	Farms	Acres irrigated in previous census year ²
United States	2,075	124,044	165	2,574	90	4,368	781	84,185	686	11,913
.....2018	2,254	104,143	277	9,852	614	31,017	1,951	161,367	2,094	93,881
.....2013										
2018 DATA										
Alabama	100	5,700	-	-	-	-	-	-	-	-
Alaska	3	-	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-	-	-
Arkansas	36	3,734	-	-	-	-	4	212	-	-
California	189	30,972	23	460	-	-	3	7,800	27	119
Colorado	-	-	75	1,926	-	-	-	-	270	8,652
Connecticut	-	-	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	-	-
Florida	27	-	-	-	-	-	-	-	-	-
Georgia	99	24,497	-	-	-	-	46	1,840	-	-
Hawaii	16	(D)	-	-	-	-	-	-	-	-
Idaho	19	114	-	-	22	746	21	44	-	-
Illinois	17	-	-	-	-	-	-	-	-	-
Indiana	36	72	-	-	-	-	36	9,360	-	-
Iowa	-	-	-	-	-	-	18	126	-	-
Kansas	14	980	-	-	14	3,500	15	1,950	-	-
Kentucky	18	18	-	-	-	-	-	-	-	-
Louisiana	14	-	-	-	-	-	-	-	-	-
Maine	27	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-	-
Michigan	40	1,600	-	-	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-	-	-
Mississippi	31	4,020	-	-	-	-	18	180	6	120
Missouri	79	2,336	-	-	-	-	8	-	8	8
Montana	78	23,613	-	-	-	-	72	7,176	-	-
Nebraska	32	1,440	-	-	-	-	185	34,163	-	-
Nevada	-	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	7	1,365	-	-
New Mexico	34	170	-	-	34	102	90	9,071	100	1,754
New York	91	274	-	-	-	-	-	-	-	-
North Carolina	10	90	-	-	-	-	27	810	-	-
North Dakota	-	-	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	38	15	-	-
Oklahoma	103	1,507	-	-	-	-	-	-	-	-
Oregon	111	2,445	47	168	-	-	31	669	149	477
Pennsylvania	43	417	-	-	-	-	-	-	-	-
Rhode Island	20	20	20	20	20	20	20	20	20	20
South Carolina	204	996	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	22	132
Tennessee	22	-	-	-	-	-	-	-	-	-
Texas	370	14,144	-	-	-	-	79	1,320	20	-
Utah	-	-	-	-	-	-	-	-	54	621
Vermont	2	(D)	-	-	-	-	-	-	-	-
Virginia	55	52	-	-	-	-	-	-	-	-
Washington	81	4,617	-	-	-	-	27	7,020	10	10
West Virginia	-	-	-	-	-	-	-	-	-	-
Wisconsin	54	198	-	-	-	-	36	1,044	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-
Water Resources Regions										
Region 01 New England	47	(D)	20	20	20	20	20	20	20	20
Region 02 Mid-Atlantic	68	626	-	-	-	-	7	1,365	-	-
Region 03 South Atlantic-Gulf	477	31,327	-	-	-	-	85	2,830	-	-
Region 04 Great Lakes	123	1,646	-	-	-	-	-	-	-	-
Region 05 Ohio	79	111	-	-	-	-	56	6,315	-	-
Region 06 Tennessee	25	50	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	53	198	-	-	-	-	72	4,230	-	-
Region 08 Lower Mississippi	69	7,074	-	-	-	-	10	212	14	128
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri	157	27,109	27	126	-	-	257	41,339	101	1,684
Region 11 Arkansas-White-Red	169	12,075	24	1,080	14	3,500	23	1,950	72	1,632
Region 12 Texas-Gulf	311	5,454	-	-	-	-	79	1,320	20	-
Region 13 Rio Grande	54	190	-	-	34	102	90	9,071	100	1,754
Region 14 Upper Colorado	-	-	24	720	-	-	-	-	173	6,089
Region 15 Lower Colorado	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest	235	7,176	23	-	22	746	79	7,733	135	319
Region 18 California	189	30,972	47	628	-	-	3	7,800	51	287
Region 19 Alaska	3	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	16	(D)	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 27. Reasons for Discontinuing Irrigation: 2018 and 2013 (continued)

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

Geographic area	Reason for discontinuance ¹ - con.							
	Converted to non-agricultural uses		Converted to agricultural enterprise not requiring irrigation		Available surface water too salty		Other or unspecified	
	Farms	Acres irrigated in previous census year ²	Farms	Acres irrigated in previous census year ²	Farms	Acres irrigated in previous census year ²	Farms	Acres irrigated in previous census year ²
United States	703	6,600	1,563	106,777	218	1,215	4,005	166,542
2013	559	7,539	1,188	80,521	540	36,435	24,655	1,456,494
2018 DATA								
Alabama	-	-	-	-	-	-	25	-
Alaska	-	-	-	-	-	-	3	(D)
Arizona	-	-	-	-	-	-	16	-
Arkansas	19	480	1	(D)	-	-	66	6,185
California	49	228	201	2,326	44	198	403	14,816
Colorado	23	46	7	7	-	-	266	14,619
Connecticut	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	5	6
Florida	-	-	133	2,695	-	-	230	3,011
Georgia	27	142	25	17,875	-	-	116	(D)
Hawaii	16	16	-	-	-	-	33	33
Idaho	6	6	5	9	-	-	83	952
Illinois	17	-	3	12	-	-	68	3,571
Indiana	-	-	17	595	-	-	-	-
Iowa	-	-	-	-	-	-	52	4,576
Kansas	29	1,085	73	11,240	-	-	73	5,890
Kentucky	38	23	70	(D)	-	-	30	104
Louisiana	27	520	-	-	-	-	107	738
Maine	-	-	-	-	-	-	3	(D)
Maryland	-	-	-	-	-	-	19	19
Massachusetts	-	-	-	-	-	-	10	-
Michigan	81	700	82	208	21	21	122	7,278
Minnesota	2	(D)	29	29	-	-	22	(D)
Mississippi	7	-	6	6	-	-	38	640
Missouri	8	24	16	31	-	-	64	880
Montana	24	216	48	144	29	490	117	4,747
Nebraska	-	-	143	51,088	-	-	151	17,000
Nevada	-	-	-	-	-	-	18	48
New Hampshire	-	-	22	-	-	-	-	-
New Jersey	-	-	-	-	-	-	22	132
New Mexico	52	70	65	11,551	-	-	365	8,980
New York	-	-	46	184	-	-	69	117
North Carolina	27	27	73	47	-	-	94	6,382
North Dakota	-	-	-	-	-	-	4	4
Ohio	23	46	108	235	-	-	55	100
Oklahoma	-	-	-	-	-	-	29	1,823
Oregon	29	-	91	54	-	-	281	23,533
Pennsylvania	21	42	65	43	-	-	49	49
Rhode Island	20	20	20	20	20	20	-	-
South Carolina	-	-	-	-	77	351	25	-
South Dakota	-	-	22	3,080	-	-	22	-
Tennessee	-	-	-	-	-	-	7	7
Texas	39	589	58	649	-	-	409	21,926
Utah	-	-	54	-	27	135	108	648
Vermont	-	-	-	-	-	-	3	(D)
Virginia	56	2,253	-	-	-	-	33	1,029
Washington	60	60	44	73	-	-	180	9,406
West Virginia	3	(D)	-	-	-	-	70	51
Wisconsin	-	-	36	954	-	-	18	90
Wyoming	-	-	-	-	-	-	22	88
Water Resources Regions								
Region 01 New England	20	20	42	20	20	20	13	(D)
Region 02 Mid-Atlantic	77	2,295	65	43	-	-	145	1,233
Region 03 South Atlantic-Gulf	54	169	231	20,617	77	351	503	10,228
Region 04 Great Lakes	104	746	162	1,362	21	21	172	7,473
Region 05 Ohio	41	(D)	162	(D)	-	-	160	302
Region 06 Tennessee	-	-	6	6	-	-	7	7
Region 07 Upper Mississippi	19	(D)	68	637	-	-	168	14,712
Region 08 Lower Mississippi	38	620	1	(D)	-	-	174	5,857
Region 09 Souris-Red-Rainy	-	-	14	14	-	-	-	-
Region 10 Missouri	55	286	212	54,566	29	490	462	31,665
Region 11 Arkansas-White-Red	44	1,465	81	22,365	-	-	380	22,261
Region 12 Texas-Gulf	39	589	58	649	-	-	346	17,786
Region 13 Rio Grande	52	70	42	51	-	-	270	4,426
Region 14 Upper Colorado	-	-	-	-	-	-	107	1,307
Region 15 Lower Colorado	-	-	-	-	-	-	16	-
Region 16 Great Basin	-	-	54	-	27	135	99	426
Region 17 Pacific Northwest	95	66	164	280	-	-	544	33,891
Region 18 California	49	228	201	2,326	44	198	403	14,816
Region 19 Alaska	-	-	-	-	-	-	3	(D)
Region 20 Hawaii	16	16	-	-	-	-	33	33

¹ Respondents could choose more than one reason for not irrigating.

² Acres and square feet irrigated are totals for all irrigation on these farms. Data were acquired from the 2017 and 2012 Censuses of Agriculture results.

Table 28. Method of Water Distribution in Fields in the Open: 2018 and 2013

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Farms	Acres irrigated	Gravity systems		Sprinkler systems		Drip, trickle, or low-flow micro sprinklers	
			Farms	Acres irrigated ¹	Farms	Acres irrigated ¹	Farms	Acres irrigated ¹
United States2018	220,566	55,886,470	85,888	20,187,048	109,184	31,656,895	62,158	5,860,921
.....2013	(NA)	55,283,340	85,159	21,504,684	121,655	34,894,109	59,435	4,889,912
2018 DATA								
Alabama	910	162,612	94	12,046	509	159,871	380	21,001
Alaska	157	1,502	23	89	42	1,167	104	253
Arizona	3,004	945,236	2,347	837,762	476	155,477	442	78,470
Arkansas	3,088	4,246,295	2,667	3,891,251	737	372,849	204	2,787
California	41,431	8,399,881	13,717	3,888,723	7,853	952,038	26,918	4,061,340
Colorado	14,413	2,458,120	11,185	1,098,563	4,738	1,425,738	782	3,861
Connecticut	500	4,936	115	246	321	4,772	252	1,079
Delaware	506	201,224	12	(D)	463	206,381	57	1,863
Florida	7,027	1,324,471	455	532,796	3,393	339,515	4,048	523,820
Georgia	3,764	1,162,380	210	2,143	2,411	1,098,413	1,656	162,416
Hawaii	1,528	25,657	416	2,449	682	7,640	987	17,909
Idaho	14,741	3,392,674	8,759	836,989	8,038	2,577,358	654	9,684
Illinois	1,690	564,575	27	(D)	1,381	603,828	402	7,131
Indiana	1,886	582,102	25	1,188	1,619	601,888	473	22,351
Iowa	876	165,621	29	50	630	171,062	306	2,837
Kansas	4,176	2,386,483	777	66,053	3,669	2,310,388	430	28,102
Kentucky	812	57,506	63	2,992	285	56,154	576	7,604
Louisiana	1,756	1,071,564	1,318	975,326	431	96,703	201	1,569
Maine	784	35,078	55	145	626	35,473	420	1,839
Maryland	798	124,486	92	268	592	129,180	318	4,351
Massachusetts	1,129	18,834	238	6,593	664	11,124	427	2,965
Michigan	3,308	824,218	61	81	2,296	801,075	1,491	39,821
Minnesota	2,155	553,858	35	2,829	1,998	601,354	270	3,360
Mississippi	1,517	1,666,779	1,019	1,373,391	561	290,049	242	5,581
Missouri	2,470	1,428,310	825	810,544	1,394	694,803	792	10,778
Montana	8,743	2,139,878	5,415	1,226,780	4,670	953,595	448	1,511
Nebraska	12,937	7,665,880	5,064	661,385	11,647	7,002,568	748	58,714
Nevada	1,825	693,466	1,464	449,388	607	247,051	56	4,418
New Hampshire	555	2,750	82	117	179	882	383	2,018
New Jersey	1,423	88,604	97	3,140	999	72,647	718	21,767
New Mexico	10,046	675,092	7,861	266,460	1,916	396,325	949	20,465
New York	1,586	45,847	236	3,225	777	33,858	1,079	14,595
North Carolina	2,024	131,631	133	1,534	1,342	125,567	817	15,047
North Dakota	703	296,958	152	45,395	610	252,703	18	154
Ohio	1,111	37,740	83	817	625	32,184	668	8,413
Oklahoma	1,704	601,202	239	69,649	1,210	544,199	387	11,492
Oregon	13,505	1,577,008	3,727	514,953	9,209	1,004,474	2,471	68,252
Pennsylvania	1,899	37,849	108	9,919	658	10,018	1,487	19,589
Rhode Island	176	3,093	9	44	67	2,687	130	385
South Carolina	1,440	252,409	120	2,856	871	258,963	652	31,169
South Dakota	1,186	378,309	318	37,027	883	339,964	88	1,673
Tennessee	1,067	190,003	99	11,906	642	180,908	395	2,468
Texas	11,644	4,083,451	3,092	768,512	6,943	3,266,687	3,188	271,329
Utah	12,487	1,181,301	6,953	519,157	6,877	666,144	368	9,464
Vermont	375	2,613	39	121	212	1,784	234	1,023
Virginia	1,116	47,136	35	1,355	613	41,216	572	4,996
Washington	11,014	1,864,760	1,420	109,225	8,495	1,502,132	2,734	265,147
West Virginia	286	6,188	43	64	148	5,908	168	345
Wisconsin	1,790	517,394	59	244	1,467	536,698	499	3,476
Wyoming	5,498	1,561,506	4,476	1,140,460	1,708	473,433	69	239
Water Resources Regions								
Region 01 New England	3,334	66,062	502	7,168	1,956	55,645	1,743	9,057
Region 02 Mid-Atlantic	5,822	518,002	398	15,197	3,414	474,601	3,235	57,171
Region 03 South Atlantic-Gulf	15,502	3,032,227	1,018	552,869	8,590	1,978,462	7,815	754,519
Region 04 Great Lakes	5,752	1,124,241	329	3,739	3,859	1,125,599	2,703	53,100
Region 05 Ohio	3,536	441,080	222	4,363	2,031	445,717	1,836	28,564
Region 06 Tennessee	857	70,716	112	1,173	474	65,679	388	3,974
Region 07 Upper Mississippi	5,953	1,624,769	160	17,178	4,959	1,689,675	1,398	22,278
Region 08 Lower Mississippi	6,368	7,625,123	5,017	6,394,647	2,223	1,300,360	339	13,589
Region 09 Souris-Red-Rainy	571	207,595	20	2,812	527	221,981	40	134
Region 10 Missouri	32,378	13,105,909	16,620	2,796,501	21,633	10,429,967	1,893	70,815
Region 11 Arkansas-White-Red	9,289	4,876,728	3,252	977,653	5,692	3,963,617	1,564	64,980
Region 12 Texas-Gulf	9,635	2,693,245	2,599	648,791	5,660	1,950,510	2,677	240,029
Region 13 Rio Grande	8,690	709,230	7,010	377,496	1,299	322,956	956	13,344
Region 14 Upper Colorado	13,125	1,472,320	9,795	1,075,608	4,760	442,761	487	2,764
Region 15 Lower Colorado	3,785	1,035,023	2,786	893,052	851	180,635	523	99,404
Region 16 Great Basin	11,259	1,763,271	6,938	910,097	5,569	856,169	378	14,172
Region 17 Pacific Northwest	41,158	7,010,052	14,792	1,599,329	26,752	5,125,660	6,193	344,043
Region 18 California	41,867	8,483,718	13,879	3,906,837	8,211	1,018,094	26,899	4,050,822
Region 19 Alaska	157	1,502	23	89	42	1,167	104	253
Region 20 Hawaii	1,528	25,657	416	2,449	682	7,640	987	17,909

¹ Multiple systems covering the same acreage are counted each time they cover the acres. This includes multiple systems of the same type.

Table 29. Gravity Irrigation in Fields in the Open: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Uncontrolled flooding		Other gravity systems	
	Farms	Acres irrigated	Farms	Acres irrigated
United States	15,298	1,881,732	3,752	169,743
.....2018				
.....2013	11,765	1,801,259	5,926	730,918
2018 DATA				
Alabama	25	7,125	-	-
Alaska	-	-	-	-
Arizona	224	2,864	16	320
Arkansas	57	8,115	-	-
California	2,858	387,077	526	8,002
Colorado	2,088	229,662	314	20,072
Connecticut	-	-	42	84
Delaware	-	-	-	-
Florida	6	19,800	4	14,900
Georgia	-	-	23	161
Hawaii	66	495	70	(D)
Idaho	1,470	114,047	620	35,711
Illinois	-	-	5	5
Indiana	-	-	-	-
Iowa	-	-	-	-
Kansas	-	-	-	-
Kentucky	26	52	29	29
Louisiana	81	10,346	-	-
Maine	-	-	12	93
Maryland	-	-	27	55
Massachusetts	-	-	-	-
Michigan	-	-	20	40
Minnesota	-	-	-	-
Mississippi	13	299	-	-
Missouri	-	-	19	7,940
Montana	1,553	312,157	238	9,409
Nebraska	204	14,315	33	3,750
Nevada	369	110,842	33	285
New Hampshire	-	-	4	(D)
New Jersey	-	-	23	46
New Mexico	962	31,706	188	4,007
New York	23	46	26	1,352
North Carolina	-	-	-	-
North Dakota	-	-	-	-
Ohio	8	8	22	22
Oklahoma	39	6,240	-	-
Oregon	1,141	159,549	436	11,124
Pennsylvania	-	-	16	32
Rhode Island	5	40	-	-
South Carolina	51	1,252	-	-
South Dakota	66	3,014	-	-
Tennessee	-	-	22	374
Texas	386	24,582	105	20,085
Utah	2,048	100,428	485	14,259
Vermont	5	10	2	(D)
Virginia	-	-	22	22
Washington	235	11,843	276	5,585
West Virginia	-	-	2	(D)
Wisconsin	-	-	-	-
Wyoming	1,289	325,818	92	11,519
Water Resources Regions				
Region 01 New England	5	40	60	201
Region 02 Mid-Atlantic	23	46	66	133
Region 03 South Atlantic-Gulf	94	28,471	27	15,061
Region 04 Great Lakes	13	(D)	46	1,392
Region 05 Ohio	26	(D)	75	(D)
Region 06 Tennessee	-	-	22	374
Region 07 Upper Mississippi	-	-	5	5
Region 08 Lower Mississippi	101	9,396	-	-
Region 09 Souris-Red-Rainy	-	-	-	-
Region 10 Missouri	3,115	466,040	232	26,019
Region 11 Arkansas-White-Red	350	38,924	94	10,150
Region 12 Texas-Gulf	386	24,582	105	20,085
Region 13 Rio Grande	986	65,993	-	-
Region 14 Upper Colorado	1,739	280,021	482	20,690
Region 15 Lower Colorado	401	10,612	42	450
Region 16 Great Basin	1,950	186,246	470	22,975
Region 17 Pacific Northwest	3,135	373,139	1,407	42,708
Region 18 California	2,908	397,657	549	8,991
Region 19 Alaska	-	-	-	-
Region 20 Hawaii	66	495	70	(D)

¹ Multiple systems covering the same acreage are counted each time they cover the acres. This includes multiple systems of the same type.

Table 30. Sprinkler Irrigation in Fields in the Open: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. 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		Other sprinkler system	
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States2018	16,130	1,788,443	7,518	596,059	22,266	394,194	8,673	401,318
.....2013	16,806	1,859,017	8,446	558,308	29,936	820,806	11,973	1,664,496
2018 DATA								
Alabama	39	24,680	51	4,615	91	1,056	27	57
Alaska	4	351	-	-	33	(D)	3	(D)
Arizona	49	7,648	17	2,040	48	2,396	65	5,292
Arkansas	11	2,028	58	2,668	63	589	48	2,333
California	377	83,396	240	24,433	1,126	50,262	1,519	156,483
Colorado	1,159	79,972	562	18,085	622	6,973	208	8,711
Connecticut	-	-	7	252	134	590	95	1,266
Delaware	76	27,088	10	1,325	12	(D)	1	(D)
Florida	1	(D)	75	31,256	793	(D)	513	34,528
Georgia	126	27,220	357	43,631	215	1,164	96	1,377
Hawaii	2	(D)	42	2,697	252	704	314	2,621
Idaho	3,100	406,429	336	21,094	2,774	73,733	674	25,642
Illinois	107	42,338	46	2,590	105	344	31	41
Indiana	63	30,733	149	8,646	147	432	91	128
Iowa	41	6,920	19	960	86	135	23	58
Kansas	3	9,900	15	105	74	721	41	9,840
Kentucky	7	6,307	32	512	77	297	126	241
Louisiana	13	2,080	-	-	101	1,082	23	206
Maine	-	-	83	7,997	443	1,175	78	(D)
Maryland	67	10,509	39	2,850	108	385	66	(D)
Massachusetts	5	(D)	86	997	172	611	43	(D)
Michigan	97	14,496	588	61,636	316	3,060	363	873
Minnesota	123	24,596	84	3,819	192	303	42	100
Mississippi	8	5,850	46	5,948	33	86	25	74
Missouri	90	21,338	148	24,766	153	303	73	1,227
Montana	1,931	198,603	223	4,114	1,467	33,825	223	3,719
Nebraska	148	15,337	103	5,234	107	966	35	4,652
Nevada	162	9,999	32	690	46	241	51	656
New Hampshire	2	(D)	3	498	126	169	57	(D)
New Jersey	25	1,176	236	22,336	390	5,106	180	2,448
New Mexico	380	13,367	67	507	151	364	341	2,806
New York	21	4,170	191	16,158	398	3,245	137	576
North Carolina	54	(D)	280	21,305	394	(D)	279	4,707
North Dakota	4	72	2	(D)	42	104	-	-
Ohio	28	2,861	111	8,866	316	1,690	67	1,679
Oklahoma	38	6,613	76	4,625	163	296	32	14,878
Oregon	1,989	196,155	923	112,182	3,930	115,405	560	10,481
Pennsylvania	2	(D)	113	2,105	336	1,164	67	446
Rhode Island	-	-	11	1,790	37	154	4	4
South Carolina	7	(D)	151	9,046	225	(D)	31	930
South Dakota	-	-	-	-	45	(D)	2	(D)
Tennessee	15	5,200	36	3,440	128	179	59	333
Texas	457	86,163	642	36,217	749	6,714	422	48,993
Utah	3,511	258,816	143	1,731	1,198	13,745	571	21,711
Vermont	2	(D)	9	342	79	269	46	(D)
Virginia	5	1,710	168	9,674	249	1,521	77	5,425
Washington	1,461	82,373	637	48,632	2,858	44,429	643	21,514
West Virginia	-	-	5	(D)	96	105	39	(D)
Wisconsin	49	10,897	205	9,209	319	2,805	66	732
Wyoming	271	36,645	61	4,092	247	6,548	96	4,207
Water Resources Regions								
Region 01 New England	9	76	194	11,578	946	2,789	283	1,858
Region 02 Mid-Atlantic	185	41,991	583	45,564	1,170	8,079	434	8,694
Region 03 South Atlantic-Gulf	202	73,541	974	111,330	1,711	11,639	974	41,664
Region 04 Great Lakes	191	44,811	833	81,940	829	6,990	550	1,410
Region 05 Ohio	61	23,058	242	9,812	504	1,459	305	751
Region 06 Tennessee	25	(D)	46	3,285	226	(D)	41	(D)
Region 07 Upper Mississippi	259	65,935	302	25,433	633	2,896	136	961
Region 08 Lower Mississippi	57	19,754	51	11,015	131	1,307	29	953
Region 09 Souris-Red-Rainy	42	6,581	2	(D)	67	573	42	(D)
Region 10 Missouri	1,604	157,098	404	27,187	1,351	24,184	374	18,648
Region 11 Arkansas-White-Red	102	45,177	168	15,948	370	1,268	155	53,364
Region 12 Texas-Gulf	427	64,807	636	28,259	680	5,935	387	22,193
Region 13 Rio Grande	130	9,618	19	(D)	141	(D)	328	2,841
Region 14 Upper Colorado	2,877	170,957	577	9,349	634	9,537	300	2,993
Region 15 Lower Colorado	91	9,478	58	2,439	48	2,396	107	15,828
Region 16 Great Basin	2,307	214,521	116	2,623	1,276	18,205	508	23,009
Region 17 Pacific Northwest	6,993	707,353	2,004	182,266	10,022	242,307	1,899	57,254
Region 18 California	562	130,716	267	25,271	1,242	52,668	1,504	146,082
Region 19 Alaska	4	351	-	-	33	(D)	3	(D)
Region 20 Hawaii	2	(D)	42	2,697	252	704	314	2,621

¹ Multiple systems covering the same acreage are counted each time they cover the acres. This includes multiple systems of the same type.

Table 33. Estimated Quantity of Water Applied in the Open Using Only Gravity Flow Systems: 2018 and 2013

[Excludes area under protection and institutional, research, and experimental farms. 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 ¹	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre
United States2018	61,091	13,649,228	1.8	20,314	3,959,882	1.6	23,482	3,930,302	2.3
.....2013	53,824	13,296,785	1.9	18,380	3,394,577	1.7	19,564	3,511,942	2.5
2018 DATA									
Alabama	75	9,175	0.9	25	50	0.5	25	2,000	3.0
Alaska	19	85	0.7	19	85	0.7	-	-	-
Arizona	2,150	593,775	4.9	598	191,712	4.5	1,173	142,171	4.5
Arkansas	2,171	3,152,019	1.3	713	718,590	1.0	184	112,251	1.8
California	9,040	1,888,221	3.5	1,898	365,496	3.1	4,322	844,514	4.0
Colorado	9,114	891,277	1.7	4,617	256,346	1.9	2,491	345,408	1.7
Connecticut	43	43	2.0	43	43	2.0	-	-	-
Delaware	2	(D)	(D)	2	(D)	(D)	-	-	-
Florida	178	413,173	0.9	117	18,279	1.1	51	358,994	0.9
Georgia	70	1,225	0.9	70	1,225	0.9	-	-	-
Hawaii	40	146	1.1	39	(D)	0.9	-	-	-
Idaho	6,362	548,565	2.2	2,704	260,726	2.6	1,915	146,985	1.8
Illinois	21	21	1.0	21	21	1.0	-	-	-
Indiana	6	12	0.5	6	12	0.5	-	-	-
Iowa	5	25	0.4	5	25	0.4	-	-	-
Kansas	296	23,725	0.7	251	16,225	0.8	30	(D)	0.9
Kentucky	57	121	0.6	4	16	1.0	-	-	-
Louisiana	1,140	810,334	1.0	528	423,557	0.6	433	220,583	2.0
Maine	5	8	0.6	2	(D)	(D)	-	-	-
Maryland	-	-	-	-	-	-	-	-	-
Massachusetts	180	5,240	1.8	68	264	(D)	112	4,976	1.9
Michigan	-	-	-	-	-	-	-	-	-
Minnesota	4	(D)	1.0	4	(D)	1.0	-	-	-
Mississippi	725	955,807	0.8	584	561,769	0.7	19	1,744	1.6
Missouri	400	513,483	0.9	266	234,705	0.8	37	28,971	0.6
Montana	3,840	841,857	1.1	345	36,996	1.1	2,096	443,226	1.1
Nebraska	976	98,757	0.8	725	86,541	0.8	126	3,704	1.1
Nevada	1,186	321,341	2.5	151	20,668	2.8	716	202,489	2.0
New Hampshire	49	84	0.6	-	-	-	49	84	0.6
New Jersey	13	26	0.5	13	26	0.5	-	-	-
New Mexico	7,265	210,984	2.2	1,699	45,210	1.4	4,192	129,754	2.3
New York	73	1,392	1.2	27	1,323	1.2	-	-	-
North Carolina	80	1,322	0.1	53	80	0.7	27	1,242	(D)
North Dakota	86	16,576	0.8	6	12	1.2	62	7,564	1.1
Ohio	26	718	(D)	25	(D)	0.3	1	(D)	(D)
Oklahoma	176	45,174	1.2	107	31,684	1.2	26	1,950	1.0
Oregon	2,607	372,779	1.7	646	53,279	2.2	881	176,680	1.7
Pennsylvania	37	53	0.7	21	21	1.0	-	-	-
Rhode Island	5	40	0.1	-	-	-	-	-	-
South Carolina	14	70	0.2	14	70	(D)	-	-	-
South Dakota	243	28,969	1.0	22	(D)	1.0	111	13,767	1.1
Tennessee	66	4,252	(D)	44	(D)	(D)	-	-	-
Texas	2,334	664,410	1.9	772	333,639	1.6	1,162	262,922	2.3
Utah	5,345	329,835	2.0	1,510	79,633	2.1	1,871	118,169	2.1
Vermont	25	25	1.0	-	-	-	25	25	1.0
Virginia	4	1,324	0.2	4	1,324	0.2	-	-	-
Washington	792	39,081	1.7	440	28,488	1.9	26	156	2.0
West Virginia	-	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-	-
Wyoming	3,746	863,671	1.4	1,106	187,333	2.0	1,319	357,923	1.2
Water Resources Regions									
Region 01 New England	282	5,415	1.8	113	(D)	0.5	161	5,060	1.9
Region 02 Mid-Atlantic	83	1,855	0.6	44	1,777	0.6	-	-	-
Region 03 South Atlantic-Gulf	409	425,527	0.9	252	19,860	1.1	110	362,348	0.9
Region 04 Great Lakes	95	1,657	1.0	46	1,059	0.7	26	(D)	(D)
Region 05 Ohio	87	185	0.6	34	80	0.7	-	-	-
Region 06 Tennessee	95	520	0.2	73	146	0.5	-	-	-
Region 07 Upper Mississippi	45	5,984	0.2	45	5,984	0.2	-	-	-
Region 08 Lower Mississippi	3,856	4,881,127	1.1	1,893	1,872,098	0.8	621	331,080	1.8
Region 09 Souris-Red-Rainy	6	12	1.2	6	12	1.2	-	-	-
Region 10 Missouri	9,604	1,637,838	1.3	2,733	337,625	1.5	3,779	666,575	1.2
Region 11 Arkansas-White-Red	2,492	745,070	1.2	1,317	196,202	1.0	454	(D)	(D)
Region 12 Texas-Gulf	1,949	581,955	2.0	635	284,636	1.7	937	254,849	2.4
Region 13 Rio Grande	6,518	314,670	2.0	1,044	66,808	1.3	4,328	160,059	2.2
Region 14 Upper Colorado	7,984	868,044	1.6	4,412	179,153	2.2	1,799	397,589	1.6
Region 15 Lower Colorado	2,487	627,311	4.8	656	202,145	4.5	1,307	153,530	4.4
Region 16 Great Basin	5,462	614,853	2.2	1,262	93,064	2.1	2,300	316,744	2.4
Region 17 Pacific Northwest	10,453	1,032,785	1.9	3,817	342,364	2.5	3,250	358,389	1.6
Region 18 California	9,125	1,904,189	3.4	1,874	356,364	3.1	4,410	874,424	3.9
Region 19 Alaska	19	85	0.7	19	85	0.7	-	-	-
Region 20 Hawaii	40	146	1.1	39	(D)	0.9	-	-	-

See footnote(s) at end of table.

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Table 33. Estimated Quantity of Water Applied in the Open Using Only Gravity Flow Systems: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Only uncontrolled flooding (rangeland, pastureland, etc.)			Only other gravity		
	Farms	Acres irrigated ¹	Average acre-feet per acre	Farms	Acres irrigated	Average acre-feet per acre
United States2018	9,144	913,507	1.5	1,418	85,804	2.0
.....2013	6,896	787,224	1.5	1,054	155,793	2.3
2018 DATA						
Alabama	25	7,125	0.3	-	-	-
Alaska	-	-	-	-	-	-
Arizona	176	2,304	5.1	-	-	-
Arkansas	38	1,990	0.5	-	-	-
California	1,884	183,591	2.6	101	1,875	1.0
Colorado	1,036	95,515	0.9	142	15,233	3.8
Connecticut	-	-	-	-	-	-
Delaware	-	-	-	-	-	-
Florida	3	18,000	0.3	4	14,900	(D)
Georgia	-	-	-	-	-	-
Hawaii	-	-	-	1	(D)	(D)
Idaho	923	73,954	1.8	328	16,767	0.7
Illinois	-	-	-	-	-	-
Indiana	-	-	-	-	-	-
Iowa	-	-	-	-	-	-
Kansas	-	-	-	-	-	-
Kentucky	-	-	-	27	27	1.0
Louisiana	68	7,096	0.3	-	-	-
Maine	-	-	-	3	(D)	0.5
Maryland	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-
Michigan	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-
Mississippi	12	294	0.6	-	-	-
Missouri	-	-	-	-	-	-
Montana	903	116,905	1.0	86	2,616	1.1
Nebraska	63	747	1.1	-	-	-
Nevada	199	39,022	2.0	15	165	2.7
New Hampshire	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-
New Mexico	738	15,835	1.9	89	1,433	2.5
New York	23	46	0.5	23	23	3.0
North Carolina	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-
Ohio	-	-	-	-	-	-
Oklahoma	39	6,240	0.7	-	-	-
Oregon	758	101,183	1.5	172	3,147	0.8
Pennsylvania	-	-	-	16	32	0.5
Rhode Island	5	40	0.1	-	-	-
South Carolina	-	-	-	-	-	-
South Dakota	44	2,684	0.4	-	-	-
Tennessee	-	-	-	22	(D)	0.1
Texas	270	15,759	0.8	40	19,000	2.5
Utah	930	23,995	2.5	242	4,346	1.3
Vermont	-	-	-	-	-	-
Virginia	-	-	-	-	-	-
Washington	189	7,774	0.7	83	1,421	3.4
West Virginia	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-
Wyoming	818	193,408	1.1	24	4,404	2.5
Water Resources Regions						
Region 01 New England	5	40	0.1	3	(D)	0.5
Region 02 Mid-Atlantic	23	46	0.5	16	32	0.5
Region 03 South Atlantic-Gulf	40	25,419	0.3	4	14,900	(D)
Region 04 Great Lakes	-	-	-	23	(D)	(D)
Region 05 Ohio	-	-	-	27	(D)	1.0
Region 06 Tennessee	-	-	-	22	374	0.1
Region 07 Upper Mississippi	-	-	-	-	-	-
Region 08 Lower Mississippi	78	6,016	0.3	-	-	-
Region 09 Souris-Red-Rainy	-	-	-	-	-	-
Region 10 Missouri	1,889	221,650	1.0	87	14,886	3.1
Region 11 Arkansas-White-Red	209	22,055	0.8	80	2,447	1.7
Region 12 Texas-Gulf	270	15,759	0.8	40	19,000	2.5
Region 13 Rio Grande	659	25,392	1.7	-	-	-
Region 14 Upper Colorado	793	126,280	0.9	158	6,868	3.9
Region 15 Lower Colorado	277	3,083	4.3	-	-	-
Region 16 Great Basin	925	54,466	2.1	237	15,594	0.7
Region 17 Pacific Northwest	2,061	216,850	1.6	619	9,737	1.4
Region 18 California	1,915	196,451	2.5	101	1,875	1.0
Region 19 Alaska	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	1	(D)	(D)

¹ Acres represent the acres of land with coverage by at least one of the systems. Acres are not double counted if multiple systems exist on the same acreage.

Table 34. Estimated Quantity of Water Applied in the Open Using Only Sprinkler Systems: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Only linear move tower systems								
	All pressures			Only low pressure under 30 psi			Only medium to high pressure 30 psi or more		
	Farms	Acres irrigated ¹	Average acre-feet per acre	Farms	Acres irrigated ¹	Average acre-feet per acre	Farms	Acres irrigated ¹	Average acre-feet per acre
United States2018	1,528	123,161	2.3	584	46,486	1.5	941	76,054	2.8
.....2013	653	61,385	1.7	181	24,340	2.1	466	37,009	1.4
2018 DATA									
Alabama	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-	-
Arkansas	5	5	1.0	5	5	1.0	-	-	-
California	26	21,858	6.0	-	-	-	26	21,858	6.0
Colorado	1	(D)	(D)	1	(D)	(D)	-	-	-
Connecticut	-	-	-	-	-	-	-	-	-
Delaware	22	110	0.4	-	-	-	22	110	0.4
Florida	3	621	0.5	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Hawaii	2	(D)	(D)	-	-	-	2	(D)	(D)
Idaho	123	12,387	1.7	-	-	-	123	12,387	1.7
Illinois	-	-	-	-	-	-	-	-	-
Indiana	34	404	0.8	16	224	0.6	18	180	0.9
Iowa	-	-	-	-	-	-	-	-	-
Kansas	-	-	-	-	-	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-	-
Louisiana	13	78	0.3	13	78	0.3	-	-	-
Maine	27	(D)	0.5	27	(D)	0.5	-	-	-
Maryland	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-
Michigan	20	800	0.2	-	-	-	20	800	0.2
Minnesota	-	-	-	-	-	-	-	-	-
Mississippi	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-
Montana	120	9,140	1.8	23	230	0.5	97	8,910	1.8
Nebraska	16	4,320	0.3	16	4,320	0.3	-	-	-
Nevada	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-
New Mexico	22	5,280	1.0	22	5,280	1.0	-	-	-
New York	1	(D)	(D)	-	-	-	1	(D)	(D)
North Carolina	1	(D)	(D)	-	-	-	1	(D)	(D)
North Dakota	-	-	-	-	-	-	-	-	-
Ohio	59	2,963	0.1	-	-	-	59	2,963	0.1
Oklahoma	-	-	-	-	-	-	-	-	-
Oregon	233	16,805	1.6	35	14,008	1.8	198	2,797	1.0
Pennsylvania	-	-	-	-	-	-	-	-	-
Rhode Island	1	(D)	(D)	-	-	-	1	(D)	(D)
South Carolina	34	(D)	(D)	26	26	1.0	8	(D)	(D)
South Dakota	-	-	-	-	-	-	-	-	-
Tennessee	21	714	0.2	-	-	-	21	714	0.2
Texas	266	21,467	1.6	198	9,047	1.7	68	12,420	1.5
Utah	297	7,047	2.1	81	756	1.5	216	6,291	2.2
Vermont	8	139	(D)	5	7	(D)	3	132	(D)
Virginia	1	(D)	(D)	1	(D)	(D)	-	-	-
Washington	83	4,624	2.7	26	442	1.4	57	4,182	2.8
West Virginia	-	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-	-
Wyoming	89	11,949	1.7	89	11,949	1.7	-	-	-
Water Resources Regions									
Region 01 New England	28	554	0.3	27	(D)	(D)	1	(D)	(D)
Region 02 Mid-Atlantic	22	110	0.4	-	-	-	22	110	0.4
Region 03 South Atlantic-Gulf	38	(D)	0.6	26	(D)	(D)	9	(D)	(D)
Region 04 Great Lakes	55	1,602	0.3	5	7	1.0	50	1,595	0.3
Region 05 Ohio	68	2,829	0.2	17	249	0.6	51	2,580	0.1
Region 06 Tennessee	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi	34	792	(D)	13	78	(D)	21	714	0.2
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-
Region 10 Missouri	84	7,902	1.2	61	7,764	1.2	23	138	2.0
Region 11 Arkansas-White-Red	5	(D)	1.0	5	(D)	1.0	-	-	-
Region 12 Texas-Gulf	288	26,747	1.5	220	14,327	1.5	68	12,420	1.5
Region 13 Rio Grande	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado	158	9,877	1.8	50	6,583	1.5	108	3,294	2.2
Region 15 Lower Colorado	27	270	5.0	-	-	-	27	270	5.0
Region 16 Great Basin	135	3,240	1.6	54	513	0.8	81	2,727	1.8
Region 17 Pacific Northwest	558	45,018	1.8	106	16,880	1.6	452	28,138	1.8
Region 18 California	26	21,858	6.0	-	-	-	26	21,858	6.0
Region 19 Alaska	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	2	(D)	(D)	-	-	-	2	(D)	(D)

See footnote(s) at end of table.

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Table 34. Estimated Quantity of Water Applied in the Open Using Only Sprinkler Systems: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Only solid set and permanent systems								
	All pressures			Only low pressure under 30 psi			Only medium to high pressure 30 psi or more		
	Farms	Acres irrigated ¹	Average acre-feet per acre	Farms	Acres irrigated ¹	Average acre-feet per acre	Farms	Acres irrigated ¹	Average acre-feet per acre
United States 2018	10,016	614,055	2.0	2,466	176,676	1.9	7,218	400,866	2.0
..... 2013	9,610	463,717	2.1	2,466	110,916	2.0	6,831	298,699	2.3
2018 DATA									
Alabama	41	1,295	0.4	-	-	-	37	495	0.3
Alaska	1	(D)	(D)	-	-	-	1	(D)	(D)
Arizona	100	14,260	0.9	34	98	0.7	66	14,162	0.9
Arkansas	16	799	0.8	5	15	0.3	11	784	0.8
California	2,661	207,154	2.7	735	57,326	1.8	1,755	138,305	2.9
Colorado	59	250	2.6	-	-	-	59	250	2.6
Connecticut	59	(D)	(D)	15	15	1.0	44	(D)	(D)
Delaware	23	11,820	0.4	-	-	-	23	11,820	0.4
Florida	1,186	18,289	1.0	334	6,810	0.7	803	10,132	1.2
Georgia	79	1,057	0.6	31	488	0.4	48	569	0.9
Hawaii	47	93	1.0	33	(D)	1.0	14	(D)	1.0
Idaho	488	8,847	2.2	90	6,113	2.4	398	2,734	1.9
Illinois	15	75	1.0	-	-	-	15	75	1.0
Indiana	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-
Kansas	11	11	1.0	-	-	-	11	11	1.0
Kentucky	6	6	1.0	-	-	-	6	6	1.0
Louisiana	75	559	0.3	29	162	0.3	46	397	0.4
Maine	31	(D)	(D)	3	(D)	(D)	28	(D)	(D)
Maryland	33	1,999	(Z)	14	251	0.2	19	1,748	(Z)
Massachusetts	301	5,882	0.7	57	171	1.5	242	5,551	0.7
Michigan	43	10,885	0.2	1	(D)	(D)	42	(D)	(D)
Minnesota	22	118	2.2	14	70	2.4	8	48	2.0
Mississippi	16	193	0.6	11	93	0.8	5	100	0.5
Missouri	8	48	0.2	-	-	-	8	48	0.2
Montana	50	399	3.2	23	46	4.5	27	353	3.0
Nebraska	15	330	0.3	-	-	-	15	330	0.3
Nevada	33	509	3.3	15	60	1.0	18	449	3.6
New Hampshire	11	22	1.0	4	8	1.0	7	14	1.0
New Jersey	117	10,259	0.8	22	1,540	(Z)	95	8,719	0.9
New Mexico	233	435	2.0	166	266	2.1	67	169	1.8
New York	77	2,388	1.6	46	92	0.5	31	2,296	1.7
North Carolina	181	11,702	0.8	36	819	0.2	145	10,883	0.8
North Dakota	1	(D)	(D)	-	-	-	1	(D)	(D)
Ohio	8	8	1.0	8	8	1.0	-	-	-
Oklahoma	26	722	1.1	-	-	-	26	722	1.1
Oregon	1,118	51,687	1.8	118	14,488	2.0	1,000	37,199	1.7
Pennsylvania	81	2,295	0.1	10	40	0.3	71	2,255	0.1
Rhode Island	9	(D)	0.3	8	53	(D)	1	(D)	(D)
South Carolina	99	2,032	1.0	29	1,043	0.6	70	989	1.5
South Dakota	-	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-
Texas	223	16,400	1.5	106	13,386	1.1	97	1,914	1.7
Utah	185	1,026	1.5	27	54	2.0	149	891	1.3
Vermont	37	263	(D)	2	(D)	(D)	35	(D)	(D)
Virginia	23	206	(D)	22	(D)	(D)	1	(D)	(D)
Washington	1,946	191,176	2.4	356	64,905	2.5	1,513	104,769	2.3
West Virginia	7	5,397	0.2	7	5,397	0.2	-	-	-
Wisconsin	215	23,502	0.6	55	2,706	1.0	160	20,796	0.5
Wyoming	-	-	-	-	-	-	-	-	-
Water Resources Regions									
Region 01 New England	434	15,595	0.5	87	250	1.2	345	15,185	0.5
Region 02 Mid-Atlantic	307	33,272	0.4	96	7,315	0.2	211	25,957	0.5
Region 03 South Atlantic-Gulf	1,579	34,521	0.9	441	9,253	0.6	1,085	23,121	1.0
Region 04 Great Lakes	191	15,157	0.6	81	2,826	1.0	110	12,331	0.5
Region 05 Ohio	18	66	(D)	10	10	1.0	8	56	(D)
Region 06 Tennessee	23	(D)	0.5	-	-	-	23	(D)	0.5
Region 07 Upper Mississippi	176	20,728	0.5	14	70	2.4	162	20,658	0.5
Region 08 Lower Mississippi	82	1,312	0.6	34	177	0.3	48	1,135	0.7
Region 09 Souris-Red-Rainy	1	(D)	(D)	-	-	-	1	(D)	(D)
Region 10 Missouri	55	403	0.4	-	-	-	55	403	0.4
Region 11 Arkansas-White-Red	39	12,770	1.1	7	12,003	1.1	32	767	1.1
Region 12 Texas-Gulf	214	4,348	2.5	112	1,429	1.7	82	1,819	1.7
Region 13 Rio Grande	173	355	1.9	86	(D)	2.5	87	(D)	1.7
Region 14 Upper Colorado	126	407	2.4	67	134	1.2	59	273	2.9
Region 15 Lower Colorado	100	14,260	0.9	34	98	0.7	66	14,162	0.9
Region 16 Great Basin	231	1,774	2.1	42	114	1.5	180	1,579	2.1
Region 17 Pacific Northwest	3,558	251,781	2.3	587	85,552	2.4	2,894	144,727	2.2
Region 18 California	2,661	207,154	2.7	735	57,326	1.8	1,755	138,305	2.9
Region 19 Alaska	1	(D)	(D)	-	-	-	1	(D)	(D)
Region 20 Hawaii	47	93	1.0	33	(D)	1.0	14	(D)	1.0

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Corn for grain or seed							
	Farms	Irrigated acres harvested	Average yield per irrigated acre (bushels)	Farms by irrigated acres harvested				
				1 to 99 acres	100 to 249 acres	250 to 499 acres	500 to 999 acres	1,000 acres or more
United States2018	31,828	11,610,238	210	8,764	9,519	6,583	4,522	2,440
.....2013	37,247	13,289,247	196	10,286	12,289	6,877	4,956	2,839
2018 DATA								
Alabama	124	32,857	216	50	16	48	3	7
Alaska	-	-	-	-	-	-	-	-
Arizona	41	13,340	231	17	1	16	6	1
Arkansas	1,089	447,403	184	220	250	344	155	120
California	337	134,945	183	135	74	71	27	30
Colorado	1,646	642,494	198	544	495	240	238	129
Connecticut	-	-	-	-	-	-	-	-
Delaware	417	111,849	171	116	135	108	35	23
Florida	79	33,481	185	-	57	3	3	16
Georgia	662	135,101	209	342	182	86	32	20
Hawaii	15	4,720	59	-	7	7	1	-
Idaho	862	112,975	218	584	173	68	25	12
Illinois	996	313,408	214	270	376	204	84	62
Indiana	1,098	317,229	209	251	455	214	132	46
Iowa	461	109,131	203	141	180	81	52	7
Kansas	3,065	1,275,781	204	665	1,153	503	484	260
Kentucky	59	29,337	207	12	6	28	6	7
Louisiana	534	285,780	195	111	97	123	99	104
Maine	33	2,283	175	30	-	-	3	-
Maryland	287	51,602	193	138	82	32	33	2
Massachusetts	-	-	-	-	-	-	-	-
Michigan	1,157	378,664	196	325	411	261	91	69
Minnesota	1,421	280,391	206	578	536	182	98	27
Mississippi	454	283,200	199	46	118	91	101	98
Missouri	934	351,031	196	200	285	214	163	72
Montana	139	24,055	173	56	54	20	9	-
Nebraska	10,581	4,522,575	222	2,209	2,841	2,473	2,027	1,031
Nevada	26	1,828	167	15	10	-	1	-
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	88	8,895	194	52	25	11	-	-
New Mexico	231	48,130	160	166	5	34	23	3
New York	5	1,446	182	1	-	3	1	-
North Carolina	145	12,127	194	129	-	9	7	-
North Dakota	336	104,053	209	31	152	102	42	9
Ohio	60	8,045	214	31	19	9	1	-
Oklahoma	197	130,878	202	46	32	42	40	37
Oregon	211	47,757	261	132	28	41	5	5
Pennsylvania	37	1,621	275	21	16	-	-	-
Rhode Island	-	-	-	-	-	-	-	-
South Carolina	281	94,386	191	78	66	37	94	6
South Dakota	656	179,472	199	85	300	208	25	38
Tennessee	291	70,957	222	59	169	19	39	5
Texas	1,218	672,323	206	131	325	388	226	148
Utah	199	13,215	213	159	28	12	-	-
Vermont	-	-	-	-	-	-	-	-
Virginia	78	11,466	200	53	10	12	2	1
Washington	493	119,019	256	199	128	115	35	16
West Virginia	-	-	-	-	-	-	-	-
Wisconsin	484	142,895	213	170	157	66	65	26
Wyoming	301	48,093	179	166	65	58	9	3
Water Resources Regions								
Region 01 New England	33	2,283	175	30	-	-	3	-
Region 02 Mid-Atlantic	877	183,223	181	360	258	163	70	26
Region 03 South Atlantic-Gulf	1,337	307,666	199	639	332	170	151	45
Region 04 Great Lakes	1,612	514,095	199	469	554	350	147	92
Region 05 Ohio	788	207,304	209	154	357	168	98	11
Region 06 Tennessee	43	23,014	227	-	11	19	7	6
Region 07 Upper Mississippi	3,069	760,729	211	1,067	1,152	509	214	127
Region 08 Lower Mississippi	2,630	1,254,247	194	467	695	614	464	390
Region 09 Souris-Red-Rainy	255	94,411	213	52	75	56	59	13
Region 10 Missouri	14,922	5,915,979	216	3,307	4,563	3,261	2,522	1,269
Region 11 Arkansas-White-Red	3,046	1,648,999	210	529	847	699	612	359
Region 12 Texas-Gulf	605	203,779	168	100	189	230	51	35
Region 13 Rio Grande	87	18,593	126	43	20	-	23	1
Region 14 Upper Colorado	399	30,782	195	358	21	18	-	2
Region 15 Lower Colorado	41	13,340	231	17	1	16	6	1
Region 16 Great Basin	190	13,511	215	140	41	8	1	-
Region 17 Pacific Northwest	1,542	278,618	241	897	322	224	66	33
Region 18 California	337	134,945	183	135	74	71	27	30
Region 19 Alaska	-	-	-	-	-	-	-	-
Region 20 Hawaii	15	4,720	59	-	7	7	1	-

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Corn for silage or greenchop								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (tons)	Farms by irrigated acres harvested					
				1 to 24 acres	25 to 49 acres	50 to 99 acres	100 to 249 acres	250 acres or more	
United States	7,930	1,648,789	26	974	1,191	1,762	2,142	1,861	
2013	8,382	1,729,358	25	1,320	1,789	1,468	1,881	1,924	
2018 DATA									
Alabama	-	-	-	-	-	-	-	-	
Alaska	-	-	-	-	-	-	-	-	
Arizona	159	65,219	31	-	-	23	66	70	
Arkansas	5	400	15	-	-	5	-	-	
California	1,515	454,607	27	114	145	282	376	598	
Colorado	730	133,455	25	75	120	150	221	164	
Connecticut	-	-	-	-	-	-	-	-	
Delaware	9	780	21	-	-	6	3	-	
Florida	12	13,130	23	-	3	-	-	9	
Georgia	37	2,888	24	-	7	23	7	-	
Hawaii	-	-	-	-	-	-	-	-	
Idaho	985	235,357	30	82	153	253	313	184	
Illinois	-	-	-	-	-	-	-	-	
Indiana	98	8,504	25	27	-	54	-	17	
Iowa	18	720	25	-	18	-	-	-	
Kansas	301	72,418	25	-	58	44	89	110	
Kentucky	2	(D)	(D)	2	-	-	-	-	
Louisiana	-	-	-	-	-	-	-	-	
Maine	-	-	-	-	-	-	-	-	
Maryland	14	2,800	29	-	-	-	9	5	
Massachusetts	29	58	29	29	-	-	-	-	
Michigan	170	14,790	20	29	-	80	61	-	
Minnesota	174	17,807	25	19	38	74	39	4	
Mississippi	7	665	18	-	-	7	-	-	
Missouri	16	2,720	23	8	-	-	-	8	
Montana	216	31,210	30	2	32	55	79	48	
Nebraska	825	109,372	25	259	159	114	198	95	
Nevada	98	9,501	25	-	44	15	31	8	
New Hampshire	-	-	-	-	-	-	-	-	
New Jersey	-	-	-	-	-	-	-	-	
New Mexico	316	80,893	25	66	33	39	48	130	
New York	2	(D)	(D)	-	-	-	1	1	
North Carolina	-	-	-	-	-	-	-	-	
North Dakota	45	3,279	19	-	-	35	10	-	
Ohio	10	750	17	-	-	10	-	-	
Oklahoma	14	7,124	16	-	-	13	-	1	
Oregon	205	17,515	26	31	55	71	41	7	
Pennsylvania	24	(D)	(D)	22	-	-	1	1	
Rhode Island	-	-	-	-	-	-	-	-	
South Carolina	52	5,200	13	-	-	26	26	-	
South Dakota	46	5,250	20	-	22	20	-	4	
Tennessee	-	-	-	-	-	-	-	-	
Texas	378	166,040	24	-	-	43	117	218	
Utah	653	61,833	26	158	162	157	119	57	
Vermont	-	-	-	-	-	-	-	-	
Virginia	71	5,122	23	-	24	23	23	1	
Washington	318	62,858	29	32	30	53	134	69	
West Virginia	-	-	-	-	-	-	-	-	
Wisconsin	146	24,703	26	19	57	10	28	32	
Wyoming	230	30,802	25	-	31	77	102	20	
Water Resources Regions									
Region 01 New England	29	58	29	29	-	-	-	-	
Region 02 Mid-Atlantic	118	9,174	25	22	24	29	36	7	
Region 03 South Atlantic-Gulf	101	21,218	21	-	10	49	33	9	
Region 04 Great Lakes	299	34,097	23	29	18	154	62	36	
Region 05 Ohio	19	139	25	19	-	-	-	-	
Region 06 Tennessee	-	-	-	-	-	-	-	-	
Region 07 Upper Mississippi	269	29,865	25	48	77	74	52	18	
Region 08 Lower Mississippi	7	665	18	-	-	7	-	-	
Region 09 Souris-Red-Rainy	15	3,000	27	-	-	-	15	-	
Region 10 Missouri	1,998	293,910	26	291	388	424	588	307	
Region 11 Arkansas-White-Red	553	159,271	24	51	29	84	179	210	
Region 12 Texas-Gulf	402	138,842	23	33	33	54	79	203	
Region 13 Rio Grande	101	34,101	29	33	-	5	-	63	
Region 14 Upper Colorado	140	24,419	23	-	23	68	26	23	
Region 15 Lower Colorado	191	66,440	31	27	-	25	66	73	
Region 16 Great Basin	731	73,315	25	133	206	159	169	64	
Region 17 Pacific Northwest	1,447	306,538	30	145	238	350	461	253	
Region 18 California	1,510	453,737	27	114	145	280	376	595	
Region 19 Alaska	-	-	-	-	-	-	-	-	
Region 20 Hawaii	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Sorghum for grain or seed								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (bushels)	Farms by irrigated acres harvested					
				1 to 49 acres	50 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more	
United States2018	1,594	286,851	98	417	239	688	154	96	
.....2013	3,923	809,579	97	647	850	1,494	545	387	
2018 DATA									
Alabama	-	-	-	-	-	-	-	-	
Alaska	-	-	-	-	-	-	-	-	
Arizona	41	22,346	96	16	-	17	-	8	
Arkansas	38	2,865	70	15	6	17	-	-	
California	7	1,750	70	-	-	-	7	-	
Colorado	174	15,935	84	98	12	43	20	1	
Connecticut	-	-	-	-	-	-	-	-	
Delaware	-	-	-	-	-	-	-	-	
Florida	-	-	-	-	-	-	-	-	
Georgia	30	3,419	99	-	6	24	-	-	
Hawaii	-	-	-	-	-	-	-	-	
Idaho	-	-	-	-	-	-	-	-	
Illinois	5	250	110	-	5	-	-	-	
Indiana	-	-	-	-	-	-	-	-	
Iowa	-	-	-	-	-	-	-	-	
Kansas	490	86,970	116	60	126	241	32	31	
Kentucky	-	-	-	-	-	-	-	-	
Louisiana	-	-	-	-	-	-	-	-	
Maine	-	-	-	-	-	-	-	-	
Maryland	-	-	-	-	-	-	-	-	
Massachusetts	-	-	-	-	-	-	-	-	
Michigan	24	3,681	128	10	-	10	3	1	
Minnesota	-	-	-	-	-	-	-	-	
Mississippi	-	-	-	-	-	-	-	-	
Missouri	-	-	-	-	-	-	-	-	
Montana	16	1,824	60	-	-	16	-	-	
Nebraska	110	5,077	117	80	5	25	-	-	
Nevada	-	-	-	-	-	-	-	-	
New Hampshire	-	-	-	-	-	-	-	-	
New Jersey	-	-	-	-	-	-	-	-	
New Mexico	73	5,982	100	40	-	33	-	-	
New York	-	-	-	-	-	-	-	-	
North Carolina	-	-	-	-	-	-	-	-	
North Dakota	-	-	-	-	-	-	-	-	
Ohio	-	-	-	-	-	-	-	-	
Oklahoma	92	12,353	108	63	-	4	19	6	
Oregon	-	-	-	-	-	-	-	-	
Pennsylvania	-	-	-	-	-	-	-	-	
Rhode Island	-	-	-	-	-	-	-	-	
South Carolina	-	-	-	-	-	-	-	-	
South Dakota	-	-	-	-	-	-	-	-	
Tennessee	-	-	-	-	-	-	-	-	
Texas	484	123,669	87	35	69	258	73	49	
Utah	-	-	-	-	-	-	-	-	
Vermont	-	-	-	-	-	-	-	-	
Virginia	-	-	-	-	-	-	-	-	
Washington	-	-	-	-	-	-	-	-	
West Virginia	-	-	-	-	-	-	-	-	
Wisconsin	-	-	-	-	-	-	-	-	
Wyoming	10	730	70	-	10	-	-	-	
Water Resources Regions									
Region 01 New England	-	-	-	-	-	-	-	-	
Region 02 Mid-Atlantic	-	-	-	-	-	-	-	-	
Region 03 South Atlantic-Gulf	30	3,419	99	-	6	24	-	-	
Region 04 Great Lakes	24	3,681	128	10	-	10	3	1	
Region 05 Ohio	-	-	-	-	-	-	-	-	
Region 06 Tennessee	-	-	-	-	-	-	-	-	
Region 07 Upper Mississippi	5	250	110	-	5	-	-	-	
Region 08 Lower Mississippi	16	955	87	5	6	5	-	-	
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	
Region 10 Missouri	243	22,975	107	95	45	88	15	-	
Region 11 Arkansas-White-Red	911	181,709	101	169	166	428	74	74	
Region 12 Texas-Gulf	225	48,474	83	35	11	111	55	13	
Region 13 Rio Grande	45	1,127	100	40	-	5	-	-	
Region 14 Upper Colorado	47	165	85	47	-	-	-	-	
Region 15 Lower Colorado	41	22,346	96	16	-	17	-	8	
Region 16 Great Basin	-	-	-	-	-	-	-	-	
Region 17 Pacific Northwest	-	-	-	-	-	-	-	-	
Region 18 California	7	1,750	70	-	-	-	7	-	
Region 19 Alaska	-	-	-	-	-	-	-	-	
Region 20 Hawaii	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Wheat for grain or seed								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (bushels)	Farms by irrigated acres harvested					
				1 to 49 acres	50 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more	
United States	8,760	2,311,703	89	1,742	1,619	2,724	1,641	1,034	
2018	12,974	3,197,501	78	2,525	3,071	4,029	1,799	1,550	
2018 DATA									
Alabama	26	2,915	78	-	25	-	-	1	
Alaska	1	(D)	(D)	1	-	-	-	-	
Arizona	170	76,229	105	18	-	26	82	44	
Arkansas	5	5,000	55	-	-	-	-	5	
California	674	207,599	97	65	100	195	216	98	
Colorado	521	75,935	74	99	126	238	36	22	
Connecticut	-	-	-	-	-	-	-	-	
Delaware	101	10,572	78	22	42	27	9	1	
Florida	-	-	-	-	-	-	-	-	
Georgia	102	22,020	68	-	24	47	25	6	
Hawaii	-	-	-	-	-	-	-	-	
Idaho	1,906	597,386	117	535	287	500	331	253	
Illinois	65	5,904	77	-	36	29	-	-	
Indiana	25	5,150	74	-	9	-	16	-	
Iowa	-	-	-	-	-	-	-	-	
Kansas	976	261,493	60	89	166	425	155	141	
Kentucky	-	-	-	-	-	-	-	-	
Louisiana	-	-	-	-	-	-	-	-	
Maine	-	-	-	-	-	-	-	-	
Maryland	29	4,719	71	20	-	-	6	3	
Massachusetts	-	-	-	-	-	-	-	-	
Michigan	125	17,673	91	32	43	34	11	5	
Minnesota	51	10,040	50	34	-	14	-	3	
Mississippi	-	-	-	-	-	-	-	-	
Missouri	122	40,257	69	-	24	40	26	32	
Montana	555	145,394	84	44	116	162	160	73	
Nebraska	370	64,530	76	81	111	102	60	16	
Nevada	28	19,698	109	15	-	1	1	11	
New Hampshire	-	-	-	-	-	-	-	-	
New Jersey	12	2,217	54	-	-	12	-	-	
New Mexico	177	41,372	82	67	-	62	40	8	
New York	-	-	-	-	-	-	-	-	
North Carolina	28	1,850	77	-	27	-	-	1	
North Dakota	167	41,094	75	31	5	55	70	6	
Ohio	14	1,370	71	-	10	4	-	-	
Oklahoma	325	103,858	46	-	94	119	87	25	
Oregon	269	53,972	117	34	56	122	32	25	
Pennsylvania	-	-	-	-	-	-	-	-	
Rhode Island	-	-	-	-	-	-	-	-	
South Carolina	19	3,650	75	-	-	12	7	-	
South Dakota	47	7,434	63	-	1	41	5	-	
Tennessee	14	700	70	-	14	-	-	-	
Texas	832	260,803	57	99	132	311	145	145	
Utah	434	30,674	97	296	51	58	25	4	
Vermont	-	-	-	-	-	-	-	-	
Virginia	4	1,324	80	-	-	-	4	-	
Washington	445	166,293	111	140	86	72	41	106	
West Virginia	-	-	-	-	-	-	-	-	
Wisconsin	21	1,189	70	19	-	-	2	-	
Wyoming	100	21,380	95	1	34	16	49	-	
Water Resources Regions									
Region 01 New England	-	-	-	-	-	-	-	-	
Region 02 Mid-Atlantic	146	18,832	73	42	42	39	19	4	
Region 03 South Atlantic-Gulf	149	27,520	70	-	51	59	32	7	
Region 04 Great Lakes	143	20,543	88	32	53	34	19	5	
Region 05 Ohio	31	3,122	81	-	9	22	-	-	
Region 06 Tennessee	26	2,915	78	-	25	-	-	1	
Region 07 Upper Mississippi	120	13,253	64	53	44	11	10	2	
Region 08 Lower Mississippi	117	40,997	67	-	30	32	18	37	
Region 09 Souris-Red-Rainy	17	6,070	57	-	-	14	1	2	
Region 10 Missouri	1,593	342,703	77	210	376	490	403	114	
Region 11 Arkansas-White-Red	1,778	570,204	58	88	274	787	359	270	
Region 12 Texas-Gulf	431	56,317	51	132	107	150	18	24	
Region 13 Rio Grande	120	21,022	89	34	5	42	34	5	
Region 14 Upper Colorado	83	(D)	(D)	47	-	35	-	1	
Region 15 Lower Colorado	173	79,858	104	18	-	26	82	47	
Region 16 Great Basin	581	86,093	95	331	91	55	63	41	
Region 17 Pacific Northwest	2,580	804,426	116	689	412	733	367	379	
Region 18 California	671	203,970	97	65	100	195	216	95	
Region 19 Alaska	1	(D)	(D)	1	-	-	-	-	
Region 20 Hawaii	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Soybeans for beans								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (bushels)	Farms by irrigated acres harvested					
				1 to 49 acres	50 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more	
United States	21,316	8,215,031	61	2,040	3,666	6,677	4,356	4,577	
2013	21,755	7,413,276	54	2,544	3,924	6,966	4,128	4,193	
2018 DATA									
Alabama	119	21,199	66	5	64	29	13	8	
Alaska	-	-	-	-	-	-	-	-	
Arizona	-	-	-	-	-	-	-	-	
Arkansas	2,367	2,154,112	56	156	103	358	424	1,326	
California	-	-	-	-	-	-	-	-	
Colorado	84	13,428	51	14	14	45	6	5	
Connecticut	-	-	-	-	-	-	-	-	
Delaware	314	62,087	50	66	46	125	52	25	
Florida	30	3,060	46	-	-	30	-	-	
Georgia	153	26,770	40	24	27	74	24	4	
Hawaii	7	250	50	4	3	-	-	-	
Idaho	2	(D)	(D)	2	-	-	-	-	
Illinois	618	184,406	66	36	119	241	120	102	
Indiana	848	175,327	65	71	266	272	159	80	
Iowa	201	45,974	58	-	52	85	48	16	
Kansas	1,683	390,288	68	190	222	809	315	147	
Kentucky	54	21,848	62	-	6	19	17	12	
Louisiana	638	418,548	62	40	39	152	156	251	
Maine	-	-	-	-	-	-	-	-	
Maryland	247	44,447	52	5	137	46	37	22	
Massachusetts	-	-	-	-	-	-	-	-	
Michigan	809	192,450	60	124	151	308	151	75	
Minnesota	891	104,194	57	212	254	319	94	12	
Mississippi	993	1,053,930	65	12	52	161	198	570	
Missouri	1,139	640,311	54	69	112	298	233	427	
Montana	23	4,078	41	-	4	8	11	-	
Nebraska	7,821	2,202,453	67	632	1,471	2,369	2,064	1,285	
Nevada	-	-	-	-	-	-	-	-	
New Hampshire	-	-	-	-	-	-	-	-	
New Jersey	143	12,269	45	46	59	23	15	-	
New Mexico	10	(D)	(D)	10	-	-	-	-	
New York	-	-	-	-	-	-	-	-	
North Carolina	103	6,614	51	27	70	2	2	2	
North Dakota	248	58,653	55	-	36	154	32	26	
Ohio	42	4,745	67	22	4	9	7	-	
Oklahoma	166	62,313	55	-	13	119	6	28	
Oregon	-	-	-	-	-	-	-	-	
Pennsylvania	16	80	80	16	-	-	-	-	
Rhode Island	-	-	-	-	-	-	-	-	
South Carolina	148	18,156	52	50	41	41	14	2	
South Dakota	420	97,467	58	44	89	173	79	35	
Tennessee	312	80,717	55	21	58	163	21	49	
Texas	133	29,032	58	38	24	25	19	27	
Utah	-	-	-	-	-	-	-	-	
Vermont	-	-	-	-	-	-	-	-	
Virginia	67	9,749	61	-	10	50	4	3	
Washington	-	-	-	-	-	-	-	-	
West Virginia	-	-	-	-	-	-	-	-	
Wisconsin	445	73,832	59	104	120	148	35	38	
Wyoming	22	2,200	15	-	-	22	-	-	
Water Resources Regions									
Region 01 New England	-	-	-	-	-	-	-	-	
Region 02 Mid-Atlantic	787	128,632	51	133	252	244	108	50	
Region 03 South Atlantic-Gulf	536	71,995	51	106	170	185	67	8	
Region 04 Great Lakes	1,138	255,751	61	216	200	418	199	105	
Region 05 Ohio	568	142,249	65	57	133	195	128	55	
Region 06 Tennessee	67	17,009	67	-	39	3	16	9	
Region 07 Upper Mississippi	2,089	385,280	61	285	607	796	227	174	
Region 08 Lower Mississippi	4,595	3,951,114	59	237	284	842	829	2,403	
Region 09 Souris-Red-Rainy	230	42,570	57	41	53	83	49	4	
Region 10 Missouri	9,518	2,564,114	66	820	1,798	3,147	2,323	1,430	
Region 11 Arkansas-White-Red	1,701	651,431	59	91	108	764	399	339	
Region 12 Texas-Gulf	68	4,592	48	38	19	-	11	-	
Region 13 Rio Grande	10	(D)	(D)	10	-	-	-	-	
Region 14 Upper Colorado	-	-	-	-	-	-	-	-	
Region 15 Lower Colorado	-	-	-	-	-	-	-	-	
Region 16 Great Basin	-	-	-	-	-	-	-	-	
Region 17 Pacific Northwest	2	(D)	(D)	2	-	-	-	-	
Region 18 California	-	-	-	-	-	-	-	-	
Region 19 Alaska	-	-	-	-	-	-	-	-	
Region 20 Hawaii	7	250	50	4	3	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Beans, dry edible								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (cwt)	Farms by irrigated acres harvested					
				1 to 24 acres	25 to 49 acres	50 to 99 acres	100 to 249 acres	250 acres or more	
United States	2,275	416,608	27	304	362	464	602	543	
2013	2,793	433,590	25	963	161	376	797	496	
2018 DATA									
Alabama	-	-	-	-	-	-	-	-	
Alaska	-	-	-	-	-	-	-	-	
Arizona	9	7,274	17	-	-	1	6	2	
Arkansas	-	-	-	-	-	-	-	-	
California	244	40,176	28	37	45	37	64	61	
Colorado	141	18,913	29	8	27	23	64	19	
Connecticut	-	-	-	-	-	-	-	-	
Delaware	-	-	-	-	-	-	-	-	
Florida	27	270	10	27	-	-	-	-	
Georgia	-	-	-	-	-	-	-	-	
Hawaii	-	-	-	-	-	-	-	-	
Idaho	641	77,397	27	99	176	187	93	86	
Illinois	-	-	-	-	-	-	-	-	
Indiana	-	-	-	-	-	-	-	-	
Iowa	-	-	-	-	-	-	-	-	
Kansas	13	8,210	28	-	1	-	-	12	
Kentucky	-	-	-	-	-	-	-	-	
Louisiana	-	-	-	-	-	-	-	-	
Maine	32	32	25	32	-	-	-	-	
Maryland	4	420	30	-	-	-	4	-	
Massachusetts	28	28	20	28	-	-	-	-	
Michigan	111	18,223	22	-	20	20	41	30	
Minnesota	130	49,311	29	-	14	18	40	58	
Mississippi	-	-	-	-	-	-	-	-	
Missouri	-	-	-	-	-	-	-	-	
Montana	24	3,089	35	-	-	3	20	1	
Nebraska	414	103,771	26	-	47	71	139	157	
Nevada	-	-	-	-	-	-	-	-	
New Hampshire	-	-	-	-	-	-	-	-	
New Jersey	-	-	-	-	-	-	-	-	
New Mexico	2	(D)	(D)	-	-	-	-	2	
New York	-	-	-	-	-	-	-	-	
North Carolina	-	-	-	-	-	-	-	-	
North Dakota	63	21,260	28	-	-	-	22	41	
Ohio	-	-	-	-	-	-	-	-	
Oklahoma	-	-	-	-	-	-	-	-	
Oregon	35	4,827	27	7	-	24	-	4	
Pennsylvania	24	24	16	24	-	-	-	-	
Rhode Island	9	9	20	9	-	-	-	-	
South Carolina	-	-	-	-	-	-	-	-	
South Dakota	1	(D)	(D)	-	-	-	-	1	
Tennessee	-	-	-	-	-	-	-	-	
Texas	11	1,110	15	-	-	5	6	-	
Utah	4	208	28	-	-	4	-	-	
Vermont	-	-	-	-	-	-	-	-	
Virginia	-	-	-	-	-	-	-	-	
Washington	202	27,673	31	33	32	27	79	31	
West Virginia	-	-	-	-	-	-	-	-	
Wisconsin	11	8,548	23	-	-	-	1	10	
Wyoming	95	19,440	24	-	-	44	23	28	
Water Resources Regions									
Region 01 New England	69	69	22	69	-	-	-	-	
Region 02 Mid-Atlantic	6	422	30	2	-	-	4	-	
Region 03 South Atlantic-Gulf	27	270	10	27	-	-	-	-	
Region 04 Great Lakes	133	18,245	22	22	20	20	41	30	
Region 05 Ohio	-	-	-	-	-	-	-	-	
Region 06 Tennessee	-	-	-	-	-	-	-	-	
Region 07 Upper Mississippi	129	51,899	27	-	14	18	41	56	
Region 08 Lower Mississippi	-	-	-	-	-	-	-	-	
Region 09 Souris-Red-Rainy	71	26,500	29	-	-	-	18	53	
Region 10 Missouri	675	154,416	26	8	61	138	250	218	
Region 11 Arkansas-White-Red	2	(D)	(D)	-	1	-	1	-	
Region 12 Texas-Gulf	10	920	(D)	-	-	5	5	-	
Region 13 Rio Grande	-	-	-	-	-	-	-	-	
Region 14 Upper Colorado	15	(D)	21	-	13	-	-	2	
Region 15 Lower Colorado	9	7,274	17	-	-	1	6	2	
Region 16 Great Basin	4	208	28	-	-	4	-	-	
Region 17 Pacific Northwest	881	110,047	28	139	208	241	172	121	
Region 18 California	244	40,176	28	37	45	37	64	61	
Region 19 Alaska	-	-	-	-	-	-	-	-	
Region 20 Hawaii	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Rice								Other small grains (barley, oats, rye, etc.)	
	Farms	Irrigated acres harvested	Average yield per irrigated acre (cwt)	Farms by irrigated acres harvested					Farms	Irrigated acres harvested
				1 to 99 acres	100 to 249 acres	250 to 499 acres	500 to 999 acres	1,000 acres or more		
United States2018	3,813	2,370,113	79	484	880	896	789	764	5,767	1,026,289
.....2013	5,613	3,132,894	80	383	1,219	1,534	1,787	690	6,258	1,209,527
2018 DATA										
Alabama	-	-	-	-	-	-	-	-	4	8
Alaska	-	-	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-	130	13,912
Arkansas	1,715	1,190,434	79	217	366	335	389	408	-	-
California	837	393,275	88	92	246	274	121	104	551	127,718
Colorado	-	-	-	-	-	-	-	-	366	81,378
Connecticut	-	-	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	10	1,300
Florida	16	(D)	(D)	-	-	4	8	4	56	9,630
Georgia	-	-	-	-	-	-	-	-	25	732
Hawaii	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	1,580	388,697
Illinois	1	(D)	(D)	-	-	1	-	-	-	-
Indiana	-	-	-	-	-	-	-	-	35	2,342
Iowa	-	-	-	-	-	-	-	-	-	-
Kansas	-	-	-	-	-	-	-	-	10	4,135
Kentucky	-	-	-	-	-	-	-	-	-	-
Louisiana	561	282,375	72	94	118	151	126	72	-	-
Maine	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	31	1,351
Massachusetts	-	-	-	-	-	-	-	-	-	-
Michigan	-	-	-	-	-	-	-	-	11	507
Minnesota	-	-	-	-	-	-	-	-	27	2,020
Mississippi	148	99,888	78	8	27	43	45	25	-	-
Missouri	257	173,652	79	43	46	48	49	71	-	-
Montana	-	-	-	-	-	-	-	-	537	141,966
Nebraska	-	-	-	-	-	-	-	-	84	7,930
Nevada	-	-	-	-	-	-	-	-	137	13,163
New Hampshire	-	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-	-
New Mexico	-	-	-	-	-	-	-	-	79	9,507
New York	-	-	-	-	-	-	-	-	3	9
North Carolina	-	-	-	-	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	-	-	15	4,100
Ohio	-	-	-	-	-	-	-	-	23	690
Oklahoma	-	-	-	-	-	-	-	-	22	22,590
Oregon	-	-	-	-	-	-	-	-	181	18,081
Pennsylvania	-	-	-	-	-	-	-	-	22	176
Rhode Island	-	-	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	28	4,091
Tennessee	1	(D)	(D)	-	-	1	-	-	-	-
Texas	277	206,790	78	30	77	39	51	80	168	46,444
Utah	-	-	-	-	-	-	-	-	947	45,301
Vermont	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	-	-	210	22,136
West Virginia	-	-	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-	33	1,777
Wyoming	-	-	-	-	-	-	-	-	442	54,598
Water Resources Regions										
Region 01 New England	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	-	-	-	-	-	-	-	-	66	2,836
Region 03 South Atlantic-Gulf	16	(D)	(D)	-	-	4	8	4	85	10,370
Region 04 Great Lakes	-	-	-	-	-	-	-	-	21	(D)
Region 05 Ohio	-	-	-	-	-	-	-	-	58	3,032
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	1	(D)	(D)	-	-	1	-	-	49	2,697
Region 08 Lower Mississippi	2,279	1,456,107	78	280	495	530	515	459	-	-
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	1	(D)
Region 10 Missouri	-	-	-	-	-	-	-	-	1,156	213,627
Region 11 Arkansas-White-Red	403	290,592	79	82	62	48	94	117	137	42,669
Region 12 Texas-Gulf	277	206,790	78	30	77	39	51	80	94	32,755
Region 13 Rio Grande	-	-	-	-	-	-	-	-	153	67,629
Region 14 Upper Colorado	-	-	-	-	-	-	-	-	377	17,247
Region 15 Lower Colorado	-	-	-	-	-	-	-	-	159	14,980
Region 16 Great Basin	-	-	-	-	-	-	-	-	941	80,846
Region 17 Pacific Northwest	-	-	-	-	-	-	-	-	1,893	406,196
Region 18 California	837	393,275	88	92	246	274	121	104	577	129,798
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. 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 irrigated acre (tons, dry)	Farms by irrigated acres harvested					
				1 to 49 acres	50 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more	
United States	48,697	6,165,406	5.1	26,651	7,400	8,654	3,284	2,708	
2013	46,181	5,512,871	5.1	26,206	7,079	7,662	3,037	2,197	
2018 DATA									
Alabama	25	2,000	2.0	-	25	-	-	-	
Alaska	1	(D)	(D)	-	1	-	-	-	
Arizona	824	304,152	8.3	451	65	88	34	186	
Arkansas	10	360	5.3	5	5	-	-	-	
California	2,544	701,813	6.3	742	433	553	408	408	
Colorado	6,749	592,838	4.1	4,303	922	1,062	206	256	
Connecticut	-	-	-	-	-	-	-	-	
Delaware	28	162	6.0	28	-	-	-	-	
Florida	-	-	-	-	-	-	-	-	
Georgia	57	1,145	7.0	57	-	-	-	-	
Hawaii	3	27	6.6	3	-	-	-	-	
Idaho	7,361	856,511	5.2	4,077	1,295	1,132	514	343	
Illinois	-	-	-	-	-	-	-	-	
Indiana	55	2,966	7.4	18	36	-	1	-	
Iowa	-	-	-	-	-	-	-	-	
Kansas	646	156,569	6.0	195	124	166	93	68	
Kentucky	-	-	-	-	-	-	-	-	
Louisiana	-	-	-	-	-	-	-	-	
Maine	-	-	-	-	-	-	-	-	
Maryland	5	350	5.9	-	5	-	-	-	
Massachusetts	-	-	-	-	-	-	-	-	
Michigan	228	12,180	7.5	141	42	45	-	-	
Minnesota	302	21,055	5.4	171	56	57	18	-	
Mississippi	12	222	4.0	12	-	-	-	-	
Missouri	23	478	5.2	23	-	-	-	-	
Montana	4,836	872,353	3.7	1,681	965	1,124	653	413	
Nebraska	2,584	325,052	5.2	1,081	601	603	154	145	
Nevada	1,090	332,309	5.2	393	194	139	193	171	
New Hampshire	-	-	-	-	-	-	-	-	
New Jersey	7	175	5.0	7	-	-	-	-	
New Mexico	3,712	135,448	5.7	3,047	333	287	33	12	
New York	2	(D)	(D)	-	-	1	-	1	
North Carolina	12	84	2.2	12	-	-	-	-	
North Dakota	176	9,538	4.7	88	66	22	-	-	
Ohio	26	1,110	6.4	23	-	3	-	-	
Oklahoma	243	34,640	6.2	75	46	94	26	2	
Oregon	2,634	331,194	4.9	1,513	292	539	150	140	
Pennsylvania	23	288	2.5	22	-	1	-	-	
Rhode Island	-	-	-	-	-	-	-	-	
South Carolina	-	-	-	-	-	-	-	-	
South Dakota	347	45,734	4.2	44	61	237	-	5	
Tennessee	-	-	-	-	-	-	-	-	
Texas	621	56,268	6.0	349	110	114	27	21	
Utah	7,724	611,229	4.2	5,267	915	1,021	288	233	
Vermont	-	-	-	-	-	-	-	-	
Virginia	-	-	-	-	-	-	-	-	
Washington	2,569	278,089	6.6	1,544	327	390	209	99	
West Virginia	-	-	-	-	-	-	-	-	
Wisconsin	224	23,936	6.3	123	38	40	11	12	
Wyoming	2,994	454,316	3.7	1,156	443	936	266	193	
Water Resources Regions									
Region 01 New England	-	-	-	-	-	-	-	-	
Region 02 Mid-Atlantic	63	975	4.7	57	5	1	-	-	
Region 03 South Atlantic-Gulf	106	3,451	3.8	81	25	-	-	-	
Region 04 Great Lakes	371	27,192	6.9	169	106	87	7	2	
Region 05 Ohio	23	(D)	(D)	23	-	-	-	-	
Region 06 Tennessee	-	-	-	-	-	-	-	-	
Region 07 Upper Mississippi	399	26,174	6.0	273	66	40	9	11	
Region 08 Lower Mississippi	-	-	-	-	-	-	-	-	
Region 09 Souris-Red-Rainy	121	17,607	4.1	41	31	19	30	-	
Region 10 Missouri	11,483	1,680,634	4.3	4,501	2,168	3,102	1,008	704	
Region 11 Arkansas-White-Red	1,754	305,005	5.4	728	319	439	130	138	
Region 12 Texas-Gulf	476	34,330	6.3	249	152	50	20	5	
Region 13 Rio Grande	3,218	172,691	4.8	2,597	201	298	36	86	
Region 14 Upper Colorado	7,082	430,590	3.6	5,004	892	974	104	108	
Region 15 Lower Colorado	1,093	337,052	8.2	630	110	115	43	195	
Region 16 Great Basin	6,776	849,809	4.7	4,093	821	1,003	472	387	
Region 17 Pacific Northwest	13,080	1,574,264	5.2	7,413	2,070	1,912	1,033	652	
Region 18 California	2,648	704,820	6.2	789	433	614	392	420	
Region 19 Alaska	1	(D)	(D)	-	1	-	-	-	
Region 20 Hawaii	3	27	6.6	3	-	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. 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 irrigated acre (tons, dry)	Farms by irrigated acres harvested					
				1 to 24 acres	25 to 49 acres	50 to 99 acres	100 to 249 acres	250 acres or more	
United States2018	25,402	3,263,946	4.3	11,357	3,873	2,854	4,175	3,143	
.....2013	28,142	3,300,889	3.7	11,149	5,725	4,026	4,140	3,102	
2018 DATA									
Alabama	50	425	6.0	50	-	-	-	-	
Alaska	4	713	2.8	-	-	3	-	1	
Arizona	251	44,101	4.7	97	49	-	72	33	
Arkansas	93	7,205	4.3	23	23	18	24	5	
California	1,961	557,566	8.6	340	294	314	394	619	
Colorado	3,917	362,160	2.5	2,015	726	457	441	278	
Connecticut	-	-	-	-	-	-	-	-	
Delaware	-	-	-	-	-	-	-	-	
Florida	179	35,676	3.8	-	105	-	66	8	
Georgia	214	20,251	6.9	23	93	49	48	1	
Hawaii	-	-	-	-	-	-	-	-	
Idaho	1,701	156,806	3.1	866	274	264	115	182	
Illinois	12	1,800	0.5	-	-	-	12	-	
Indiana	9	540	2.5	-	-	9	-	-	
Iowa	-	-	-	-	-	-	-	-	
Kansas	355	47,827	9.3	44	60	48	175	28	
Kentucky	-	-	-	-	-	-	-	-	
Louisiana	49	2,506	1.9	27	8	-	14	-	
Maine	-	-	-	-	-	-	-	-	
Maryland	41	1,133	1.0	20	20	-	-	1	
Massachusetts	-	-	-	-	-	-	-	-	
Michigan	-	-	-	-	-	-	-	-	
Minnesota	-	-	-	-	-	-	-	-	
Mississippi	31	2,284	2.7	12	6	-	13	-	
Missouri	72	4,160	4.2	24	8	16	24	-	
Montana	2,035	332,932	2.3	913	219	182	280	441	
Nebraska	829	94,336	4.4	237	62	189	249	92	
Nevada	417	150,331	3.8	61	31	88	86	151	
New Hampshire	-	-	-	-	-	-	-	-	
New Jersey	2	(D)	(D)	2	-	-	-	-	
New Mexico	1,957	101,446	5.9	1,420	255	38	144	100	
New York	-	-	-	-	-	-	-	-	
North Carolina	92	3,036	3.5	53	-	39	-	-	
North Dakota	63	3,707	4.6	-	31	31	-	1	
Ohio	-	-	-	-	-	-	-	-	
Oklahoma	280	44,201	5.4	77	-	80	79	44	
Oregon	3,363	276,496	2.3	1,927	541	272	420	203	
Pennsylvania	-	-	-	-	-	-	-	-	
Rhode Island	-	-	-	-	-	-	-	-	
South Carolina	76	1,445	4.0	76	-	-	-	-	
South Dakota	84	20,349	4.7	44	-	-	-	40	
Tennessee	21	1,680	2.0	-	-	21	-	-	
Texas	2,341	275,863	5.0	990	438	158	531	224	
Utah	1,924	133,745	2.5	1,171	230	236	142	145	
Vermont	-	-	-	-	-	-	-	-	
Virginia	-	-	-	-	-	-	-	-	
Washington	1,204	149,317	5.1	390	138	144	356	176	
West Virginia	20	(D)	(D)	20	-	-	-	-	
Wisconsin	4	1,440	4.5	-	-	-	3	1	
Wyoming	1,751	428,427	2.1	435	262	198	487	369	
Water Resources Regions									
Region 01 New England	-	-	-	-	-	-	-	-	
Region 02 Mid-Atlantic	43	1,155	1.1	22	20	-	-	1	
Region 03 South Atlantic-Gulf	617	63,067	4.8	189	204	88	127	9	
Region 04 Great Lakes	-	-	-	-	-	-	-	-	
Region 05 Ohio	32	1,820	0.5	20	-	-	12	-	
Region 06 Tennessee	25	50	6.0	25	-	-	-	-	
Region 07 Upper Mississippi	29	2,220	4.0	16	-	9	3	1	
Region 08 Lower Mississippi	84	3,276	2.6	41	13	30	-	-	
Region 09 Souris-Red-Rainy	31	2,077	5.0	-	-	31	-	-	
Region 10 Missouri	4,788	710,252	2.7	1,847	660	653	886	742	
Region 11 Arkansas-White-Red	1,475	233,157	6.5	352	203	201	535	184	
Region 12 Texas-Gulf	2,040	219,664	4.8	931	380	143	360	226	
Region 13 Rio Grande	1,630	71,023	4.2	1,245	189	57	77	62	
Region 14 Upper Colorado	3,185	364,806	2.1	1,618	535	345	413	274	
Region 15 Lower Colorado	409	52,440	4.8	183	83	-	108	35	
Region 16 Great Basin	2,117	297,058	2.9	971	267	295	233	351	
Region 17 Pacific Northwest	6,818	667,792	3.1	3,534	979	672	1,013	620	
Region 18 California	2,075	573,376	8.5	363	340	327	408	637	
Region 19 Alaska	4	713	2.8	-	-	3	-	1	
Region 20 Hawaii	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Peanuts								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (pounds)	Farms by irrigated acres harvested					
				1 to 49 acres	50 to 99 acres	100 to 249 acres	250 to 499 acres	500 acres or more	
United States	1,701	460,155	4,518	316	330	571	274	210	
2013	1,605	371,634	4,533	167	353	689	240	156	
2018 DATA									
Alabama	85	18,150	4,399	25	1	37	8	14	
Alaska	-	-	-	-	-	-	-	-	
Arizona	-	-	-	-	-	-	-	-	
Arkansas	43	18,553	4,682	5	9	5	12	12	
California	3	3	4,000	3	-	-	-	-	
Colorado	-	-	-	-	-	-	-	-	
Connecticut	-	-	-	-	-	-	-	-	
Delaware	-	-	-	-	-	-	-	-	
Florida	164	55,617	4,512	54	27	30	18	35	
Georgia	849	247,135	4,832	98	144	318	181	108	
Hawaii	-	-	-	-	-	-	-	-	
Idaho	-	-	-	-	-	-	-	-	
Illinois	-	-	-	-	-	-	-	-	
Indiana	-	-	-	-	-	-	-	-	
Iowa	-	-	-	-	-	-	-	-	
Kansas	-	-	-	-	-	-	-	-	
Kentucky	-	-	-	-	-	-	-	-	
Louisiana	19	3,040	5,000	-	-	19	-	-	
Maine	-	-	-	-	-	-	-	-	
Maryland	-	-	-	-	-	-	-	-	
Massachusetts	-	-	-	-	-	-	-	-	
Michigan	-	-	-	-	-	-	-	-	
Minnesota	-	-	-	-	-	-	-	-	
Mississippi	11	1,425	4,329	-	7	3	1	-	
Missouri	-	-	-	-	-	-	-	-	
Montana	-	-	-	-	-	-	-	-	
Nebraska	-	-	-	-	-	-	-	-	
Nevada	-	-	-	-	-	-	-	-	
New Hampshire	-	-	-	-	-	-	-	-	
New Jersey	-	-	-	-	-	-	-	-	
New Mexico	24	4,272	3,540	-	-	23	-	1	
New York	-	-	-	-	-	-	-	-	
North Carolina	54	2,306	5,379	53	-	-	-	1	
North Dakota	-	-	-	-	-	-	-	-	
Ohio	-	-	-	-	-	-	-	-	
Oklahoma	17	2,265	4,183	-	13	-	4	-	
Oregon	-	-	-	-	-	-	-	-	
Pennsylvania	-	-	-	-	-	-	-	-	
Rhode Island	-	-	-	-	-	-	-	-	
South Carolina	124	17,791	4,822	37	40	36	6	5	
South Dakota	-	-	-	-	-	-	-	-	
Tennessee	22	22	4,500	22	-	-	-	-	
Texas	286	89,576	3,605	19	89	100	44	34	
Utah	-	-	-	-	-	-	-	-	
Vermont	-	-	-	-	-	-	-	-	
Virginia	-	-	-	-	-	-	-	-	
Washington	-	-	-	-	-	-	-	-	
West Virginia	-	-	-	-	-	-	-	-	
Wisconsin	-	-	-	-	-	-	-	-	
Wyoming	-	-	-	-	-	-	-	-	
Water Resources Regions									
Region 01 New England	-	-	-	-	-	-	-	-	
Region 02 Mid-Atlantic	-	-	-	-	-	-	-	-	
Region 03 South Atlantic-Gulf	1,276	340,999	4,760	267	212	421	213	163	
Region 04 Great Lakes	-	-	-	-	-	-	-	-	
Region 05 Ohio	-	-	-	-	-	-	-	-	
Region 06 Tennessee	22	22	4,500	22	-	-	-	-	
Region 07 Upper Mississippi	-	-	-	-	-	-	-	-	
Region 08 Lower Mississippi	56	19,265	4,897	5	12	26	1	12	
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	
Region 10 Missouri	-	-	-	-	-	-	-	-	
Region 11 Arkansas-White-Red	54	(D)	(D)	-	37	1	16	-	
Region 12 Texas-Gulf	289	91,251	3,585	19	69	123	44	34	
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	3	3	4,000	3	-	-	-	-	
Region 19 Alaska	-	-	-	-	-	-	-	-	
Region 20 Hawaii	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Cotton								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (lbs, lint)	Farms by irrigated acres harvested					
				1 to 99 acres	100 to 249 acres	250 to 499 acres	500 to 999 acres	1,000 acres or more	
United States2018	6,918	3,697,167	1,167	1,094	1,963	1,573	1,320	968	
.....2013	6,804	2,954,457	1,172	1,299	1,747	1,990	1,148	620	
2018 DATA									
Alabama	199	52,608	1,102	50	102	17	15	15	
Alaska	-	-	-	-	-	-	-	-	
Arizona	277	164,846	1,480	33	65	92	36	51	
Arkansas	410	386,089	1,251	32	66	76	87	149	
California	461	254,785	1,615	20	204	118	84	35	
Colorado	-	-	-	-	-	-	-	-	
Connecticut	-	-	-	-	-	-	-	-	
Delaware	-	-	-	-	-	-	-	-	
Florida	31	(D)	(D)	-	27	-	-	4	
Georgia	1,041	463,450	787	187	277	268	238	71	
Hawaii	-	-	-	-	-	-	-	-	
Idaho	-	-	-	-	-	-	-	-	
Illinois	1	(D)	(D)	-	-	1	-	-	
Indiana	-	-	-	-	-	-	-	-	
Iowa	-	-	-	-	-	-	-	-	
Kansas	127	40,974	1,237	18	69	25	9	6	
Kentucky	-	-	-	-	-	-	-	-	
Louisiana	75	33,908	1,270	6	35	9	22	3	
Maine	-	-	-	-	-	-	-	-	
Maryland	-	-	-	-	-	-	-	-	
Massachusetts	-	-	-	-	-	-	-	-	
Michigan	-	-	-	-	-	-	-	-	
Minnesota	-	-	-	-	-	-	-	-	
Mississippi	235	209,107	1,286	19	24	48	64	80	
Missouri	204	208,092	1,425	-	23	43	48	90	
Montana	-	-	-	-	-	-	-	-	
Nebraska	-	-	-	-	-	-	-	-	
Nevada	-	-	-	-	-	-	-	-	
New Hampshire	-	-	-	-	-	-	-	-	
New Jersey	-	-	-	-	-	-	-	-	
New Mexico	230	51,304	1,094	133	-	48	47	2	
New York	-	-	-	-	-	-	-	-	
North Carolina	101	14,202	1,073	26	61	9	5	-	
North Dakota	-	-	-	-	-	-	-	-	
Ohio	-	-	-	-	-	-	-	-	
Oklahoma	250	113,902	1,358	63	72	39	55	21	
Oregon	-	-	-	-	-	-	-	-	
Pennsylvania	-	-	-	-	-	-	-	-	
Rhode Island	-	-	-	-	-	-	-	-	
South Carolina	199	39,558	1,111	103	54	24	16	2	
South Dakota	-	-	-	-	-	-	-	-	
Tennessee	93	23,539	1,198	56	7	17	7	6	
Texas	2,974	1,632,965	1,095	338	877	739	587	433	
Utah	-	-	-	-	-	-	-	-	
Vermont	-	-	-	-	-	-	-	-	
Virginia	10	400	908	10	-	-	-	-	
Washington	-	-	-	-	-	-	-	-	
West Virginia	-	-	-	-	-	-	-	-	
Wisconsin	-	-	-	-	-	-	-	-	
Wyoming	-	-	-	-	-	-	-	-	
Water Resources Regions									
Region 01 New England	-	-	-	-	-	-	-	-	
Region 02 Mid-Atlantic	-	-	-	-	-	-	-	-	
Region 03 South Atlantic-Gulf	1,504	570,825	843	363	457	319	272	93	
Region 04 Great Lakes	-	-	-	-	-	-	-	-	
Region 05 Ohio	-	-	-	-	-	-	-	-	
Region 06 Tennessee	131	(D)	(D)	47	64	11	8	1	
Region 07 Upper Mississippi	1	(D)	(D)	-	-	1	-	-	
Region 08 Lower Mississippi	950	844,580	1,299	79	142	181	222	326	
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	
Region 10 Missouri	-	-	-	-	-	-	-	-	
Region 11 Arkansas-White-Red	1,059	522,693	1,314	218	360	188	177	116	
Region 12 Texas-Gulf	2,309	1,270,679	1,032	182	666	638	483	340	
Region 13 Rio Grande	226	47,646	1,117	152	5	25	38	6	
Region 14 Upper Colorado	-	-	-	-	-	-	-	-	
Region 15 Lower Colorado	285	169,313	1,496	33	68	95	36	53	
Region 16 Great Basin	-	-	-	-	-	-	-	-	
Region 17 Pacific Northwest	-	-	-	-	-	-	-	-	
Region 18 California	453	250,318	1,606	20	201	115	84	33	
Region 19 Alaska	-	-	-	-	-	-	-	-	
Region 20 Hawaii	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Land in vegetables							
	Farms	Irrigated acres harvested	Farms by irrigated acres harvested					
			Less than 5.0 acres	5.0 to 24.9 acres	25.0 to 99.9 acres	100.0 to 249.9 acres	250.0 acres or more	
United States	23,087	3,127,705	12,999	4,722	1,768	1,351	2,247	
2013	24,157	2,993,600	15,026	3,583	1,792	1,496	2,260	
2018 DATA								
Alabama	229	14,532	76	97	28	-	28	
Alaska	70	375	61	8	-	1	-	
Arizona	202	133,733	46	64	-	16	76	
Arkansas	143	14,993	81	42	4	-	16	
California	2,015	975,424	764	246	174	194	637	
Colorado	475	52,390	356	54	22	-	43	
Connecticut	191	693	178	7	5	1	-	
Delaware	79	14,293	17	-	28	30	4	
Florida	741	172,039	287	228	81	9	136	
Georgia	467	77,134	134	85	83	71	94	
Hawaii	337	5,055	234	79	22	-	2	
Idaho	945	317,115	316	100	134	160	235	
Illinois	379	22,988	214	75	39	48	3	
Indiana	404	37,099	194	84	26	54	46	
Iowa	214	4,727	132	46	-	36	-	
Kansas	172	3,036	136	29	-	3	4	
Kentucky	493	3,821	280	160	53	-	-	
Louisiana	101	18,798	70	13	11	-	7	
Maine	462	15,979	352	55	26	9	20	
Maryland	408	19,262	175	84	93	41	15	
Massachusetts	364	2,971	200	123	40	-	1	
Michigan	974	121,194	485	239	69	80	101	
Minnesota	418	55,436	199	38	59	56	66	
Mississippi	198	5,602	105	74	13	-	6	
Missouri	608	6,848	447	127	8	26	-	
Montana	271	7,532	197	34	2	36	2	
Nebraska	201	21,317	126	56	4	-	15	
Nevada	34	3,622	26	5	-	-	3	
New Hampshire	219	1,313	169	48	1	-	1	
New Jersey	737	31,376	331	196	115	70	25	
New Mexico	764	14,459	655	100	-	-	9	
New York	713	18,612	315	258	96	27	17	
North Carolina	648	53,854	472	81	48	-	47	
North Dakota	62	22,404	46	4	-	-	12	
Ohio	654	10,557	382	183	79	3	7	
Oklahoma	336	7,041	229	77	-	26	4	
Oregon	1,220	117,103	836	76	95	109	104	
Pennsylvania	1,131	26,369	637	409	61	15	9	
Rhode Island	99	1,348	75	17	-	7	-	
South Carolina	496	42,781	287	146	29	2	32	
South Dakota	94	355	65	29	-	-	-	
Tennessee	335	3,929	249	85	-	-	1	
Texas	705	128,652	364	139	58	75	69	
Utah	402	4,302	210	156	32	4	-	
Vermont	232	1,505	169	50	12	1	-	
Virginia	468	12,751	312	100	33	13	10	
Washington	1,244	292,946	780	182	12	30	240	
West Virginia	149	5,798	139	-	5	-	5	
Wisconsin	703	200,869	318	134	68	88	95	
Wyoming	81	1,372	71	-	-	10	-	
Water Resources Regions								
Region 01 New England	1,434	23,068	1,037	283	75	17	22	
Region 02 Mid-Atlantic	2,826	113,785	1,442	753	375	187	69	
Region 03 South Atlantic-Gulf	2,754	361,043	1,337	738	260	82	337	
Region 04 Great Lakes	2,064	165,170	1,112	486	201	123	142	
Region 05 Ohio	1,619	42,465	925	483	113	70	28	
Region 06 Tennessee	372	1,493	271	86	15	-	-	
Region 07 Upper Mississippi	1,524	261,276	793	245	144	182	160	
Region 08 Lower Mississippi	273	45,308	133	62	30	18	30	
Region 09 Souris-Red-Rainy	105	10,108	92	7	-	-	6	
Region 10 Missouri	1,150	66,341	804	274	12	22	38	
Region 11 Arkansas-White-Red	732	27,964	568	109	14	29	12	
Region 12 Texas-Gulf	672	63,080	360	139	58	70	45	
Region 13 Rio Grande	590	83,729	462	67	-	5	56	
Region 14 Upper Colorado	323	6,596	256	64	-	-	3	
Region 15 Lower Colorado	244	144,729	83	64	-	16	81	
Region 16 Great Basin	407	17,489	198	161	32	4	12	
Region 17 Pacific Northwest	3,581	724,193	2,067	368	243	331	572	
Region 18 California	2,010	964,439	764	246	174	194	632	
Region 19 Alaska	70	375	61	8	-	1	-	
Region 20 Hawaii	337	5,055	234	79	22	-	2	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Sweet corn								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (cwt)	Farms by irrigated acres harvested					
				Less than 5.0 acres	5.0 to 24.9 acres	25.0 to 49.9 acres	50.0 to 99.9 acres	100.0 acres or more	
United States2018	5,476	285,749	207	3,366	1,048	216	297	549	
.....2013	5,923	321,992	207	3,689	1,022	285	269	658	
2018 DATA									
Alabama	66	629	198	40	25	-	-	1	
Alaska	10	1	134	10	-	-	-	-	
Arizona	16	16	200	16	-	-	-	-	
Arkansas	9	18	289	9	-	-	-	-	
California	205	19,166	307	129	28	2	-	46	
Colorado	144	3,050	250	140	-	-	-	4	
Connecticut	71	92	61	70	-	1	-	-	
Delaware	55	10,184	188	-	-	-	22	33	
Florida	141	20,610	347	76	27	-	27	11	
Georgia	114	23,965	232	70	-	-	6	38	
Hawaii	1	(D)	(D)	-	-	-	-	1	
Idaho	196	3,178	92	121	27	25	20	3	
Illinois	64	6,268	193	15	-	18	12	19	
Indiana	94	5,461	80	19	39	19	1	16	
Iowa	45	1,676	134	22	5	-	18	-	
Kansas	49	86	137	49	-	-	-	-	
Kentucky	59	306	100	32	27	-	-	-	
Louisiana	63	168	211	52	11	-	-	-	
Maine	126	1,163	240	89	31	-	3	3	
Maryland	175	12,555	129	53	-	20	50	52	
Massachusetts	77	482	156	10	67	-	-	-	
Michigan	233	1,469	113	119	106	6	-	2	
Minnesota	181	17,942	147	25	23	18	37	78	
Mississippi	75	164	209	63	12	-	-	-	
Missouri	86	228	143	58	28	-	-	-	
Montana	57	83	84	55	2	-	-	-	
Nebraska	61	233	50	43	14	4	-	-	
Nevada	17	5	150	17	-	-	-	-	
New Hampshire	9	152	251	-	7	-	2	-	
New Jersey	158	3,617	104	46	67	14	28	3	
New Mexico	176	120	62	176	-	-	-	-	
New York	238	3,504	125	91	120	11	4	12	
North Carolina	170	347	230	143	27	-	-	-	
North Dakota	40	18	130	40	-	-	-	-	
Ohio	201	2,815	185	159	31	6	-	5	
Oklahoma	53	2,343	200	27	-	-	26	-	
Oregon	344	21,363	223	258	24	6	5	51	
Pennsylvania	292	2,684	134	168	94	25	3	2	
Rhode Island	13	77	(D)	12	-	-	1	-	
South Carolina	144	948	97	115	26	-	-	3	
South Dakota	36	257	100	14	22	-	-	-	
Tennessee	136	679	40	135	-	-	-	1	
Texas	69	2,881	100	42	19	-	-	8	
Utah	95	341	198	61	34	-	-	-	
Vermont	25	97	(D)	19	6	-	-	-	
Virginia	124	4,638	143	98	22	-	-	4	
Washington	432	60,256	229	286	42	-	2	102	
West Virginia	3	3	250	3	-	-	-	-	
Wisconsin	228	49,107	177	71	35	41	30	51	
Wyoming	-	-	-	-	-	-	-	-	
Water Resources Regions									
Region 01 New England	304	2,011	204	185	109	1	6	3	
Region 02 Mid-Atlantic	819	34,844	145	344	205	64	106	100	
Region 03 South Atlantic-Gulf	727	46,747	279	524	117	-	33	53	
Region 04 Great Lakes	469	11,335	143	198	211	30	11	19	
Region 05 Ohio	388	6,581	106	269	95	6	-	18	
Region 06 Tennessee	116	74	(D)	116	-	-	-	-	
Region 07 Upper Mississippi	492	69,485	171	126	60	78	88	140	
Region 08 Lower Mississippi	61	744	82	49	11	-	-	1	
Region 09 Souris-Red-Rainy	37	10	124	37	-	-	-	-	
Region 10 Missouri	324	3,821	218	252	64	4	-	4	
Region 11 Arkansas-White-Red	144	2,429	200	118	-	-	26	-	
Region 12 Texas-Gulf	69	2,881	100	42	19	-	-	8	
Region 13 Rio Grande	76	(D)	62	76	-	-	-	-	
Region 14 Upper Colorado	80	81	68	80	-	-	-	-	
Region 15 Lower Colorado	49	19	191	49	-	-	-	-	
Region 16 Great Basin	112	346	198	78	34	-	-	-	
Region 17 Pacific Northwest	993	84,827	222	684	95	31	27	156	
Region 18 California	205	19,166	307	129	28	2	-	46	
Region 19 Alaska	10	1	134	10	-	-	-	-	
Region 20 Hawaii	1	(D)	(D)	-	-	-	-	1	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Tomatoes in the open								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (cwt)	Farms by irrigated acres harvested					
				Less than 5.0 acres	5.0 to 24.9 acres	25.0 to 49.9 acres	50.0 to 99.9 acres	100.0 acres or more	
United States	8,879	288,114	766	7,913	490	71	76	329	
2013	10,496	358,985	798	9,459	445	69	65	458	
2018 DATA									
Alabama	104	1,174	571	54	25	25	-	-	
Alaska	12	2	159	12	-	-	-	-	
Arizona	16	2	50	16	-	-	-	-	
Arkansas	63	170	489	43	20	-	-	-	
California	1,007	240,734	827	629	36	28	37	277	
Colorado	186	104	181	186	-	-	-	-	
Connecticut	127	73	348	126	-	1	-	-	
Delaware	8	5	605	8	-	-	-	-	
Florida	181	21,795	566	173	-	-	-	8	
Georgia	98	141	198	94	-	4	-	-	
Hawaii	34	(D)	(D)	33	-	-	-	1	
Idaho	151	49	100	151	-	-	-	-	
Illinois	135	157	20	120	15	-	-	-	
Indiana	160	2,427	426	148	-	-	2	10	
Iowa	83	(D)	246	78	5	-	-	-	
Kansas	73	81	20	73	-	-	-	-	
Kentucky	264	346	273	244	20	-	-	-	
Louisiana	60	69	131	60	-	-	-	-	
Maine	105	23	216	105	-	-	-	-	
Maryland	170	503	60	157	9	-	4	-	
Massachusetts	261	226	108	261	-	-	-	-	
Michigan	509	5,508	736	456	20	-	21	12	
Minnesota	100	76	(D)	100	-	-	-	-	
Mississippi	135	209	558	122	13	-	-	-	
Missouri	267	204	261	259	8	-	-	-	
Montana	102	38	98	102	-	-	-	-	
Nebraska	73	37	372	73	-	-	-	-	
Nevada	21	4	300	21	-	-	-	-	
New Hampshire	16	14	124	16	-	-	-	-	
New Jersey	333	1,905	142	276	47	-	8	2	
New Mexico	323	163	155	323	-	-	-	-	
New York	337	500	292	302	33	-	2	-	
North Carolina	204	550	54	192	-	12	-	-	
North Dakota	38	9	88	38	-	-	-	-	
Ohio	325	1,029	469	278	42	1	1	3	
Oklahoma	227	296	170	202	25	-	-	-	
Oregon	372	271	200	348	24	-	-	-	
Pennsylvania	344	761	330	335	8	-	-	1	
Rhode Island	30	100	250	29	-	-	1	-	
South Carolina	176	4,808	101	136	26	-	-	14	
South Dakota	41	13	161	41	-	-	-	-	
Tennessee	262	277	314	220	42	-	-	-	
Texas	250	204	172	250	-	-	-	-	
Utah	106	186	40	79	27	-	-	-	
Vermont	25	16	185	25	-	-	-	-	
Virginia	235	1,755	100	212	22	-	-	1	
Washington	285	111	294	285	-	-	-	-	
West Virginia	92	32	533	92	-	-	-	-	
Wisconsin	310	273	336	287	23	-	-	-	
Wyoming	43	46	243	43	-	-	-	-	
Water Resources Regions									
Region 01 New England	543	439	187	541	-	1	1	-	
Region 02 Mid-Atlantic	1,125	5,001	154	998	111	-	12	4	
Region 03 South Atlantic-Gulf	856	28,215	482	748	57	29	-	22	
Region 04 Great Lakes	1,006	6,652	678	918	49	-	24	15	
Region 05 Ohio	811	2,722	475	739	62	1	-	9	
Region 06 Tennessee	274	732	150	220	42	12	-	-	
Region 07 Upper Mississippi	557	943	127	532	22	-	2	1	
Region 08 Lower Mississippi	132	325	405	102	30	-	-	-	
Region 09 Souris-Red-Rainy	35	7	106	35	-	-	-	-	
Region 10 Missouri	470	304	(D)	470	-	-	-	-	
Region 11 Arkansas-White-Red	365	398	191	335	30	-	-	-	
Region 12 Texas-Gulf	238	187	169	238	-	-	-	-	
Region 13 Rio Grande	223	109	185	223	-	-	-	-	
Region 14 Upper Colorado	154	(D)	150	154	-	-	-	-	
Region 15 Lower Colorado	53	605	913	51	-	-	-	2	
Region 16 Great Basin	125	190	45	98	27	-	-	-	
Region 17 Pacific Northwest	861	441	211	837	24	-	-	-	
Region 18 California	1,005	240,134	827	629	36	28	37	275	
Region 19 Alaska	12	2	159	12	-	-	-	-	
Region 20 Hawaii	34	(D)	(D)	33	-	-	-	1	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Lettuce and romaine								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (cwt)	Farms by irrigated acres harvested					
				Less than 5.0 acres	5.0 to 24.9 acres	25.0 to 49.9 acres	50.0 to 99.9 acres	100.0 acres or more	
United States2018	4,589	277,616	640	4,169	75	54	33	258	
.....2013	5,052	264,154	415	4,665	139	7	14	227	
2018 DATA									
Alabama	-	-	-	-	-	-	-	-	
Alaska	33	49	258	32	-	1	-	-	
Arizona	43	44,363	568	5	-	-	-	38	
Arkansas	20	26	281	16	4	-	-	-	
California	563	198,895	650	348	6	-	23	186	
Colorado	134	33	348	134	-	-	-	-	
Connecticut	88	28	415	88	-	-	-	-	
Delaware	-	-	-	-	-	-	-	-	
Florida	112	25,620	800	103	-	-	-	9	
Georgia	67	14	100	67	-	-	-	-	
Hawaii	85	328	200	70	15	-	-	-	
Idaho	87	18	300	87	-	-	-	-	
Illinois	79	99	500	79	-	-	-	-	
Indiana	76	94	800	60	16	-	-	-	
Iowa	18	2	205	18	-	-	-	-	
Kansas	19	2	116	19	-	-	-	-	
Kentucky	76	57	100	76	-	-	-	-	
Louisiana	36	5	217	36	-	-	-	-	
Maine	177	55	450	174	3	-	-	-	
Maryland	80	36	200	80	-	-	-	-	
Massachusetts	203	1,055	217	173	-	30	-	-	
Michigan	101	2,012	350	81	-	-	-	20	
Minnesota	52	21	200	52	-	-	-	-	
Mississippi	55	45	263	55	-	-	-	-	
Missouri	62	25	180	62	-	-	-	-	
Montana	103	33	285	103	-	-	-	-	
Nebraska	58	14	110	58	-	-	-	-	
Nevada	19	2	200	19	-	-	-	-	
New Hampshire	7	7	181	7	-	-	-	-	
New Jersey	145	2,052	390	82	30	23	10	-	
New Mexico	101	1,653	295	96	-	-	-	5	
New York	185	93	447	185	-	-	-	-	
North Carolina	127	32	369	127	-	-	-	-	
North Dakota	9	5	130	9	-	-	-	-	
Ohio	89	37	205	89	-	-	-	-	
Oklahoma	29	4	800	29	-	-	-	-	
Oregon	360	200	113	360	-	-	-	-	
Pennsylvania	73	48	100	73	-	-	-	-	
Rhode Island	29	41	350	29	-	-	-	-	
South Carolina	48	8	101	48	-	-	-	-	
South Dakota	12	2	153	12	-	-	-	-	
Tennessee	49	5	385	49	-	-	-	-	
Texas	113	90	150	113	-	-	-	-	
Utah	27	27	350	27	-	-	-	-	
Vermont	57	59	503	56	1	-	-	-	
Virginia	143	90	500	143	-	-	-	-	
Washington	314	155	201	314	-	-	-	-	
West Virginia	29	14	364	29	-	-	-	-	
Wisconsin	196	65	215	196	-	-	-	-	
Wyoming	1	(D)	(D)	1	-	-	-	-	
Water Resources Regions									
Region 01 New England	521	1,203	245	487	4	30	-	-	
Region 02 Mid-Atlantic	493	2,234	387	430	30	23	10	-	
Region 03 South Atlantic-Gulf	377	25,686	799	368	-	-	-	9	
Region 04 Great Lakes	294	2,117	350	274	-	-	-	20	
Region 05 Ohio	289	235	445	273	16	-	-	-	
Region 06 Tennessee	62	17	389	62	-	-	-	-	
Region 07 Upper Mississippi	316	183	396	316	-	-	-	-	
Region 08 Lower Mississippi	52	45	274	48	4	-	-	-	
Region 09 Souris-Red-Rainy	24	4	192	24	-	-	-	-	
Region 10 Missouri	226	65	225	226	-	-	-	-	
Region 11 Arkansas-White-Red	93	20	385	93	-	-	-	-	
Region 12 Texas-Gulf	113	90	150	113	-	-	-	-	
Region 13 Rio Grande	101	1,653	295	96	-	-	-	5	
Region 14 Upper Colorado	36	12	340	36	-	-	-	-	
Region 15 Lower Colorado	45	44,363	568	7	-	-	-	38	
Region 16 Great Basin	44	29	340	44	-	-	-	-	
Region 17 Pacific Northwest	822	388	163	822	-	-	-	-	
Region 18 California	563	198,895	650	348	6	-	23	186	
Region 19 Alaska	33	49	258	32	-	1	-	-	
Region 20 Hawaii	85	328	200	70	15	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Potatoes, excluding sweet potatoes								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (cwt)	Farms by irrigated acres harvested					
				Less than 15.0 acres	15.0 to 99.9 acres	100.0 to 249.9 acres	250.0 to 499.9 acres	500.0 acres or more	
United States	5,361	866,288	476	4,168	246	360	242	345	
2013	5,596	903,297	408	4,199	171	472	301	453	
2018 DATA									
Alabama	22	33	280	22	-	-	-	-	
Alaska	41	203	367	36	4	1	-	-	
Arizona	22	3,109	267	5	-	16	-	1	
Arkansas	12	5	162	12	-	-	-	-	
California	252	25,442	389	184	3	45	7	13	
Colorado	171	46,579	479	132	-	4	14	21	
Connecticut	13	4	246	13	-	-	-	-	
Delaware	1	(D)	(D)	-	-	1	-	-	
Florida	81	4,608	245	76	-	-	-	5	
Georgia	99	113	200	99	-	-	-	-	
Hawaii	33	17	402	33	-	-	-	-	
Idaho	576	296,665	451	144	94	126	86	126	
Illinois	82	(D)	(D)	80	-	-	-	2	
Indiana	69	(D)	(D)	68	-	-	-	1	
Iowa	40	21	198	40	-	-	-	-	
Kansas	50	2,381	400	43	-	3	-	4	
Kentucky	42	68	300	42	-	-	-	-	
Louisiana	13	1	130	13	-	-	-	-	
Maine	238	9,195	351	211	3	6	13	5	
Maryland	77	364	357	67	10	-	-	-	
Massachusetts	67	359	(D)	66	-	-	1	-	
Michigan	232	46,712	368	161	36	21	3	11	
Minnesota	89	18,783	465	53	19	-	5	12	
Mississippi	13	10	200	13	-	-	-	-	
Missouri	104	2,028	300	94	-	10	-	-	
Montana	152	6,923	378	114	-	36	-	2	
Nebraska	79	20,530	452	64	-	-	7	8	
Nevada	21	(D)	(D)	20	-	-	-	1	
New Hampshire	-	-	-	-	-	-	-	-	
New Jersey	86	1,272	291	82	-	1	3	-	
New Mexico	141	(D)	(D)	139	-	-	-	2	
New York	177	3,140	310	139	30	6	1	1	
North Carolina	132	54	440	132	-	-	-	-	
North Dakota	48	22,294	475	36	-	-	5	7	
Ohio	99	170	337	98	1	-	-	-	
Oklahoma	65	31	259	65	-	-	-	-	
Oregon	344	41,695	535	314	2	8	3	17	
Pennsylvania	143	1,078	304	132	6	5	-	-	
Rhode Island	17	812	240	12	-	5	-	-	
South Carolina	60	(D)	(D)	59	-	-	-	1	
South Dakota	19	5	140	19	-	-	-	-	
Tennessee	72	12	440	72	-	-	-	-	
Texas	134	22,010	264	103	19	-	4	8	
Utah	102	145	200	102	-	-	-	-	
Vermont	60	71	(D)	60	-	-	-	-	
Virginia	145	3,378	367	122	10	8	4	1	
Washington	480	166,613	645	327	-	24	73	56	
West Virginia	50	17	440	50	-	-	-	-	
Wisconsin	295	84,234	443	199	9	34	13	40	
Wyoming	1	(D)	(D)	1	-	-	-	-	
Water Resources Regions									
Region 01 New England	346	10,391	336	313	3	11	14	5	
Region 02 Mid-Atlantic	459	7,084	333	386	49	15	8	1	
Region 03 South Atlantic-Gulf	422	22,887	407	416	-	-	-	6	
Region 04 Great Lakes	487	58,728	371	369	52	40	13	13	
Region 05 Ohio	265	(D)	(D)	263	1	-	-	1	
Region 06 Tennessee	97	27	393	97	-	-	-	-	
Region 07 Upper Mississippi	410	97,644	443	313	19	21	8	49	
Region 08 Lower Mississippi	36	2,011	299	26	-	10	-	-	
Region 09 Souris-Red-Rainy	57	9,942	539	51	-	-	-	6	
Region 10 Missouri	373	56,182	474	335	-	8	12	18	
Region 11 Arkansas-White-Red	123	18,854	279	113	-	3	-	7	
Region 12 Texas-Gulf	131	5,556	272	103	19	-	4	5	
Region 13 Rio Grande	103	26,782	446	73	-	-	14	16	
Region 14 Upper Colorado	68	(D)	(D)	66	-	-	-	2	
Region 15 Lower Colorado	55	3,112	266	38	-	16	-	1	
Region 16 Great Basin	132	11,583	449	122	-	-	-	10	
Region 17 Pacific Northwest	1,471	501,719	522	831	96	190	162	192	
Region 18 California	252	25,442	389	184	3	45	7	13	
Region 19 Alaska	41	203	367	36	4	1	-	-	
Region 20 Hawaii	33	17	402	33	-	-	-	-	

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	All berries		Land in orchards, vineyards, and nut trees						
	Farms	Irrigated acres harvested	Farms	Irrigated acres harvested	Farms by irrigated acres harvested				
					Less than 5.0 acres	5.0 to 14.9 acres	15.0 to 49.9 acres	50.0 to 99.9 acres	100.0 acres or more
United States2018	11,562	219,254	52,959	5,021,860	19,242	10,761	9,917	4,356	8,683
.....2013	12,763	227,651	52,018	3,662,131	24,135	10,112	8,384	3,868	5,519
2018 DATA									
Alabama	144	549	111	681	61	50	-	-	-
Alaska	50	14	30	12	30	-	-	-	-
Arizona	16	832	761	77,091	269	228	96	51	117
Arkansas	125	417	93	3,668	22	23	19	20	9
California	934	50,685	30,750	3,703,045	8,161	6,139	6,826	3,220	6,404
Colorado	158	208	908	3,849	642	219	47	-	-
Connecticut	128	176	125	330	122	-	3	-	-
Delaware	9	32	5	(D)	4	-	-	-	1
Florida	668	13,328	3,102	411,470	868	579	587	355	713
Georgia	532	16,859	867	116,664	186	264	277	23	117
Hawaii	52	42	746	8,780	625	100	14	-	7
Idaho	166	190	506	1,675	403	83	20	-	-
Illinois	93	1,023	17	5	17	-	-	-	-
Indiana	168	721	29	1,227	3	6	-	20	-
Iowa	94	464	65	140	65	-	-	-	-
Kansas	39	34	40	61	40	-	-	-	-
Kentucky	107	140	28	(D)	28	-	-	-	-
Louisiana	107	333	121	495	93	14	14	-	-
Maine	355	8,460	76	296	65	8	-	3	-
Maryland	93	145	36	241	20	7	9	-	-
Massachusetts	530	11,642	92	1,534	34	38	10	10	-
Michigan	582	12,096	367	24,360	122	81	61	22	81
Minnesota	63	436	96	751	35	42	19	-	-
Mississippi	102	619	57	3,634	37	6	-	-	14
Missouri	277	398	176	3,768	131	23	18	-	4
Montana	151	106	421	1,684	311	86	24	-	-
Nebraska	77	161	56	229	40	16	-	40	-
Nevada	3	(Z)	57	157	53	4	-	-	-
New Hampshire	190	535	19	269	3	8	7	-	1
New Jersey	243	15,473	81	2,861	45	22	3	1	10
New Mexico	90	44	2,900	61,630	2,118	543	66	67	106
New York	197	1,800	239	8,050	92	46	72	7	22
North Carolina	373	12,768	203	1,566	123	26	54	-	-
North Dakota	35	21	33	14	33	-	-	-	-
Ohio	200	350	106	1,295	86	1	9	-	10
Oklahoma	66	146	86	129	86	-	-	-	-
Oregon	1,360	20,229	2,228	90,320	1,124	423	328	124	229
Pennsylvania	341	783	281	4,164	97	109	70	1	4
Rhode Island	39	159	18	81	13	5	-	-	-
South Carolina	94	210	200	8,552	144	-	52	-	4
South Dakota	-	-	31	85	31	-	-	-	-
Tennessee	193	230	66	416	44	-	22	-	-
Texas	369	1,380	2,413	80,157	1,137	770	372	79	55
Utah	99	234	517	13,980	395	27	54	-	41
Vermont	136	568	44	356	40	-	2	1	1
Virginia	214	438	47	218	46	-	-	-	1
Washington	999	14,766	3,594	381,210	1,037	711	762	352	732
West Virginia	126	185	2	(D)	2	-	-	-	-
Wisconsin	375	28,825	67	291	13	54	-	-	-
Wyoming	-	-	46	48	46	-	-	-	-
Water Resources Regions									
Region 01 New England	1,301	21,380	383	2,662	290	59	20	13	1
Region 02 Mid-Atlantic	844	17,238	490	10,370	237	116	105	10	22
Region 03 South Atlantic-Gulf	1,911	44,325	4,478	540,314	1,389	900	970	378	841
Region 04 Great Lakes	1,019	17,026	569	29,327	209	145	95	22	98
Region 05 Ohio	587	876	156	2,248	89	29	26	2	10
Region 06 Tennessee	124	198	103	687	56	25	22	-	-
Region 07 Upper Mississippi	539	27,853	280	2,398	157	78	27	18	-
Region 08 Lower Mississippi	188	452	176	6,819	119	18	18	5	16
Region 09 Souris-Red-Rainy	70	79	35	15	35	-	-	-	-
Region 10 Missouri	333	328	409	1,028	351	47	10	-	-
Region 11 Arkansas-White-Red	305	966	645	4,424	392	209	26	15	4
Region 12 Texas-Gulf	334	1,010	2,044	64,074	966	607	341	60	50
Region 13 Rio Grande	51	256	2,846	65,622	2,014	554	86	86	106
Region 14 Upper Colorado	97	163	783	3,726	547	189	47	-	-
Region 15 Lower Colorado	53	843	883	94,269	362	250	96	51	124
Region 16 Great Basin	98	230	476	14,054	328	53	54	-	41
Region 17 Pacific Northwest	2,672	35,290	6,699	474,713	2,841	1,287	1,134	476	961
Region 18 California	934	50,685	30,728	3,696,321	8,185	6,095	6,826	3,220	6,402
Region 19 Alaska	50	14	30	12	30	-	-	-	-
Region 20 Hawaii	52	42	746	8,780	625	100	14	-	7

See footnote(s) at end of table.

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Table 35. Crops Harvested in the Open from Irrigated Farms and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Nursery and other horticultural crops (see text)		All other crops ¹ (see text)		Irrigated pastureland, all types	
	Farms	Irrigated acres harvested	Farms	Irrigated acres harvested	Farms	Irrigated acres
United States	15,623	581,936	7,006	1,783,325	51,644	4,004,854
2018	(NA)	(NA)	26,309	2,320,822	42,733	3,034,409
2013						
2018 DATA						
Alabama	185	21,002	-	-	7	128
Alaska	85	199	2	(D)	-	-
Arizona	87	5,457	132	30,180	1,117	28,650
Arkansas	97	6,157	16	53	57	10,456
California	1,951	74,259	590	179,469	5,237	699,056
Colorado	417	12,869	456	36,649	5,243	407,293
Connecticut	146	3,294	93	817	3	60
Delaware	22	1,665	5	(D)	22	110
Florida	2,039	85,141	183	419,337	583	33,841
Georgia	356	21,221	37	9,808	164	7,751
Hawaii	483	1,582	102	201	213	3,895
Idaho	401	28,628	664	207,665	8,552	450,482
Illinois	217	10,815	69	23,587	17	85
Indiana	159	3,469	132	30,639	36	162
Iowa	122	2,692	21	1,734	-	-
Kansas	120	3,388	102	44,828	33	9,271
Kentucky	167	1,092	76	1,126	26	52
Louisiana	152	3,446	13	13	27	4,910
Maine	141	3,069	38	210	59	59
Maryland	149	9,875	36	1,242	8	(D)
Massachusetts	219	1,960	136	772	28	336
Michigan	453	22,221	113	3,756	50	5,550
Minnesota	197	4,480	17	7,900	19	228
Mississippi	82	5,273	16	(D)	26	525
Missouri	217	3,955	46	612	125	16,576
Montana	77	766	369	67,616	4,090	507,345
Nebraska	122	2,476	427	106,368	772	73,612
Nevada	17	671	58	21,962	776	137,136
New Hampshire	212	385	32	36	11	18
New Jersey	492	17,831	81	1,311	58	760
New Mexico	159	1,570	222	8,234	3,216	99,552
New York	556	11,663	222	2,623	23	23
North Carolina	462	8,611	253	10,072	94	5,796
North Dakota	6	(D)	81	28,698	-	-
Ohio	333	9,272	23	276	2	(D)
Oklahoma	171	14,794	65	12,605	229	69,960
Oregon	1,079	53,291	773	205,147	5,949	344,462
Pennsylvania	542	1,999	192	2,270	24	376
Rhode Island	34	1,426	11	14	10	(D)
South Carolina	260	18,039	66	1,730	140	4,669
South Dakota	40	893	24	5,564	108	8,681
Tennessee	207	8,145	-	-	-	-
Texas	532	46,750	223	59,826	2,193	223,515
Utah	141	2,518	114	3,271	6,324	255,176
Vermont	60	141	7	51	2	(D)
Virginia	325	3,806	92	1,803	-	-
Washington	738	27,845	444	196,991	3,545	139,408
West Virginia	62	152	-	-	-	-
Wisconsin	322	11,485	10	(D)	19	399
Wyoming	10	(D)	122	45,491	2,407	454,414
Water Resources Regions						
Region 01 New England	769	10,178	315	1,896	111	483
Region 02 Mid-Atlantic	1,658	44,340	387	6,548	135	1,277
Region 03 South Atlantic-Gulf	3,337	155,435	647	442,766	984	52,584
Region 04 Great Lakes	974	31,314	230	5,121	52	5,606
Region 05 Ohio	720	13,490	212	24,142	28	54
Region 06 Tennessee	261	7,454	-	-	23	115
Region 07 Upper Mississippi	830	27,924	150	36,537	99	1,194
Region 08 Lower Mississippi	170	6,675	30	(D)	58	5,357
Region 09 Souris-Red-Rainy	15	92	15	4,400	23	437
Region 10 Missouri	554	16,326	1,319	292,550	6,420	789,649
Region 11 Arkansas-White-Red	451	23,077	253	65,891	1,178	212,768
Region 12 Texas-Gulf	509	46,205	166	42,936	1,913	165,828
Region 13 Rio Grande	93	1,732	189	4,298	2,618	113,609
Region 14 Upper Colorado	294	3,230	140	5,560	6,703	570,461
Region 15 Lower Colorado	112	5,907	134	30,680	1,469	37,676
Region 16 Great Basin	116	3,230	152	27,294	5,004	295,090
Region 17 Pacific Northwest	2,260	109,730	1,975	612,779	19,000	959,158
Region 18 California	1,932	73,817	588	178,969	5,613	789,613
Region 19 Alaska	85	199	2	(D)	-	-
Region 20 Hawaii	483	1,582	102	201	213	3,895

¹ 2013 data include nursery and other horticultural crops grown in the open.

Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Corn for grain or seed																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	Farms	Irrigated acres harvested	Average yield per irrigated acre (bushels)	Average acre-feet applied per acre	Primary method of distribution																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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					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 2018	31,828	11,610,238	210	0.9	26,186	10,052,218	212	0.8	5,642	1,558,020	190	1.2 2013	37,247	13,289,247	196	1.1	29,752	11,012,114	197	1.1	7,495	2,277,133	191	1.4	2018 DATA													Alabama	124	32,857	216	0.5	120	30,699	217	0.5	4	2,158	203	0.8	Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Arizona	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Arkansas	1,089	447,403	184	1.0	116	43,872	180	0.7	973	403,531	185	1.0	California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Colorado	1,646	642,494	198	1.4	1,104	594,366	198	1.4	542	48,128	200	1.9	Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-
..... 2013	37,247	13,289,247	196	1.1	29,752	11,012,114	197	1.1	7,495	2,277,133	191	1.4	2018 DATA													Alabama	124	32,857	216	0.5	120	30,699	217	0.5	4	2,158	203	0.8	Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Arizona	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Arkansas	1,089	447,403	184	1.0	116	43,872	180	0.7	973	403,531	185	1.0	California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Colorado	1,646	642,494	198	1.4	1,104	594,366	198	1.4	542	48,128	200	1.9	Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-													
2018 DATA													Alabama	124	32,857	216	0.5	120	30,699	217	0.5	4	2,158	203	0.8	Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Arizona	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Arkansas	1,089	447,403	184	1.0	116	43,872	180	0.7	973	403,531	185	1.0	California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Colorado	1,646	642,494	198	1.4	1,104	594,366	198	1.4	542	48,128	200	1.9	Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																										
Alabama	124	32,857	216	0.5	120	30,699	217	0.5	4	2,158	203	0.8	Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Arizona	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Arkansas	1,089	447,403	184	1.0	116	43,872	180	0.7	973	403,531	185	1.0	California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Colorado	1,646	642,494	198	1.4	1,104	594,366	198	1.4	542	48,128	200	1.9	Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																							
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Arizona	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Arkansas	1,089	447,403	184	1.0	116	43,872	180	0.7	973	403,531	185	1.0	California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Colorado	1,646	642,494	198	1.4	1,104	594,366	198	1.4	542	48,128	200	1.9	Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																				
Arizona	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Arkansas	1,089	447,403	184	1.0	116	43,872	180	0.7	973	403,531	185	1.0	California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Colorado	1,646	642,494	198	1.4	1,104	594,366	198	1.4	542	48,128	200	1.9	Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																	
Arkansas	1,089	447,403	184	1.0	116	43,872	180	0.7	973	403,531	185	1.0	California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Colorado	1,646	642,494	198	1.4	1,104	594,366	198	1.4	542	48,128	200	1.9	Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																														
California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Colorado	1,646	642,494	198	1.4	1,104	594,366	198	1.4	542	48,128	200	1.9	Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																											
Colorado	1,646	642,494	198	1.4	1,104	594,366	198	1.4	542	48,128	200	1.9	Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																								
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																					
Delaware	417	111,849	171	0.4	417	111,849	171	0.4	-	-	-	-	Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																		
Florida	79	33,481	185	1.4	79	33,481	185	1.4	-	-	-	-	Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																															
Georgia	662	135,101	209	0.9	662	135,101	209	0.9	-	-	-	-	Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																												
Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-	Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																									
Idaho	862	112,975	218	2.5	425	91,777	220	2.5	437	21,198	206	2.9	Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																						
Illinois	996	313,408	214	0.6	996	313,408	214	0.6	-	-	-	-	Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																			
Indiana	1,098	317,229	209	0.4	1,098	317,229	209	0.4	-	-	-	-	Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																
Iowa	461	109,131	203	0.4	461	109,131	203	0.4	-	-	-	-	Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																													
Kansas	3,065	1,275,781	204	1.1	2,784	1,252,465	205	1.1	281	23,316	174	0.7	Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																										
Kentucky	59	29,337	207	0.4	57	(D)	(D)	(D)	2	(D)	(D)	(D)	Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																							
Louisiana	534	285,780	195	0.6	45	28,214	194	0.5	489	257,566	195	0.6	Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																				
Maine	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																	
Maryland	287	51,602	193	0.6	267	51,542	193	0.6	20	60	196	0.5	Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																														
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																											
Michigan	1,157	378,664	196	0.5	1,157	378,664	196	0.5	-	-	-	-	Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																								
Minnesota	1,421	280,391	206	0.5	1,421	280,391	206	0.5	-	-	-	-	Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																					
Mississippi	454	283,200	199	0.6	147	69,997	203	0.6	307	213,203	198	0.7	Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																		
Missouri	934	351,031	196	0.7	690	248,967	198	0.6	244	102,064	190	1.0	Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																															
Montana	139	24,055	173	1.2	30	8,348	161	1.4	109	15,707	179	1.1	Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																												
Nebraska	10,581	4,522,575	222	0.7	9,508	4,327,428	222	0.7	1,073	195,147	209	0.9	Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																									
Nevada	26	1,828	167	2.6	1	(D)	(D)	(D)	25	(D)	(D)	(D)	New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																						
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																			
New Jersey	88	8,895	194	0.5	88	8,895	194	0.5	-	-	-	-	New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																
New Mexico	231	48,130	160	2.1	98	34,008	175	2.4	133	14,122	122	1.5	New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																													
New York	5	1,446	182	0.4	5	1,446	182	0.4	-	-	-	-	North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																										
North Carolina	145	12,127	194	0.4	118	10,885	191	0.4	27	1,242	220	0.1	North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
North Dakota	336	104,053	209	0.5	305	98,318	212	0.5	31	5,735	170	0.8	Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Ohio	60	8,045	214	0.7	59	(D)	(D)	(D)	1	(D)	(D)	(D)	Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Oklahoma	197	130,878	202	1.4	197	130,878	202	1.4	-	-	-	-	Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Oregon	211	47,757	261	2.7	183	43,557	259	2.6	28	4,200	281	3.0	Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Pennsylvania	37	1,621	275	0.4	37	1,621	275	0.4	-	-	-	-	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
South Carolina	281	94,386	191	0.8	281	94,386	191	0.8	-	-	-	-	South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
South Dakota	656	179,472	199	0.6	634	178,812	199	0.6	22	660	160	1.5	Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Tennessee	291	70,957	222	0.4	290	(D)	(D)	(D)	1	(D)	(D)	(D)	Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Texas	1,218	672,323	206	1.5	974	586,955	213	1.5	244	85,368	155	1.5	Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Utah	199	13,215	213	2.1	32	2,840	171	2.4	167	10,375	224	2.0	Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Virginia	78	11,466	200	0.4	78	11,466	200	0.4	-	-	-	-	Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Washington	493	119,019	256	2.5	486	117,218	257	2.5	7	1,801	192	2.0	West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Wisconsin	484	142,895	213	0.5	484	142,895	213	0.5	-	-	-	-	Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Wyoming	301	48,093	179	1.8	138	29,860	180	1.9	163	18,233	178	1.7	Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Water Resources Regions													Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Region 01 New England	33	2,283	175	0.5	33	2,283	175	0.5	-	-	-	-	Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Region 02 Mid-Atlantic	877	183,223	181	0.5	857	183,163	181	0.5	20	60	196	0.5	Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Region 03 South Atlantic-Gulf	1,337	307,666	199	0.9	1,308	304,866	199	0.9	29	2,800	206	0.3	Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Region 04 Great Lakes	1,612	514,095	199	0.5	1,611	(D)	(D)	(D)	1	(D)	(D)	(D)	Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Region 05 Ohio	788	207,304	209	0.4	786	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Region 06 Tennessee	43	23,014	227	0.8	41	(D)	(D)	(D)	2	(D)	(D)	(D)	Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Region 07 Upper Mississippi	3,069	760,729	211	0.5	3,054	756,667	211	0.5	15	4,062	199	0.3	Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Region 08 Lower Mississippi	2,630	1,254,247	194	0.7	789	338,660	200	0.5	1,841	915,587	191	0.8	Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Region 09 Souris-Red-Rainy	255	94,411	213	0.6	255	94,411	213	0.6	-	-	-	-	Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Region 10 Missouri	14,922	5,915,979	216	0.8	13,098	5,635,896	216	0.7	1,824	280,083	203	1.1	Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Region 11 Arkansas-White-Red	3,046	1,648,999	210	1.3	2,720	1,577,140	212	1.3	326	71,859	181	1.0	Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Region 12 Texas-Gulf	605	203,779	168	1.3	361	118,411	176	1.2	244	85,368	155	1.5	Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Region 13 Rio Grande	87	18,593	126	1.5	54	4,773	142	1.6	33	13,820	120	1.5	Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Region 14 Upper Colorado	399	30,782	195	3.3	16	17,468	185	3.6	383	13,314	207	2.7	Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Region 15 Lower Colorado	41	13,340	231	2.9	23	12,900	232	2.8	18	440	214	5.7	Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Region 16 Great Basin	190	13,511	215	2.2	32	2,243	202	2.5	158	11,268	218	2.1	Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Region 17 Pacific Northwest	1,542	278,618	241	2.5	1,090	252,199	244	2.5	452	26,419	217	2.9	Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Region 18 California	337	134,945	183	3.0	43	5,185	186	2.8	294	129,760	183	3.0	Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Region 20 Hawaii	15	4,720	59	1.2	15	4,720	59	1.2	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Corn for silage or greenchop											
	Farms	Irrigated acres harvested	Average yield per irrigated 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 2018 2013	7,930 8,382	1,648,789 1,729,358	26 25	2.0 1.9	4,654 4,660	991,891 1,204,133	26 24	1.4 1.5	3,276 3,722	656,898 525,225	27 27	2.9 2.7
2018 DATA												
Alabama	-	-	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	159	65,219	31	4.7	2	(D)	(D)	(D)	157	(D)	(D)	(D)
Arkansas	5	400	15	0.4	5	400	15	0.4	-	-	-	-
California	1,515	454,607	27	3.0	88	14,211	27	2.4	1,427	440,396	27	3.0
Colorado	730	133,455	25	1.7	451	93,882	25	1.5	279	39,573	24	2.3
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	9	780	21	0.2	9	780	21	0.2	-	-	-	-
Florida	12	13,130	23	1.2	12	13,130	23	1.2	-	-	-	-
Georgia	37	2,888	24	0.7	37	2,888	24	0.7	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	985	235,357	30	2.1	691	216,564	30	2.1	294	18,793	30	2.3
Illinois	-	-	-	-	-	-	-	-	-	-	-	-
Indiana	98	8,504	25	0.2	98	8,504	25	0.2	-	-	-	-
Iowa	18	720	25	1.5	18	720	25	1.5	-	-	-	-
Kansas	301	72,418	25	1.3	271	67,978	26	1.3	30	4,440	18	0.5
Kentucky	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	14	2,800	29	0.2	14	2,800	29	0.2	-	-	-	-
Massachusetts	29	58	29	0.2	29	58	29	0.2	-	-	-	-
Michigan	170	14,790	20	0.5	170	14,790	20	0.5	-	-	-	-
Minnesota	174	17,807	25	0.4	174	17,807	25	0.4	-	-	-	-
Mississippi	7	665	18	1.3	7	665	18	1.3	-	-	-	-
Missouri	16	2,720	23	0.3	16	2,720	23	0.3	-	-	-	-
Montana	216	31,210	30	1.2	94	17,832	30	1.4	122	13,378	29	1.0
Nebraska	825	109,372	25	0.7	678	102,175	25	0.7	147	7,197	23	1.0
Nevada	98	9,501	25	3.6	15	2,097	12	4.9	83	7,404	28	3.2
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	316	80,893	25	1.5	305	72,689	25	1.5	11	8,204	26	1.6
New York	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
North Carolina	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota	45	3,279	19	1.6	14	1,450	25	(D)	31	1,829	14	(D)
Ohio	10	750	17	0.1	10	750	17	0.1	-	-	-	-
Oklahoma	14	7,124	16	0.8	14	7,124	16	0.8	-	-	-	-
Oregon	205	17,515	26	2.0	150	13,975	26	2.2	55	3,540	26	1.2
Pennsylvania	24	(D)	(D)	(D)	24	(D)	(D)	(D)	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	52	5,200	13	0.3	52	5,200	13	0.3	-	-	-	-
South Dakota	46	5,250	20	0.4	24	4,370	23	0.4	22	880	9	0.8
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Texas	378	166,040	24	1.1	378	166,040	24	1.1	-	-	-	-
Utah	653	61,833	26	2.1	275	37,541	27	2.4	378	24,292	24	1.6
Vermont	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	71	5,122	23	0.3	71	5,122	23	0.3	-	-	-	-
Washington	318	62,858	29	1.6	255	52,340	28	1.6	63	10,518	32	1.3
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	146	24,703	26	0.4	146	24,703	26	0.4	-	-	-	-
Wyoming	230	30,802	25	2.0	53	9,579	24	1.1	177	21,223	25	2.4
Water Resources Regions												
Region 01 New England	29	58	29	0.2	29	58	29	0.2	-	-	-	-
Region 02 Mid-Atlantic	118	9,174	25	0.3	118	9,174	25	0.3	-	-	-	-
Region 03 South Atlantic-Gulf	101	21,218	21	0.9	101	21,218	21	0.9	-	-	-	-
Region 04 Great Lakes	299	34,097	23	0.4	299	34,097	23	0.4	-	-	-	-
Region 05 Ohio	19	139	25	0.3	19	139	25	0.3	-	-	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	269	29,865	25	0.4	269	29,865	25	0.4	-	-	-	-
Region 08 Lower Mississippi	7	665	18	1.3	7	665	18	1.3	-	-	-	-
Region 09 Souris-Red-Rainy	15	3,000	27	0.4	15	3,000	27	0.4	-	-	-	-
Region 10 Missouri	1,998	293,910	26	1.3	1,353	230,461	26	1.1	645	63,449	25	1.9
Region 11 Arkansas-White-Red	553	159,271	24	1.1	469	150,899	24	1.2	84	8,372	22	0.9
Region 12 Texas-Gulf	402	138,842	23	1.1	402	138,842	23	1.1	-	-	-	-
Region 13 Rio Grande	101	34,101	29	2.1	90	25,897	30	2.3	11	8,204	26	1.6
Region 14 Upper Colorado	140	24,419	23	2.3	37	(D)	(D)	(D)	103	(D)	(D)	(D)
Region 15 Lower Colorado	191	66,440	31	4.7	2	(D)	(D)	(D)	189	(D)	(D)	(D)
Region 16 Great Basin	731	73,315	25	2.1	301	42,770	26	2.3	430	30,545	25	1.9
Region 17 Pacific Northwest	1,447	306,538	30	2.0	1,055	275,087	30	2.0	392	31,451	30	1.9
Region 18 California	1,510	453,737	27	3.0	88	14,211	27	2.4	1,422	439,526	27	3.0
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Sorghum for grain or seed											
	Farms	Irrigated acres harvested	Average yield per irrigated 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 2018	1,594	286,851	98	1.3	1,220	228,197	100	1.0	374	58,654	92	2.2
..... 2013	3,923	809,579	97	1.1	3,263	686,269	96	1.0	660	123,310	98	1.3
2018 DATA												
Alabama	-	-	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	41	22,346	96	4.4	18	5,026	90	3.0	23	17,320	98	4.8
Arkansas	38	2,865	70	0.8	23	2,030	62	0.7	15	835	90	1.0
California	7	1,750	70	1.8	7	1,750	70	1.8	-	-	-	-
Colorado	174	15,935	84	1.3	80	9,557	81	1.3	94	6,378	88	1.2
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	-	-	-	-
Florida	-	-	-	-	-	-	-	-	-	-	-	-
Georgia	30	3,419	99	0.5	30	3,419	99	0.5	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-
Illinois	5	250	110	0.3	5	250	110	0.3	-	-	-	-
Indiana	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	490	86,970	116	0.8	430	82,365	116	0.8	60	4,605	113	0.6
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-
Michigan	24	3,681	128	0.4	24	3,681	128	0.4	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-	-	-	-
Montana	16	1,824	60	0.8	-	-	-	-	16	1,824	60	0.8
Nebraska	110	5,077	117	0.6	110	5,077	117	0.6	-	-	-	-
Nevada	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	73	5,982	100	2.8	33	5,855	100	2.8	40	127	100	2.6
New York	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma	92	12,353	108	1.4	80	12,113	109	1.4	12	240	60	1.5
Oregon	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Texas	484	123,669	87	1.1	370	96,344	87	1.0	114	27,325	88	1.3
Utah	-	-	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming	10	730	70	3.7	10	730	70	3.7	-	-	-	-
Water Resources Regions												
Region 01 New England	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf	30	3,419	99	0.5	30	3,419	99	0.5	-	-	-	-
Region 04 Great Lakes	24	3,681	128	0.4	24	3,681	128	0.4	-	-	-	-
Region 05 Ohio	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	5	250	110	0.3	5	250	110	0.3	-	-	-	-
Region 08 Lower Mississippi	16	955	87	0.9	6	320	69	0.7	10	635	96	1.0
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri	243	22,975	107	0.8	212	20,476	109	0.8	31	2,499	85	0.8
Region 11 Arkansas-White-Red	911	181,709	101	1.0	772	169,533	102	1.0	139	12,176	96	0.9
Region 12 Texas-Gulf	225	48,474	83	1.2	141	22,742	80	1.1	84	25,732	86	1.3
Region 13 Rio Grande	45	1,127	100	3.0	5	1,000	100	3.0	40	127	100	2.6
Region 14 Upper Colorado	47	165	85	2.5	-	-	-	-	47	165	85	2.5
Region 15 Lower Colorado	41	22,346	96	4.4	18	5,026	90	3.0	23	17,320	98	4.8
Region 16 Great Basin	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest	-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California	7	1,750	70	1.8	7	1,750	70	1.8	-	-	-	-
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Wheat for grain or seed											
	Farms	Irrigated acres harvested	Average yield per irrigated 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 States2018	8,760	2,311,703	89	1.4	6,363	1,831,164	87	1.2	2,397	480,539	94	2.1
.....2013	12,974	3,197,501	78	1.4	9,934	2,654,442	75	1.3	3,040	543,059	95	2.1
2018 DATA												
Alabama	26	2,915	78	0.4	26	2,915	78	0.4	-	-	-	-
Alaska	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Arizona	170	76,229	105	3.6	1	(D)	(D)	(D)	169	(D)	(D)	(D)
Arkansas	5	5,000	55	0.6	-	-	-	-	5	5,000	55	0.6
California	674	207,599	97	2.3	156	36,763	103	1.9	518	170,836	96	2.3
Colorado	521	75,935	74	1.2	343	65,970	73	1.1	178	9,965	79	2.1
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	101	10,572	78	0.3	101	10,572	78	0.3	-	-	-	-
Florida	-	-	-	-	-	-	-	-	-	-	-	-
Georgia	102	22,020	68	1.1	102	22,020	68	1.1	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	1,906	597,386	117	1.7	1,278	540,892	117	1.7	628	56,494	123	2.4
Illinois	65	5,904	77	0.4	65	5,904	77	0.4	-	-	-	-
Indiana	25	5,150	74	0.2	25	5,150	74	0.2	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	976	261,493	60	0.7	931	254,098	61	0.7	45	7,395	45	0.4
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	29	4,719	71	0.2	29	4,719	71	0.2	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-
Michigan	125	17,673	91	0.5	125	17,673	91	0.5	-	-	-	-
Minnesota	51	10,040	50	0.5	51	10,040	50	0.5	-	-	-	-
Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Missouri	122	40,257	69	0.4	96	34,241	70	0.4	26	6,016	64	0.8
Montana	555	145,394	84	0.8	338	100,161	90	0.9	217	45,233	70	0.8
Nebraska	370	64,530	76	0.6	348	63,186	76	0.6	22	1,344	57	0.6
Nevada	28	19,698	109	2.7	5	(D)	150	2.0	23	(D)	99	2.9
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	12	2,217	54	0.1	12	2,217	54	0.1	-	-	-	-
New Mexico	177	41,372	82	1.9	138	33,678	81	2.0	39	7,694	86	1.5
New York	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina	28	1,850	77	0.2	28	1,850	77	0.2	-	-	-	-
North Dakota	167	41,094	75	0.6	96	13,130	82	0.4	71	27,964	72	0.6
Ohio	14	1,370	71	0.1	14	1,370	71	0.1	-	-	-	-
Oklahoma	325	103,858	46	0.9	313	99,778	46	0.9	12	4,080	40	2.0
Oregon	269	53,972	117	1.6	251	47,917	117	1.5	18	6,055	113	2.2
Pennsylvania	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	19	3,650	75	0.5	19	3,650	75	0.5	-	-	-	-
South Dakota	47	7,434	63	0.4	47	7,434	63	0.4	-	-	-	-
Tennessee	14	700	70	0.3	14	700	70	0.3	-	-	-	-
Texas	832	260,803	57	1.1	802	255,486	57	1.1	30	5,317	61	2.3
Utah	434	30,674	97	1.4	117	9,644	80	1.2	317	21,030	105	1.5
Vermont	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	4	1,324	80	0.3	-	-	-	-	4	1,324	80	0.3
Washington	445	166,293	111	1.8	408	162,736	111	1.7	37	3,557	125	2.4
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	21	1,189	70	0.3	21	1,189	70	0.3	-	-	-	-
Wyoming	100	21,380	95	0.7	62	11,930	(D)	(D)	38	9,450	(D)	(D)
Water Resources Regions												
Region 01 New England	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	146	18,832	73	(D)	142	17,508	73	0.2	4	1,324	80	(D)
Region 03 South Atlantic-Gulf	149	27,520	70	0.9	149	27,520	70	0.9	-	-	-	-
Region 04 Great Lakes	143	20,543	88	0.4	143	20,543	88	0.4	-	-	-	-
Region 05 Ohio	31	3,122	81	0.3	31	3,122	81	0.3	-	-	-	-
Region 06 Tennessee	26	2,915	78	0.4	26	2,915	78	0.4	-	-	-	-
Region 07 Upper Mississippi	120	13,253	64	0.3	120	13,253	64	0.3	-	-	-	-
Region 08 Lower Mississippi	117	40,997	67	0.4	86	29,981	70	0.3	31	11,016	60	0.7
Region 09 Souris-Red-Rainy	17	6,070	57	0.5	17	6,070	57	0.5	-	-	-	-
Region 10 Missouri	1,593	342,703	77	0.7	1,221	258,232	78	0.7	372	84,471	73	0.8
Region 11 Arkansas-White-Red	1,778	570,204	58	0.9	1,577	540,824	58	0.9	201	29,380	60	1.2
Region 12 Texas-Gulf	431	56,317	51	0.8	431	56,317	51	0.8	-	-	-	-
Region 13 Rio Grande	120	21,022	89	1.9	115	20,502	88	1.9	5	520	120	4.5
Region 14 Upper Colorado	83	(D)	(D)	3.7	9	(D)	(D)	(D)	74	(D)	(D)	(D)
Region 15 Lower Colorado	173	79,858	104	3.5	3	(D)	(D)	(D)	170	(D)	(D)	(D)
Region 16 Great Basin	581	86,093	95	1.7	241	49,115	89	1.4	340	36,978	102	2.1
Region 17 Pacific Northwest	2,580	804,426	116	1.7	1,897	738,320	116	1.6	683	66,106	122	2.4
Region 18 California	671	203,970	97	2.2	154	35,523	104	1.9	517	168,447	96	2.3
Region 19 Alaska	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Beans, dry edible											
	Farms	Irrigated acres harvested	Average yield per irrigated 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 States2018	2,275	416,608	27	1.4	1,558	328,169	27	1.2	717	88,439	27	2.0
.....2013	2,793	433,590	25	1.4	1,617	320,390	25	1.1	1,176	113,200	25	2.2
2018 DATA												
Alabama	-	-	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	9	7,274	17	2.3	2	(D)	(D)	(D)	7	(D)	(D)	(D)
Arkansas	-	-	-	-	-	-	-	-	-	-	-	-
California	244	40,176	28	2.2	144	21,849	28	2.0	100	18,327	28	2.4
Colorado	141	18,913	29	1.3	104	16,436	29	1.3	37	2,477	28	1.0
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	-	-	-	-
Florida	27	270	10	1.0	27	270	10	1.0	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	641	77,397	27	2.3	270	48,640	27	2.2	371	28,757	27	2.4
Illinois	-	-	-	-	-	-	-	-	-	-	-	-
Indiana	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	13	8,210	28	0.6	13	8,210	28	0.6	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-
Maine	32	32	25	0.8	32	32	25	0.8	-	-	-	-
Maryland	4	420	30	0.7	4	420	30	0.7	-	-	-	-
Massachusetts	28	28	20	2.0	28	28	20	2.0	-	-	-	-
Michigan	111	18,223	22	0.7	111	18,223	22	0.7	-	-	-	-
Minnesota	130	49,311	29	0.4	130	49,311	29	0.4	-	-	-	-
Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-	-	-	-
Montana	24	3,089	35	(D)	8	1,009	24	(D)	16	2,080	40	0.8
Nebraska	414	103,771	26	0.9	299	81,399	26	0.9	115	22,372	27	0.9
Nevada	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
New York	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota	63	21,260	28	0.4	63	21,260	28	0.4	-	-	-	-
Ohio	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma	-	-	-	-	-	-	-	-	-	-	-	-
Oregon	35	4,827	27	1.4	35	4,827	27	1.4	-	-	-	-
Pennsylvania	24	24	16	0.8	24	24	16	0.8	-	-	-	-
Rhode Island	9	9	20	1.0	9	9	20	1.0	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota	1	(D)	(D)	(D)	1	(D)	(D)	(D)	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Texas	11	1,110	15	0.6	6	(D)	(D)	(D)	5	(D)	(D)	(D)
Utah	4	208	28	0.3	-	-	-	-	4	208	28	0.3
Vermont	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Washington	202	27,673	31	2.5	172	26,278	31	2.5	30	1,395	31	2.5
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	11	8,548	23	0.5	11	8,548	23	0.5	-	-	-	-
Wyoming	95	19,440	24	2.2	63	8,209	24	0.9	32	11,231	24	3.2
Water Resources Regions												
Region 01 New England	69	69	22	1.3	69	69	22	1.3	-	-	-	-
Region 02 Mid-Atlantic	6	422	30	0.7	6	422	30	0.7	-	-	-	-
Region 03 South Atlantic-Gulf	27	270	10	1.0	27	270	10	1.0	-	-	-	-
Region 04 Great Lakes	133	18,245	22	0.7	133	18,245	22	0.7	-	-	-	-
Region 05 Ohio	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	129	51,899	27	0.4	129	51,899	27	0.4	-	-	-	-
Region 08 Lower Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy	71	26,500	29	(D)	71	26,500	29	(D)	-	-	-	-
Region 10 Missouri	675	154,416	26	1.1	475	116,256	26	(D)	200	38,160	27	(D)
Region 11 Arkansas-White-Red	2	(D)	(D)	(D)	2	(D)	(D)	(D)	-	-	-	-
Region 12 Texas-Gulf	10	920	(D)	0.6	5	(D)	(D)	0.8	5	(D)	(D)	0.5
Region 13 Rio Grande	-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado	15	(D)	21	(D)	15	(D)	21	(D)	-	-	-	-
Region 15 Lower Colorado	9	7,274	17	2.3	2	(D)	(D)	(D)	7	(D)	(D)	(D)
Region 16 Great Basin	4	208	28	0.3	-	-	-	-	4	208	28	0.3
Region 17 Pacific Northwest	881	110,047	28	2.3	480	79,895	28	2.2	401	30,152	28	2.4
Region 18 California	244	40,176	28	2.2	144	21,849	28	2.0	100	18,327	28	2.4
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Rice											
	Farms	Irrigated acres harvested	Average yield per irrigated 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 2018	3,813	2,370,113	79	2.5	33	10,600	67	1.2	3,780	2,359,513	79	2.5
..... 2013	5,613	3,132,894	80	2.9	146	33,690	68	1.4	5,467	3,099,204	80	2.9
2018 DATA												
Alabama	-	-	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas	1,715	1,190,434	79	2.1	12	4,520	78	1.4	1,703	1,185,914	79	2.1
California	837	393,275	88	4.7	-	-	-	-	837	393,275	88	4.7
Colorado	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	-	-	-	-
Florida	16	(D)	(D)	(D)	8	4,000	54	0.7	8	(D)	(D)	(D)
Georgia	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-
Illinois	1	(D)	(D)	(D)	-	-	-	-	1	(D)	(D)	(D)
Indiana	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana	561	282,375	72	2.0	13	2,080	68	1.7	548	280,295	72	2.0
Maine	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-
Michigan	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi	148	99,888	78	2.0	-	-	-	-	148	99,888	78	2.0
Missouri	257	173,652	79	1.5	-	-	-	-	257	173,652	79	1.5
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	1	(D)	(D)	(D)	-	-	-	-	1	(D)	(D)	(D)
Texas	277	206,790	78	3.0	-	-	-	-	277	206,790	78	3.0
Utah	-	-	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-
Water Resources Regions												
Region 01 New England	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf	16	(D)	(D)	(D)	8	4,000	54	0.7	8	(D)	(D)	(D)
Region 04 Great Lakes	-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	1	(D)	(D)	(D)	-	-	-	-	1	(D)	(D)	(D)
Region 08 Lower Mississippi	2,279	1,456,107	78	2.0	25	6,600	75	1.5	2,254	1,449,507	78	2.0
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri	-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red	403	290,592	79	2.0	-	-	-	-	403	290,592	79	2.0
Region 12 Texas-Gulf	277	206,790	78	3.0	-	-	-	-	277	206,790	78	3.0
Region 13 Rio Grande	-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado	-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest	-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California	837	393,275	88	4.7	-	-	-	-	837	393,275	88	4.7
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Other small grains (barley, 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 States2018	5,767	1,026,289	1.5	3,372	713,678	1.4	2,395	312,611	1.8
.....2013	6,258	1,209,527	1.4	3,949	887,964	1.3	2,309	321,563	1.6
2018 DATA									
Alabama	4	8	2.7	4	8	2.7	-	-	-
Alaska	-	-	-	-	-	-	-	-	-
Arizona	130	13,912	4.8	33	2,231	1.1	97	11,681	5.5
Arkansas	-	-	-	-	-	-	-	-	-
California	551	127,718	1.7	67	8,605	1.8	484	119,113	1.7
Colorado	366	81,378	1.5	260	72,053	1.6	106	9,325	1.2
Connecticut	-	-	-	-	-	-	-	-	-
Delaware	10	1,300	0.1	10	1,300	0.1	-	-	-
Florida	56	9,630	0.5	56	9,630	0.5	-	-	-
Georgia	25	732	1.0	25	732	1.0	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-
Idaho	1,580	388,697	1.5	1,012	316,053	1.4	568	72,644	1.7
Illinois	-	-	-	-	-	-	-	-	-
Indiana	35	2,342	0.4	35	2,342	0.4	-	-	-
Iowa	-	-	-	-	-	-	-	-	-
Kansas	10	4,135	1.4	10	4,135	1.4	-	-	-
Kentucky	-	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-	-
Maryland	31	1,351	0.3	31	1,351	0.3	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-
Michigan	11	507	0.2	11	507	0.2	-	-	-
Minnesota	27	2,020	0.5	27	2,020	0.5	-	-	-
Mississippi	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-
Montana	537	141,966	1.0	227	91,688	1.0	310	50,278	0.9
Nebraska	84	7,930	0.2	84	7,930	0.2	-	-	-
Nevada	137	13,163	2.9	64	7,929	2.9	73	5,234	3.0
New Hampshire	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-
New Mexico	79	9,507	0.8	79	9,507	0.8	-	-	-
New York	3	9	0.1	3	9	0.1	-	-	-
North Carolina	-	-	-	-	-	-	-	-	-
North Dakota	15	4,100	0.5	15	4,100	0.5	-	-	-
Ohio	23	690	1.8	23	690	1.8	-	-	-
Oklahoma	22	22,590	0.4	22	22,590	0.4	-	-	-
Oregon	181	18,081	1.8	155	14,391	1.8	26	3,690	1.7
Pennsylvania	22	176	0.2	22	176	0.2	-	-	-
Rhode Island	-	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-
South Dakota	28	4,091	0.5	28	4,091	0.5	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-
Texas	168	46,444	1.2	168	46,444	1.2	-	-	-
Utah	947	45,301	1.4	503	30,001	1.4	444	15,300	1.4
Vermont	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-
Washington	210	22,136	1.9	182	20,996	1.9	28	1,140	1.1
West Virginia	-	-	-	-	-	-	-	-	-
Wisconsin	33	1,777	0.3	33	1,777	0.3	-	-	-
Wyoming	442	54,598	2.5	183	30,392	2.6	259	24,206	2.4
Water Resources Regions									
Region 01 New England	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	66	2,836	0.2	66	2,836	0.2	-	-	-
Region 03 South Atlantic-Gulf	85	10,370	0.6	85	10,370	0.6	-	-	-
Region 04 Great Lakes	21	(D)	(D)	21	(D)	(D)	-	-	-
Region 05 Ohio	58	3,032	0.7	58	3,032	0.7	-	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	49	2,697	0.4	49	2,697	0.4	-	-	-
Region 08 Lower Mississippi	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy	1	(D)	(D)	1	(D)	(D)	-	-	-
Region 10 Missouri	1,156	213,627	1.2	573	138,841	1.1	583	74,786	1.4
Region 11 Arkansas-White-Red	137	42,669	0.8	110	36,584	0.7	27	6,085	1.0
Region 12 Texas-Gulf	94	32,755	1.1	94	32,755	1.1	-	-	-
Region 13 Rio Grande	153	67,629	1.6	153	67,629	1.6	-	-	-
Region 14 Upper Colorado	377	17,247	1.6	284	13,329	1.6	93	3,918	1.5
Region 15 Lower Colorado	159	14,980	4.5	35	3,191	1.1	124	11,789	5.5
Region 16 Great Basin	941	80,846	1.6	502	62,090	1.6	439	18,756	1.9
Region 17 Pacific Northwest	1,893	406,196	1.6	1,248	328,032	1.5	645	78,164	1.7
Region 18 California	577	129,798	1.7	93	10,685	2.0	484	119,113	1.7
Region 19 Alaska	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Peanuts											
	Farms	Irrigated acres harvested	Average yield per irrigated 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 2018	1,701	460,155	4,518	0.7	1,629	447,984	4,517	0.7	72	12,171	4,547	0.5
..... 2013	1,605	371,634	4,533	0.7	1,566	360,505	4,555	0.7	39	11,129	3,831	0.8
2018 DATA												
Alabama	85	18,150	4,399	0.6	60	15,400	4,381	0.7	25	2,750	4,500	0.3
Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas	43	18,553	4,682	0.4	18	12,175	4,856	0.3	25	6,378	4,351	0.6
California	3	3	4,000	0.3	-	-	-	-	3	3	4,000	0.3
Colorado	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	-	-	-	-
Florida	164	55,617	4,512	0.7	164	55,617	4,512	0.7	-	-	-	-
Georgia	849	247,135	4,832	0.6	849	247,135	4,832	0.6	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-
Illinois	-	-	-	-	-	-	-	-	-	-	-	-
Indiana	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana	19	3,040	5,000	0.5	-	-	-	-	19	3,040	5,000	0.5
Maine	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-
Michigan	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi	11	1,425	4,329	0.6	11	1,425	4,329	0.6	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-	-	-	-
Montana	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska	-	-	-	-	-	-	-	-	-	-	-	-
Nevada	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	24	4,272	3,540	0.4	24	4,272	3,540	0.4	-	-	-	-
New York	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina	54	2,306	5,379	0.6	54	2,306	5,379	0.6	-	-	-	-
North Dakota	-	-	-	-	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma	17	2,265	4,183	1.3	17	2,265	4,183	1.3	-	-	-	-
Oregon	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	124	17,791	4,822	1.0	124	17,791	4,822	1.0	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee	22	22	4,500	0.2	22	22	4,500	0.2	-	-	-	-
Texas	286	89,576	3,605	1.1	286	89,576	3,605	1.1	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-
Water Resources Regions												
Region 01 New England	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf	1,276	340,999	4,760	0.6	1,251	338,249	4,762	0.6	25	2,750	4,500	0.3
Region 04 Great Lakes	-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee	22	22	4,500	0.2	22	22	4,500	0.2	-	-	-	-
Region 07 Upper Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi	56	19,265	4,897	0.4	23	12,150	4,914	0.3	33	7,115	4,868	0.6
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri	-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red	54	(D)	(D)	(D)	43	(D)	(D)	(D)	11	2,303	3,609	0.5
Region 12 Texas-Gulf	289	91,251	3,585	1.0	289	91,251	3,585	1.0	-	-	-	-
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	3	3	4,000	0.3	-	-	-	-	3	3	4,000	0.3
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Cotton							
	Farms	Irrigated acres harvested	Average yield per irrigated acre (lbs, lint)	Average acre-feet applied per acre	Primary method of distribution			
					Sprinkler system ²			
					Farms	Acres	Average yield per acre (lbs, lint)	Average acre-feet applied per acre
United States2018 2013	6,918 6,804	3,697,167 2,954,457	1,167 1,172	1.3 1.3	4,387 4,723	2,224,864 2,009,414	1,050 1,061	0.9 1.0
2018 DATA								
Alabama	199	52,608	1,102	0.5	172	46,666	1,097	0.6
Alaska	-	-	-	-	-	-	-	-
Arizona	277	164,846	1,480	4.6	2	(D)	(D)	(D)
Arkansas	410	386,089	1,251	1.0	60	40,911	1,233	0.8
California	461	254,785	1,615	3.2	-	-	-	-
Colorado	-	-	-	-	-	-	-	-
Connecticut	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-
Florida	31	(D)	(D)	0.9	4	4,068	1,066	0.9
Georgia	1,041	463,450	787	0.6	1,041	463,450	787	0.6
Hawaii	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-
Illinois	1	(D)	(D)	(D)	-	-	-	-
Indiana	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-
Kansas	127	40,974	1,237	0.7	127	40,974	1,237	0.7
Kentucky	-	-	-	-	-	-	-	-
Louisiana	75	33,908	1,270	0.4	1	(D)	(D)	(D)
Maine	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-
Michigan	-	-	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-
Mississippi	235	209,107	1,286	0.5	106	80,616	1,263	0.4
Missouri	204	208,092	1,425	0.6	23	19,600	1,171	0.8
Montana	-	-	-	-	-	-	-	-
Nebraska	-	-	-	-	-	-	-	-
Nevada	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-
New Mexico	230	51,304	1,094	1.4	49	25,794	838	1.2
New York	-	-	-	-	-	-	-	-
North Carolina	101	14,202	1,073	0.4	101	14,202	1,073	0.4
North Dakota	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	-	-
Oklahoma	250	113,902	1,358	1.2	153	64,775	1,345	1.2
Oregon	-	-	-	-	-	-	-	-
Pennsylvania	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-
South Carolina	199	39,558	1,111	0.7	199	39,558	1,111	0.7
South Dakota	-	-	-	-	-	-	-	-
Tennessee	93	23,539	1,198	(D)	69	(D)	(D)	(D)
Texas	2,974	1,632,965	1,095	1.1	2,270	1,358,610	1,097	1.1
Utah	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-
Virginia	10	400	908	0.2	10	400	908	0.2
Washington	-	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-
Water Resources Regions								
Region 01 New England	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf	1,504	570,825	843	0.6	1,450	561,913	839	0.6
Region 04 Great Lakes	-	-	-	-	-	-	-	-
Region 05 Ohio	-	-	-	-	-	-	-	-
Region 06 Tennessee	131	(D)	(D)	(D)	109	20,691	1,403	0.4
Region 07 Upper Mississippi	1	(D)	(D)	(D)	-	-	-	-
Region 08 Lower Mississippi	950	844,580	1,299	0.7	227	145,642	1,217	0.6
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-
Region 10 Missouri	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red	1,059	522,693	1,314	1.1	852	455,468	1,324	1.1
Region 12 Texas-Gulf	2,309	1,270,679	1,032	1.1	1,746	1,031,223	1,011	1.1
Region 13 Rio Grande	226	47,646	1,117	2.0	1	(D)	(D)	(D)
Region 14 Upper Colorado	-	-	-	-	-	-	-	-
Region 15 Lower Colorado	285	169,313	1,496	4.6	2	(D)	(D)	(D)
Region 16 Great Basin	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest	-	-	-	-	-	-	-	-
Region 18 California	453	250,318	1,606	3.2	-	-	-	-
Region 19 Alaska	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area		Cotton - con.							
		Primary method of distribution - con.							
		Gravity system				Drip, trickle, or low-flow micro system			
		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	2018	2,209	1,371,451	1,350	1.7	322	100,852	1,266	1.6
	2013	1,583	774,528	1,409	2.2	498	170,515	1,398	1.6
2018 DATA									
Alabama		27	5,942	1,142	0.3	-	-	-	-
Alaska		-	-	-	-	-	-	-	-
Arizona		272	156,265	1,488	4.6	3	(D)	(D)	(D)
Arkansas		350	345,178	1,254	1.0	-	-	-	-
California		429	233,738	1,600	3.2	32	21,047	1,778	3.6
Colorado		-	-	-	-	-	-	-	-
Connecticut		-	-	-	-	-	-	-	-
Delaware		-	-	-	-	-	-	-	-
Florida		27	(D)	(D)	1.0	-	-	-	-
Georgia		-	-	-	-	-	-	-	-
Hawaii		-	-	-	-	-	-	-	-
Idaho		-	-	-	-	-	-	-	-
Illinois		1	(D)	(D)	(D)	-	-	-	-
Indiana		-	-	-	-	-	-	-	-
Iowa		-	-	-	-	-	-	-	-
Kansas		-	-	-	-	-	-	-	-
Kentucky		-	-	-	-	-	-	-	-
Louisiana		74	(D)	(D)	(D)	-	-	-	-
Maine		-	-	-	-	-	-	-	-
Maryland		-	-	-	-	-	-	-	-
Massachusetts		-	-	-	-	-	-	-	-
Michigan		-	-	-	-	-	-	-	-
Minnesota		-	-	-	-	-	-	-	-
Mississippi		129	128,491	1,300	0.6	-	-	-	-
Missouri		181	188,492	1,451	0.5	-	-	-	-
Montana		-	-	-	-	-	-	-	-
Nebraska		-	-	-	-	-	-	-	-
Nevada		-	-	-	-	-	-	-	-
New Hampshire		-	-	-	-	-	-	-	-
New Jersey		-	-	-	-	-	-	-	-
New Mexico		181	25,510	1,353	1.6	-	-	-	-
New York		-	-	-	-	-	-	-	-
North Carolina		-	-	-	-	-	-	-	-
North Dakota		-	-	-	-	-	-	-	-
Ohio		-	-	-	-	-	-	-	-
Oklahoma		97	49,127	1,377	1.1	-	-	-	-
Oregon		-	-	-	-	-	-	-	-
Pennsylvania		-	-	-	-	-	-	-	-
Rhode Island		-	-	-	-	-	-	-	-
South Carolina		-	-	-	-	-	-	-	-
South Dakota		-	-	-	-	-	-	-	-
Tennessee		2	(D)	(D)	(D)	22	22	1,160	0.3
Texas		439	(D)	(D)	(D)	265	(D)	(D)	(D)
Utah		-	-	-	-	-	-	-	-
Vermont		-	-	-	-	-	-	-	-
Virginia		-	-	-	-	-	-	-	-
Washington		-	-	-	-	-	-	-	-
West Virginia		-	-	-	-	-	-	-	-
Wisconsin		-	-	-	-	-	-	-	-
Wyoming		-	-	-	-	-	-	-	-
Water Resources Regions									
Region 01 New England		-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic		-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf		54	8,912	1,116	0.5	-	-	-	-
Region 04 Great Lakes		-	-	-	-	-	-	-	-
Region 05 Ohio		-	-	-	-	-	-	-	-
Region 06 Tennessee		-	-	-	-	22	(D)	(D)	(D)
Region 07 Upper Mississippi		1	(D)	(D)	(D)	-	-	-	-
Region 08 Lower Mississippi		723	698,938	1,316	0.8	-	-	-	-
Region 09 Souris-Red-Rainy		-	-	-	-	-	-	-	-
Region 10 Missouri		-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red		167	(D)	1,236	(D)	40	(D)	1,581	(D)
Region 12 Texas-Gulf		343	164,649	1,128	1.5	220	74,807	1,105	1.0
Region 13 Rio Grande		220	43,584	(D)	1.8	5	(D)	(D)	(D)
Region 14 Upper Colorado		-	-	-	-	-	-	-	-
Region 15 Lower Colorado		280	160,732	1,506	4.6	3	(D)	(D)	(D)
Region 16 Great Basin		-	-	-	-	-	-	-	-
Region 17 Pacific Northwest		-	-	-	-	-	-	-	-
Region 18 California		421	229,271	1,590	3.2	32	21,047	1,778	3.6
Region 19 Alaska		-	-	-	-	-	-	-	-
Region 20 Hawaii		-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Sweet corn								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (cwt)	Average acre-feet applied per acre	Primary method of distribution				
					Sprinkler system ²				
					Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre	
United States 2018	5,476	285,749	207	1.3	2,915	234,771	195	1.1	
..... 2013	5,923	321,992	207	1.3	3,275	260,692	189	1.2	
2018 DATA									
Alabama	66	629	198	0.2	34	(D)	(D)	(D)	
Alaska	10	1	134	0.4	-	-	-	-	
Arizona	16	16	200	3.5	-	-	-	-	
Arkansas	9	18	289	1.6	-	-	-	-	
California	205	19,166	307	2.4	33	6	316	1.2	
Colorado	144	3,050	250	0.2	86	3,011	250	0.2	
Connecticut	71	92	61	0.3	28	79	54	0.3	
Delaware	55	10,184	188	0.4	55	10,184	188	0.4	
Florida	141	20,610	347	1.8	106	(D)	(D)	(D)	
Georgia	114	23,965	232	0.8	44	23,821	232	0.8	
Hawaii	1	(D)	(D)	(D)	-	-	-	-	
Idaho	196	3,178	92	3.0	56	831	87	2.6	
Illinois	64	6,268	193	0.8	49	6,208	193	0.8	
Indiana	94	5,461	80	0.2	64	2,488	80	0.3	
Iowa	45	1,676	134	0.1	18	1,620	135	0.1	
Kansas	49	86	137	0.4	19	38	120	0.7	
Kentucky	59	306	100	0.1	24	29	100	0.2	
Louisiana	63	168	211	1.4	13	13	375	(D)	
Maine	126	1,163	240	0.4	110	1,157	240	0.4	
Maryland	175	12,555	129	0.5	142	12,476	129	0.5	
Massachusetts	77	482	156	0.6	49	286	139	0.3	
Michigan	233	1,469	113	0.5	173	1,307	113	0.5	
Minnesota	181	17,942	147	0.7	181	17,942	147	0.7	
Mississippi	75	164	209	0.7	18	84	200	0.9	
Missouri	86	228	143	0.8	48	132	143	0.9	
Montana	57	83	84	0.7	45	78	83	0.7	
Nebraska	61	233	50	0.5	13	127	50	0.7	
Nevada	17	5	150	2.1	-	-	-	-	
New Hampshire	9	152	251	0.2	2	(D)	(D)	(D)	
New Jersey	158	3,617	104	0.6	108	3,057	108	0.6	
New Mexico	176	120	62	0.7	10	20	50	2.0	
New York	238	3,504	125	0.4	168	3,173	125	0.4	
North Carolina	170	347	230	0.3	63	34	183	0.2	
North Dakota	40	18	130	0.5	35	17	132	0.5	
Ohio	201	2,815	185	0.3	151	2,227	185	0.3	
Oklahoma	53	2,343	200	1.0	-	-	-	-	
Oregon	344	21,363	223	1.8	187	20,921	223	1.8	
Pennsylvania	292	2,684	134	0.4	155	1,791	(D)	(D)	
Rhode Island	13	77	(D)	0.1	1	(D)	(D)	(D)	
South Carolina	144	948	97	0.8	84	749	98	0.9	
South Dakota	36	257	100	1.0	-	-	-	-	
Tennessee	136	679	40	0.2	1	(D)	(D)	(D)	
Texas	69	2,881	100	0.4	8	2,700	100	0.4	
Utah	95	341	198	0.7	-	-	-	-	
Vermont	25	97	(D)	1.9	21	96	100	1.9	
Virginia	124	4,638	143	0.3	48	4,455	141	0.3	
Washington	432	60,256	229	2.3	273	56,911	232	2.3	
West Virginia	3	3	250	0.4	3	3	250	0.4	
Wisconsin	228	49,107	177	0.6	189	49,082	177	0.6	
Wyoming	-	-	-	-	-	-	-	-	
Water Resources Regions									
Region 01 New England	304	2,011	204	0.5	198	1,742	206	0.4	
Region 02 Mid-Atlantic	819	34,844	145	0.4	523	33,051	147	0.4	
Region 03 South Atlantic-Gulf	727	46,747	279	1.2	343	31,585	246	0.9	
Region 04 Great Lakes	469	11,335	143	0.5	377	10,965	144	0.5	
Region 05 Ohio	388	6,581	106	0.3	214	2,712	120	0.3	
Region 06 Tennessee	116	74	(D)	(D)	22	11	(D)	0.4	
Region 07 Upper Mississippi	492	69,485	171	0.7	427	69,372	171	0.7	
Region 08 Lower Mississippi	61	744	82	0.5	20	(D)	50	(D)	
Region 09 Souris-Red-Rainy	37	10	124	0.2	33	10	126	0.2	
Region 10 Missouri	324	3,821	218	0.3	127	3,280	237	0.2	
Region 11 Arkansas-White-Red	144	2,429	200	1.0	39	42	135	0.7	
Region 12 Texas-Gulf	69	2,881	100	0.4	8	2,700	100	0.4	
Region 13 Rio Grande	76	(D)	62	1.5	10	(D)	(D)	(D)	
Region 14 Upper Colorado	80	81	68	0.2	10	1	215	0.7	
Region 15 Lower Colorado	49	19	191	3.1	-	-	-	-	
Region 16 Great Basin	112	346	198	0.7	-	-	-	-	
Region 17 Pacific Northwest	993	84,827	222	2.2	531	78,693	228	2.2	
Region 18 California	205	19,166	307	2.4	33	6	316	1.2	
Region 19 Alaska	10	1	134	0.4	-	-	-	-	
Region 20 Hawaii	1	(D)	(D)	(D)	-	-	-	-	

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Sweet corn - con.							
	Primary method of distribution - con.							
	Gravity system				Drip, trickle, or low-flow micro system			
	Farms	Acres	Average yield per acres (cwt)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre
United States2018	751	23,468	300	2.6	1,810	27,511	235	1.4
.....2013	718	30,624	284	1.8	1,930	30,677	289	1.7
2018 DATA								
Alabama	-	-	-	-	32	(D)	(D)	(D)
Alaska	-	-	-	-	10	1	134	0.4
Arizona	16	16	200	3.5	-	-	-	-
Arkansas	-	-	-	-	9	18	289	1.6
California	44	5,156	367	3.8	128	14,004	284	1.9
Colorado	50	(D)	250	0.9	8	(D)	250	0.2
Connecticut	43	13	105	0.2	-	-	-	-
Delaware	-	-	-	-	-	-	-	-
Florida	7	11,100	360	2.4	28	(D)	(D)	(D)
Georgia	-	-	-	-	70	144	228	0.5
Hawaii	-	-	-	-	1	(D)	(D)	(D)
Idaho	118	2,345	94	3.2	22	2	44	1.0
Illinois	-	-	-	-	15	60	184	0.5
Indiana	-	-	-	-	30	2,973	80	0.2
Iowa	-	-	-	-	27	56	119	1.4
Kansas	-	-	-	-	30	48	149	0.2
Kentucky	-	-	-	-	35	277	100	0.1
Louisiana	13	26	189	(D)	37	129	199	1.7
Maine	3	(Z)	240	0.8	13	6	240	0.6
Maryland	-	-	-	-	33	79	106	0.6
Massachusetts	28	196	181	1.0	-	-	-	-
Michigan	-	-	-	-	60	162	110	0.2
Minnesota	-	-	-	-	-	-	-	-
Mississippi	22	56	204	0.5	35	24	254	0.7
Missouri	-	-	-	-	38	96	143	0.6
Montana	2	(D)	(D)	(D)	10	(D)	(D)	(D)
Nebraska	18	74	(D)	0.2	30	32	(D)	0.5
Nevada	-	-	-	-	17	5	150	2.1
New Hampshire	-	-	-	-	7	(D)	(D)	(D)
New Jersey	23	37	108	0.3	27	524	83	0.6
New Mexico	166	100	65	0.4	-	-	-	-
New York	-	-	-	-	70	331	125	0.4
North Carolina	-	-	-	-	107	313	235	0.3
North Dakota	4	(D)	(D)	(D)	1	(D)	(D)	(D)
Ohio	-	-	-	-	50	588	186	0.2
Oklahoma	26	2,340	200	1.0	27	3	200	1.0
Oregon	1	-	-	-	157	442	229	1.1
Pennsylvania	1	(D)	(D)	(D)	136	(D)	(D)	0.8
Rhode Island	4	4	(D)	0.1	8	(D)	(D)	(D)
South Carolina	-	-	-	-	60	198	91	0.3
South Dakota	29	256	100	1.0	7	1	110	0.1
Tennessee	-	-	-	-	135	(D)	(D)	(D)
Texas	58	181	100	0.4	3	(Z)	100	0.8
Utah	61	313	199	0.6	34	28	194	1.7
Vermont	-	-	-	-	4	1	(D)	1.0
Virginia	9	2	250	0.3	67	181	208	0.3
Washington	6	1,200	234	3.0	153	2,145	153	3.0
West Virginia	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	39	26	174	0.3
Wyoming	-	-	-	-	-	-	-	-
Water Resources Regions								
Region 01 New England	78	213	(D)	0.9	28	56	(D)	0.3
Region 02 Mid-Atlantic	33	52	111	0.3	263	1,741	122	0.7
Region 03 South Atlantic-Gulf	29	11,156	359	2.4	355	4,006	315	0.3
Region 04 Great Lakes	-	-	-	-	92	370	125	0.2
Region 05 Ohio	-	-	-	-	174	3,869	97	0.2
Region 06 Tennessee	-	-	-	-	94	63	(D)	(D)
Region 07 Upper Mississippi	-	-	-	-	65	114	151	0.4
Region 08 Lower Mississippi	13	(D)	189	(D)	28	(D)	197	1.6
Region 09 Souris-Red-Rainy	4	(Z)	70	0.2	-	-	-	-
Region 10 Missouri	72	343	94	0.8	125	198	123	0.8
Region 11 Arkansas-White-Red	50	2,364	201	1.0	55	23	260	1.4
Region 12 Texas-Gulf	58	181	100	0.4	3	(Z)	100	0.8
Region 13 Rio Grande	66	(D)	(D)	(D)	-	-	-	-
Region 14 Upper Colorado	70	80	66	0.2	-	-	-	-
Region 15 Lower Colorado	49	19	191	3.1	-	-	-	-
Region 16 Great Basin	61	313	199	0.6	51	33	188	1.7
Region 17 Pacific Northwest	124	3,545	141	3.1	338	2,590	166	2.6
Region 18 California	44	5,156	367	3.8	128	14,004	284	1.9
Region 19 Alaska	-	-	-	-	10	1	134	0.4
Region 20 Hawaii	-	-	-	-	1	(D)	(D)	(D)

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Tomatoes in the open								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (cwt)	Average acre-feet applied per acre	Primary method of distribution				
					Sprinkler system ²				
					Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre	
United States 2018	8,879	288,114	766	2.3	2,216	16,485	514	1.9	
..... 2013	10,496	358,985	798	2.4	3,211	37,042	707	2.6	
2018 DATA									
Alabama	104	1,174	571	2.0	22	34	569	1.8	
Alaska	12	2	159	0.9	11	(D)	(D)	(D)	
Arizona	16	2	50	0.1	-	-	-	-	
Arkansas	63	170	489	0.6	23	7	448	(D)	
California	1,007	240,734	827	2.5	68	5,802	576	4.6	
Colorado	186	104	181	(D)	98	58	177	0.6	
Connecticut	127	73	348	0.6	11	(D)	(D)	(D)	
Delaware	8	5	605	0.5	-	-	-	-	
Florida	181	21,795	566	1.7	72	(D)	(D)	(D)	
Georgia	98	141	198	0.9	12	101	200	1.0	
Hawaii	34	(D)	(D)	(D)	-	-	-	-	
Idaho	151	49	100	1.9	90	35	100	2.0	
Illinois	135	157	20	1.1	32	12	20	0.4	
Indiana	160	2,427	426	0.4	30	2,255	444	0.4	
Iowa	83	(D)	246	1.2	5	(D)	350	2.0	
Kansas	73	81	20	0.2	8	4	20	0.1	
Kentucky	264	346	273	0.4	6	5	383	0.4	
Louisiana	60	69	131	1.4	13	13	280	0.3	
Maine	105	23	216	1.6	48	13	216	1.7	
Maryland	170	503	60	0.5	15	242	25	0.3	
Massachusetts	261	226	108	0.2	144	168	93	0.2	
Michigan	509	5,508	736	0.4	146	3,779	738	0.4	
Minnesota	100	76	(D)	0.7	16	14	250	0.3	
Mississippi	135	209	558	0.7	18	(D)	(D)	2.9	
Missouri	267	204	261	0.8	52	36	255	0.9	
Montana	102	38	98	1.3	41	27	99	1.4	
Nebraska	73	37	372	0.8	27	28	366	0.6	
Nevada	21	4	300	2.3	-	-	-	-	
New Hampshire	16	14	124	0.8	1	(D)	(D)	(D)	
New Jersey	333	1,905	142	0.4	94	1,080	134	0.2	
New Mexico	323	163	155	1.0	10	10	100	1.0	
New York	337	500	292	0.5	97	259	269	0.5	
North Carolina	204	550	54	0.4	42	18	54	0.6	
North Dakota	38	9	88	0.4	33	7	102	0.3	
Ohio	325	1,029	469	0.2	97	492	464	0.1	
Oklahoma	227	296	170	0.4	100	105	170	0.6	
Oregon	372	271	200	1.2	165	89	131	1.4	
Pennsylvania	344	761	330	0.7	24	34	350	0.3	
Rhode Island	30	100	250	0.6	-	-	-	-	
South Carolina	176	4,808	101	1.2	53	263	110	0.6	
South Dakota	41	13	161	0.1	10	1	160	0.5	
Tennessee	262	277	314	0.3	42	27	456	1.0	
Texas	250	204	172	0.9	69	33	147	0.9	
Utah	106	186	40	0.6	27	8	(D)	2.5	
Vermont	25	16	185	0.4	15	(D)	(D)	(D)	
Virginia	235	1,755	100	0.2	113	54	100	0.2	
Washington	285	111	294	1.9	61	17	283	1.1	
West Virginia	92	32	533	0.1	67	24	506	0.2	
Wisconsin	310	273	336	0.6	88	186	351	0.4	
Wyoming	43	46	243	0.8	-	-	-	-	
Water Resources Regions									
Region 01 New England	543	439	187	0.5	208	216	149	0.3	
Region 02 Mid-Atlantic	1,125	5,001	154	0.4	247	1,503	132	0.2	
Region 03 South Atlantic-Gulf	856	28,215	482	1.6	218	1,469	438	1.0	
Region 04 Great Lakes	1,006	6,652	678	0.4	238	4,491	687	0.4	
Region 05 Ohio	811	2,722	475	0.4	213	1,954	521	0.4	
Region 06 Tennessee	274	732	150	0.3	76	34	447	0.8	
Region 07 Upper Mississippi	557	943	127	0.5	132	541	104	0.4	
Region 08 Lower Mississippi	132	325	405	1.0	31	38	468	2.0	
Region 09 Souris-Red-Rainy	35	7	106	0.3	35	7	106	0.3	
Region 10 Missouri	470	304	(D)	0.7	154	107	209	0.8	
Region 11 Arkansas-White-Red	365	398	191	(D)	153	126	178	(D)	
Region 12 Texas-Gulf	238	187	169	0.9	69	33	147	0.9	
Region 13 Rio Grande	223	109	185	1.3	10	10	(D)	1.0	
Region 14 Upper Colorado	154	(D)	150	0.6	3	(D)	184	0.1	
Region 15 Lower Colorado	53	605	913	3.0	-	-	-	-	
Region 16 Great Basin	125	190	45	0.7	27	8	40	2.5	
Region 17 Pacific Northwest	861	441	211	1.4	323	144	141	1.5	
Region 18 California	1,005	240,134	827	2.5	68	5,802	576	4.6	
Region 19 Alaska	12	2	159	0.9	11	(D)	(D)	(D)	
Region 20 Hawaii	34	(D)	(D)	(D)	-	-	-	-	

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Tomatoes in the open - con.							
	Primary method of distribution - con.							
	Gravity system				Drip, trickle, or low-flow micro system			
	Farms	Acres	Average yield per acres (cwt)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre
United States2018	1,086	38,846	771	2.5	5,577	232,784	782	2.2
.....2013	644	62,860	823	2.9	6,641	259,083	805	2.2
2018 DATA								
Alabama	-	-	-	-	82	1,140	571	2.0
Alaska	-	-	-	-	1	(D)	(D)	(D)
Arizona	-	-	-	-	16	2	50	0.1
Arkansas	5	40	490	(D)	35	123	491	0.6
California	125	31,047	822	2.6	814	203,885	835	2.4
Colorado	26	5	184	(D)	62	40	186	(D)
Connecticut	71	18	302	0.6	45	(D)	(D)	(D)
Delaware	4	1	280	0.1	4	4	703	0.6
Florida	2	(D)	(D)	(D)	107	13,553	550	1.6
Georgia	11	3	200	0.1	75	37	193	0.7
Hawaii	-	-	-	-	34	(D)	(D)	(D)
Idaho	26	7	100	2.2	35	7	100	1.3
Illinois	21	9	20	1.0	82	136	20	1.1
Indiana	-	-	-	-	130	173	201	0.3
Iowa	-	-	-	-	78	(D)	100	0.1
Kansas	-	-	-	-	65	77	20	0.2
Kentucky	57	29	274	0.7	201	312	272	0.4
Louisiana	-	-	-	-	47	56	97	1.6
Maine	-	-	-	-	57	10	216	1.5
Maryland	-	-	-	-	155	261	92	0.7
Massachusetts	-	-	-	-	117	59	151	0.3
Michigan	20	8	734	0.2	343	1,721	731	0.3
Minnesota	19	5	250	0.3	65	57	(D)	0.8
Mississippi	23	(D)	(D)	0.3	94	152	555	0.3
Missouri	-	-	-	-	215	167	262	0.8
Montana	34	6	97	0.9	27	5	95	0.9
Nebraska	-	-	-	-	46	9	390	1.5
Nevada	4	1	300	3.0	17	3	300	2.0
New Hampshire	-	-	-	-	15	(D)	(D)	(D)
New Jersey	36	6	140	0.4	203	819	151	0.6
New Mexico	306	152	159	1.0	7	1	100	0.3
New York	22	2	30	0.1	218	239	319	0.5
North Carolina	-	-	-	-	162	532	54	0.4
North Dakota	-	-	-	-	5	2	48	0.5
Ohio	23	12	481	0.1	205	526	473	0.2
Oklahoma	-	-	-	-	127	191	170	0.2
Oregon	9	5	68	2.5	198	176	239	1.0
Pennsylvania	43	9	340	0.6	277	719	328	0.8
Rhode Island	4	4	250	0.3	26	96	250	0.6
South Carolina	-	-	-	-	123	4,545	100	1.3
South Dakota	-	-	-	-	31	12	161	0.1
Tennessee	43	15	103	0.1	177	235	312	0.2
Texas	3	1	300	0.8	178	170	176	0.9
Utah	65	174	40	0.6	14	4	(D)	0.1
Vermont	5	1	191	1.0	5	(D)	(D)	(D)
Virginia	9	2	100	0.1	113	1,699	100	0.2
Washington	27	14	293	2.1	197	81	296	2.0
West Virginia	-	-	-	-	25	7	625	0.1
Wisconsin	-	-	-	-	222	88	303	1.1
Wyoming	43	46	243	0.8	-	-	-	-
Water Resources Regions								
Region 01 New England	75	22	293	0.5	260	200	216	0.6
Region 02 Mid-Atlantic	71	16	230	0.4	807	3,482	164	0.4
Region 03 South Atlantic-Gulf	36	7,227	600	2.0	602	19,519	442	1.5
Region 04 Great Lakes	91	24	505	0.2	677	2,137	662	0.3
Region 05 Ohio	79	40	205	0.5	519	728	366	0.4
Region 06 Tennessee	21	4	310	0.2	177	694	134	0.3
Region 07 Upper Mississippi	40	14	101	0.7	385	388	159	0.6
Region 08 Lower Mississippi	5	40	490	0.4	96	247	382	0.9
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-
Region 10 Missouri	33	8	405	1.5	283	190	(D)	0.6
Region 11 Arkansas-White-Red	-	-	-	-	212	272	197	(D)
Region 12 Texas-Gulf	3	1	300	0.8	166	153	173	0.9
Region 13 Rio Grande	206	98	194	1.3	7	1	(D)	0.3
Region 14 Upper Colorado	114	98	144	0.6	37	(D)	191	1.0
Region 15 Lower Colorado	35	4	111	1.1	18	602	917	3.0
Region 16 Great Basin	67	175	41	0.6	31	7	146	0.9
Region 17 Pacific Northwest	85	28	188	2.1	453	269	250	1.3
Region 18 California	125	31,047	822	2.6	812	203,285	835	2.4
Region 19 Alaska	-	-	-	-	1	(D)	(D)	(D)
Region 20 Hawaii	-	-	-	-	34	(D)	(D)	(D)

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Lettuce and romaine								
	Farms	Irrigated acres harvested	Average yield per irrigated acre (cwt)	Average acre-feet applied per acre	Primary method of distribution				
					Sprinkler system ²				
					Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre	
United States 2018	4,589	277,616	640	2.5	1,568	105,171	711	2.4	
..... 2013	5,052	264,154	415	2.6	2,025	98,745	412	3.0	
2018 DATA									
Alabama	-	-	-	-	-	-	-	-	-
Alaska	33	49	258	0.9	13	(D)	(D)	(D)	
Arizona	43	44,363	568	2.4	-	-	-	-	
Arkansas	20	26	281	1.0	9	2	224	1.0	
California	563	198,895	650	2.9	149	(D)	709	3.1	
Colorado	134	33	348	0.5	75	15	350	0.4	
Connecticut	88	28	415	0.5	-	-	-	-	
Delaware	-	-	-	-	-	-	-	-	
Florida	112	25,620	800	0.3	59	23,199	(D)	0.3	
Georgia	67	14	100	0.6	8	1	100	0.8	
Hawaii	85	328	200	1.3	7	133	200	1.1	
Idaho	87	18	300	1.3	56	12	300	0.9	
Illinois	79	99	500	1.4	62	98	500	1.4	
Indiana	76	94	800	0.2	17	80	800	0.2	
Iowa	18	2	205	0.1	-	-	-	-	
Kansas	19	2	116	0.1	4	(Z)	100	0.1	
Kentucky	76	57	100	0.2	28	27	100	0.1	
Louisiana	36	5	217	1.1	-	-	-	-	
Maine	177	55	450	1.1	82	25	450	1.4	
Maryland	80	36	200	0.5	8	2	200	0.1	
Massachusetts	203	1,055	217	1.2	68	1,018	217	1.2	
Michigan	101	2,012	350	0.1	40	2,002	350	0.1	
Minnesota	52	21	200	0.6	20	9	200	0.4	
Mississippi	55	45	263	0.2	-	-	-	-	
Missouri	62	25	180	1.6	28	11	180	0.7	
Montana	103	33	285	1.2	53	27	287	1.5	
Nebraska	58	14	110	0.2	18	10	111	0.1	
Nevada	19	2	200	2.5	-	-	-	-	
New Hampshire	7	7	181	0.3	-	-	-	-	
New Jersey	145	2,052	390	0.5	42	890	411	0.4	
New Mexico	101	1,653	295	5.0	7	2	295	0.2	
New York	185	93	447	0.3	93	65	(D)	0.2	
North Carolina	127	32	369	0.4	46	8	367	0.5	
North Dakota	9	5	130	0.5	1	(D)	(D)	(D)	
Ohio	89	37	205	0.2	39	9	281	0.1	
Oklahoma	29	4	800	0.8	-	-	-	-	
Oregon	360	200	113	1.0	165	152	106	1.1	
Pennsylvania	73	48	100	0.3	11	5	100	0.4	
Rhode Island	29	41	350	0.9	9	5	371	1.0	
South Carolina	48	8	101	0.4	14	1	101	0.5	
South Dakota	12	2	153	0.7	3	1	150	1.0	
Tennessee	49	5	385	0.3	-	-	-	-	
Texas	113	90	150	0.5	38	19	150	0.1	
Utah	27	27	350	1.0	-	-	-	-	
Vermont	57	59	503	1.0	27	34	761	0.8	
Virginia	143	90	500	0.1	68	80	500	0.1	
Washington	314	155	201	1.4	101	72	201	1.8	
West Virginia	29	14	364	1.2	26	13	365	1.3	
Wisconsin	196	65	215	0.6	74	24	252	0.3	
Wyoming	1	(D)	(D)	(D)	-	-	-	-	
Water Resources Regions									
Region 01 New England	521	1,203	245	1.1	173	1,064	232	1.2	
Region 02 Mid-Atlantic	493	2,234	387	0.5	176	992	416	0.4	
Region 03 South Atlantic-Gulf	377	25,686	799	0.3	127	23,210	(D)	0.3	
Region 04 Great Lakes	294	2,117	350	0.1	56	2,025	354	0.1	
Region 05 Ohio	289	235	445	0.3	153	173	550	0.3	
Region 06 Tennessee	62	17	389	0.1	-	-	-	-	
Region 07 Upper Mississippi	316	183	396	1.0	174	141	416	1.1	
Region 08 Lower Mississippi	52	45	274	0.6	5	1	280	0.2	
Region 09 Souris-Red-Rainy	24	4	192	0.3	2	(D)	(D)	(D)	
Region 10 Missouri	226	65	225	1.2	112	35	(D)	1.0	
Region 11 Arkansas-White-Red	93	20	385	0.7	36	9	316	0.6	
Region 12 Texas-Gulf	113	90	150	0.5	38	19	150	0.1	
Region 13 Rio Grande	101	1,653	295	5.0	7	2	295	0.2	
Region 14 Upper Colorado	36	12	340	0.3	3	(Z)	(D)	0.1	
Region 15 Lower Colorado	45	44,363	568	2.4	-	-	-	-	
Region 16 Great Basin	44	29	340	1.1	-	-	-	-	
Region 17 Pacific Northwest	822	388	163	1.2	337	247	150	1.3	
Region 18 California	563	198,895	650	2.9	149	(D)	709	3.1	
Region 19 Alaska	33	49	258	0.9	13	(D)	(D)	(D)	
Region 20 Hawaii	85	328	200	1.3	7	133	200	1.1	

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Lettuce and romaine - con.							
	Primary method of distribution - con.							
	Gravity system				Drip, trickle, or low-flow micro system			
	Farms	Acres	Average yield per acres (cwt)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre
United States2018	359	60,464	585	2.7	2,662	111,981	604	2.6
.....2013	381	49,360	370	2.7	2,646	116,050	437	2.2
2018 DATA								
Alabama	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	20	(D)	(D)	(D)
Arizona	43	44,363	568	2.4	-	-	-	-
Arkansas	-	-	-	-	11	25	285	1.0
California	27	(D)	650	4.2	387	109,462	609	2.6
Colorado	3	6	350	0.1	56	12	344	0.7
Connecticut	43	4	315	0.5	45	24	433	0.5
Delaware	-	-	-	-	-	-	-	-
Florida	3	(D)	800	(D)	50	(D)	(D)	(D)
Georgia	11	3	100	0.4	48	10	100	0.6
Hawaii	-	-	-	-	78	195	200	1.4
Idaho	20	2	300	(D)	11	4	300	(D)
Illinois	-	-	-	-	17	2	500	2.0
Indiana	-	-	-	-	59	14	800	0.3
Iowa	-	-	-	-	18	2	205	0.1
Kansas	-	-	-	-	15	2	120	0.1
Kentucky	-	-	-	-	48	30	100	0.3
Louisiana	-	-	-	-	36	5	217	1.1
Maine	3	(Z)	450	0.8	92	30	450	0.9
Maryland	-	-	-	-	72	33	200	0.5
Massachusetts	-	-	-	-	135	37	224	1.1
Michigan	-	-	-	-	61	10	350	0.4
Minnesota	-	-	-	-	32	12	200	0.7
Mississippi	6	6	280	0.3	49	39	261	0.2
Missouri	-	-	-	-	34	14	180	2.3
Montana	23	2	300	0.1	27	3	261	0.2
Nebraska	-	-	-	-	40	4	108	0.3
Nevada	2	(D)	(D)	(D)	17	(D)	(D)	(D)
New Hampshire	-	-	-	-	7	7	181	0.3
New Jersey	-	-	-	-	103	1,162	374	0.6
New Mexico	77	1,642	295	5.0	17	9	295	2.4
New York	-	-	-	-	92	28	(D)	0.3
North Carolina	-	-	-	-	81	24	370	0.4
North Dakota	4	(D)	(D)	(D)	4	4	130	0.5
Ohio	-	-	-	-	50	29	182	0.2
Oklahoma	-	-	-	-	29	4	800	0.8
Oregon	-	-	-	-	195	47	133	0.7
Pennsylvania	-	-	-	-	62	43	100	0.3
Rhode Island	4	4	193	0.4	16	32	367	1.0
South Carolina	-	-	-	-	34	7	101	0.3
South Dakota	-	-	-	-	9	1	158	0.3
Tennessee	21	2	400	0.1	28	3	375	0.4
Texas	-	-	-	-	75	71	150	0.6
Utah	27	27	350	1.0	-	-	-	-
Vermont	-	-	-	-	30	25	156	1.3
Virginia	9	2	500	0.1	66	9	500	0.1
Washington	33	8	201	1.5	180	75	202	1.1
West Virginia	-	-	-	-	3	1	360	0.1
Wisconsin	-	-	-	-	122	41	194	0.7
Wyoming	-	-	-	-	1	(D)	(D)	(D)
Water Resources Regions								
Region 01 New England	50	9	263	0.5	298	131	349	0.9
Region 02 Mid-Atlantic	9	2	500	0.1	308	1,240	363	0.6
Region 03 South Atlantic-Gulf	20	2,049	797	0.3	230	427	(D)	0.3
Region 04 Great Lakes	-	-	-	-	238	92	269	0.7
Region 05 Ohio	-	-	-	-	136	63	157	0.3
Region 06 Tennessee	21	2	400	0.1	41	15	388	0.1
Region 07 Upper Mississippi	-	-	-	-	142	42	331	0.6
Region 08 Lower Mississippi	-	-	-	-	47	45	274	0.6
Region 09 Souris-Red-Rainy	4	(D)	(D)	0.1	18	4	200	(D)
Region 10 Missouri	-	-	-	-	114	30	(D)	1.4
Region 11 Arkansas-White-Red	-	-	-	-	57	10	447	0.7
Region 12 Texas-Gulf	-	-	-	-	75	71	150	0.6
Region 13 Rio Grande	77	1,642	295	5.0	17	9	295	2.4
Region 14 Upper Colorado	3	(D)	(D)	(D)	30	(D)	329	(D)
Region 15 Lower Colorado	45	44,363	568	2.4	-	-	-	-
Region 16 Great Basin	27	27	350	1.0	17	2	200	2.4
Region 17 Pacific Northwest	76	13	235	(D)	409	129	180	(D)
Region 18 California	27	(D)	650	4.2	387	109,462	609	2.6
Region 19 Alaska	-	-	-	-	20	(D)	(D)	(D)
Region 20 Hawaii	-	-	-	-	78	195	200	1.4

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Potatoes, excluding sweet potatoes							
	Farms	Irrigated acres harvested	Average yield per irrigated acre (cwt)	Average acre-feet applied per acre	Primary method of distribution			
					Sprinkler system ²			
				Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre	
United States 2018	5,361	866,288	476	1.8	2,584	839,073	477	1.8
..... 2013	5,596	903,297	408	1.7	3,385	867,125	414	1.7
2018 DATA								
Alabama	22	33	280	0.3	22	33	280	0.3
Alaska	41	203	367	0.5	16	166	378	0.4
Arizona	22	3,109	267	2.0	17	3,108	267	2.0
Arkansas	12	5	162	1.0	6	2	184	0.9
California	252	25,442	389	2.4	61	9,953	380	1.6
Colorado	171	46,579	479	1.6	120	46,511	479	1.6
Connecticut	13	4	246	0.3	13	4	246	0.3
Delaware	1	(D)	(D)	(D)	1	(D)	(D)	(D)
Florida	81	4,608	245	0.5	4	(D)	(D)	(D)
Georgia	99	113	200	0.4	4	4	200	0.1
Hawaii	33	17	402	1.9	-	-	-	-
Idaho	576	296,665	451	2.1	477	290,670	451	2.1
Illinois	82	(D)	(D)	(D)	65	(D)	(D)	(D)
Indiana	69	(D)	(D)	(D)	18	(D)	(D)	(D)
Iowa	40	21	198	2.0	-	-	-	-
Kansas	50	2,381	400	1.9	11	2,360	400	1.9
Kentucky	42	68	300	0.1	2	(D)	(D)	(D)
Louisiana	13	1	130	0.2	-	-	-	-
Maine	238	9,195	351	0.6	158	9,177	351	0.6
Maryland	77	364	357	1.0	37	314	349	1.0
Massachusetts	67	359	(D)	(D)	1	(D)	(D)	(D)
Michigan	232	46,712	368	1.1	111	46,654	368	1.1
Minnesota	89	18,783	465	0.7	56	18,774	465	0.7
Mississippi	13	10	200	0.1	-	-	-	-
Missouri	104	2,028	300	1.0	34	2,010	300	1.0
Montana	152	6,923	378	1.3	107	6,887	378	1.3
Nebraska	79	20,530	452	0.9	24	20,502	452	0.9
Nevada	21	(D)	(D)	(D)	4	(D)	(D)	(D)
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	86	1,272	291	0.3	27	1,222	291	0.3
New Mexico	141	(D)	(D)	(D)	9	(D)	(D)	(D)
New York	177	3,140	310	1.8	110	3,085	310	1.9
North Carolina	132	54	440	0.7	27	14	440	0.3
North Dakota	48	22,294	475	0.9	48	22,294	475	0.9
Ohio	99	170	337	0.3	65	(D)	(D)	0.4
Oklahoma	65	31	259	0.1	25	3	259	0.1
Oregon	344	41,695	535	2.6	106	41,326	535	2.6
Pennsylvania	143	1,078	304	1.3	38	988	312	1.3
Rhode Island	17	812	240	0.3	5	800	240	0.3
South Carolina	60	(D)	(D)	(D)	26	(D)	(D)	(D)
South Dakota	19	5	140	0.2	10	1	140	0.4
Tennessee	72	12	440	0.3	-	-	-	-
Texas	134	22,010	264	1.3	43	21,956	264	1.3
Utah	102	145	200	1.0	27	3	200	2.5
Vermont	60	71	(D)	(D)	24	(D)	(D)	(D)
Virginia	145	3,378	367	0.3	91	3,305	367	0.3
Washington	480	166,613	645	2.6	279	163,566	645	2.6
West Virginia	50	17	440	1.1	50	17	440	1.1
Wisconsin	295	84,234	443	0.9	205	84,201	443	0.9
Wyoming	1	(D)	(D)	(D)	-	-	-	-
Water Resources Regions								
Region 01 New England	346	10,391	336	0.6	186	10,324	337	0.6
Region 02 Mid-Atlantic	459	7,084	333	0.5	222	6,890	(D)	0.5
Region 03 South Atlantic-Gulf	422	22,887	407	0.7	94	21,676	(D)	0.8
Region 04 Great Lakes	487	58,728	371	1.0	201	58,550	371	1.0
Region 05 Ohio	265	(D)	(D)	(D)	134	(D)	(D)	(D)
Region 06 Tennessee	97	27	393	0.3	34	6	213	0.2
Region 07 Upper Mississippi	410	97,644	443	0.9	299	97,613	443	0.9
Region 08 Lower Mississippi	36	2,011	299	1.0	10	2,000	300	1.0
Region 09 Souris-Red-Rainy	57	9,942	539	0.8	39	9,939	539	0.8
Region 10 Missouri	373	56,182	474	1.1	165	56,003	474	1.1
Region 11 Arkansas-White-Red	123	18,854	279	1.5	73	18,824	279	1.5
Region 12 Texas-Gulf	131	5,556	272	1.1	40	5,502	271	1.2
Region 13 Rio Grande	103	26,782	446	1.7	37	26,759	446	1.7
Region 14 Upper Colorado	68	(D)	(D)	(D)	12	(D)	(D)	(D)
Region 15 Lower Colorado	55	3,112	266	2.0	17	3,108	267	2.0
Region 16 Great Basin	132	11,583	449	2.2	40	11,438	452	2.2
Region 17 Pacific Northwest	1,471	501,719	522	2.3	904	492,304	522	2.3
Region 18 California	252	25,442	389	2.4	61	9,953	380	1.6
Region 19 Alaska	41	203	367	0.5	16	166	378	0.4
Region 20 Hawaii	33	17	402	1.9	-	-	-	-

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Potatoes, excluding sweet potatoes - con.							
	Primary method of distribution - con.							
	Gravity system				Drip, trickle, or low-flow micro system			
	Farms	Acres	Average yield per acres (cwt)	Average acre-feet applied per acre	Farms	Acres	Average yield per acre (cwt)	Average acre-feet applied per acre
United States2018	480	19,373	467	2.9	2,297	7,842	327	1.4
.....2013	296	26,881	244	1.5	1,915	9,291	300	1.5
2018 DATA								
Alabama	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	25	37	314	0.5
Arizona	5	1	200	0.2	-	-	-	-
Arkansas	-	-	-	-	6	3	143	1.0
California	30	10,488	435	3.5	161	5,001	314	1.8
Colorado	23	2	498	0.6	28	66	498	0.8
Connecticut	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-
Florida	-	-	-	-	77	(D)	(D)	(D)
Georgia	11	3	200	0.1	84	106	200	0.5
Hawaii	-	-	-	-	33	17	402	1.9
Idaho	54	5,932	447	2.2	45	63	306	1.0
Illinois	-	-	-	-	17	10	364	(D)
Indiana	-	-	-	-	51	13	344	0.5
Iowa	-	-	-	-	40	21	198	2.0
Kansas	14	14	400	0.7	25	7	400	0.8
Kentucky	-	-	-	-	40	(D)	(D)	(D)
Louisiana	-	-	-	-	13	1	130	0.2
Maine	-	-	-	-	80	18	357	0.5
Maryland	-	-	-	-	40	50	407	1.0
Massachusetts	-	-	-	-	66	(D)	(D)	0.2
Michigan	-	-	-	-	121	58	372	0.3
Minnesota	15	5	476	0.5	18	4	476	0.4
Mississippi	-	-	-	-	13	10	200	0.1
Missouri	-	-	-	-	70	18	300	1.1
Montana	29	5	388	1.2	16	30	329	0.8
Nebraska	-	-	-	-	55	28	197	0.7
Nevada	-	-	-	-	17	2	410	2.2
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	13	4	292	0.5	46	46	292	0.6
New Mexico	132	30	178	0.8	-	-	-	-
New York	23	46	311	0.4	44	9	333	0.4
North Carolina	-	-	-	-	105	40	440	0.8
North Dakota	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	34	(D)	(D)	0.1
Oklahoma	-	-	-	-	40	28	259	0.1
Oregon	24	24	534	0.5	214	345	534	2.5
Pennsylvania	-	-	-	-	105	90	220	0.5
Rhode Island	4	4	240	0.6	8	8	240	0.3
South Carolina	-	-	-	-	34	7	450	0.6
South Dakota	-	-	-	-	9	4	140	0.1
Tennessee	-	-	-	-	72	12	440	0.3
Texas	19	4	262	0.2	72	50	352	0.6
Utah	34	85	200	0.5	41	58	200	1.6
Vermont	7	3	167	1.0	29	(D)	(D)	1.3
Virginia	9	2	374	0.1	45	71	374	0.3
Washington	34	2,723	647	2.4	167	324	642	0.2
West Virginia	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	90	33	284	0.8
Wyoming	-	-	-	-	1	(D)	(D)	(D)
Water Resources Regions								
Region 01 New England	6	6	216	0.7	154	61	226	0.3
Region 02 Mid-Atlantic	22	6	318	0.4	215	188	(D)	0.6
Region 03 South Atlantic-Gulf	11	3	200	0.1	317	1,208	(D)	0.3
Region 04 Great Lakes	28	47	309	0.4	258	132	299	0.6
Region 05 Ohio	-	-	-	-	131	99	312	0.2
Region 06 Tennessee	-	-	-	-	63	22	440	0.4
Region 07 Upper Mississippi	15	5	476	0.5	96	27	304	1.4
Region 08 Lower Mississippi	-	-	-	-	26	11	178	0.3
Region 09 Souris-Red-Rainy	-	-	-	-	18	4	476	0.4
Region 10 Missouri	20	17	398	0.8	188	162	358	0.9
Region 11 Arkansas-White-Red	-	-	-	-	50	30	266	0.1
Region 12 Texas-Gulf	19	4	262	0.2	72	50	352	0.6
Region 13 Rio Grande	66	23	186	0.9	-	-	-	-
Region 14 Upper Colorado	56	6	263	0.5	-	-	-	-
Region 15 Lower Colorado	38	4	200	0.8	-	-	-	-
Region 16 Great Basin	34	85	200	0.5	58	61	208	1.7
Region 17 Pacific Northwest	135	8,681	510	2.2	432	734	561	1.3
Region 18 California	30	10,488	435	3.5	161	5,001	314	1.8
Region 19 Alaska	-	-	-	-	25	37	314	0.5
Region 20 Hawaii	-	-	-	-	33	17	402	1.9

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. 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 ²			Gravity system			Drip, trickle, or low-flow micro system		
				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 2018	11,562	219,254	1.4	4,224	102,042	1.1	712	7,643	2.1	6,626	109,570	1.7
..... 2013	12,763	227,651	1.3	5,749	113,617	1.7	720	6,253	1.6	6,294	107,781	0.8
2018 DATA												
Alabama	144	549	0.9	19	41	0.2	-	-	-	125	508	1.0
Alaska	50	14	0.5	14	4	0.6	-	-	-	36	10	0.5
Arizona	16	832	0.8	-	-	-	-	-	-	16	832	0.8
Arkansas	125	417	1.2	38	73	1.4	5	20	1.7	82	324	1.1
California	934	50,685	1.9	149	14,509	(D)	15	2	0.4	770	36,174	(D)
Colorado	158	208	0.7	27	3	0.5	72	143	0.7	59	62	0.9
Connecticut	128	176	0.6	15	(D)	0.7	43	(D)	0.5	70	49	0.3
Delaware	9	32	0.2	-	-	-	4	1	0.1	5	31	0.2
Florida	668	13,328	2.8	317	2,513	3.0	-	-	-	351	10,815	2.8
Georgia	532	16,859	1.5	102	567	0.4	-	-	-	430	16,292	1.5
Hawaii	52	42	1.2	-	-	-	-	-	-	52	42	1.2
Idaho	166	190	0.7	52	132	0.3	43	22	2.0	71	36	1.4
Illinois	93	1,023	2.5	35	75	3.0	-	-	-	58	948	2.4
Indiana	168	721	0.1	68	188	0.2	-	-	-	100	532	0.1
Iowa	94	464	1.2	18	72	1.2	-	-	-	76	392	1.2
Kansas	39	34	0.2	14	2	0.2	-	-	-	25	32	0.2
Kentucky	107	140	0.6	10	5	0.5	-	-	-	97	135	0.6
Louisiana	107	333	0.8	27	91	1.0	-	-	-	80	242	0.8
Maine	355	8,460	0.5	267	8,405	0.5	5	1	0.3	83	53	0.5
Maryland	93	145	1.3	4	4	2.7	-	-	-	89	141	1.2
Massachusetts	530	11,642	2.1	345	6,843	1.8	118	4,688	2.5	67	110	1.5
Michigan	582	12,096	0.7	122	3,596	(D)	20	20	(D)	440	8,480	(D)
Minnesota	63	436	0.3	43	423	0.3	-	-	-	20	13	0.6
Mississippi	102	619	0.3	7	14	0.4	-	-	-	95	605	0.3
Missouri	277	398	1.3	33	(D)	(D)	1	(D)	(D)	243	371	1.4
Montana	151	106	1.0	5	1	2.0	25	4	1.5	121	101	1.0
Nebraska	77	161	0.4	25	14	0.2	-	-	-	52	148	0.5
Nevada	3	(Z)	0.5	-	-	-	-	-	-	3	(Z)	0.5
New Hampshire	190	535	0.7	29	55	0.8	49	84	0.9	112	397	0.6
New Jersey	243	15,473	1.2	78	7,524	1.4	36	8	0.3	129	7,941	1.0
New Mexico	90	44	2.1	17	12	0.9	46	15	1.8	27	17	3.2
New York	197	1,800	2.4	91	1,536	2.6	22	2	0.1	84	261	0.9
North Carolina	373	12,768	0.6	227	12,559	0.6	26	21	0.3	120	188	0.3
North Dakota	35	21	0.3	35	21	0.3	-	-	-	-	-	-
Ohio	200	350	0.6	98	(D)	(D)	2	(D)	(D)	100	240	0.7
Oklahoma	66	146	0.9	-	-	-	26	130	1.0	40	16	0.4
Oregon	1,360	20,229	1.0	789	10,607	1.0	29	2,235	1.7	542	7,388	0.9
Pennsylvania	341	783	0.4	70	356	0.3	-	-	-	271	427	0.4
Rhode Island	39	159	0.6	1	(D)	(D)	4	(D)	(D)	34	53	0.9
South Carolina	94	210	0.4	8	2	0.2	-	-	-	86	209	0.4
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee	193	230	0.9	43	55	0.4	21	2	0.1	129	173	1.1
Texas	369	1,380	0.4	19	2	1.7	-	-	-	350	1,379	0.4
Utah	99	234	2.2	27	3	2.5	-	-	-	72	231	2.2
Vermont	136	568	0.7	75	138	(D)	8	33	(D)	53	397	0.8
Virginia	214	438	0.9	23	46	1.0	-	-	-	191	392	0.9
Washington	999	14,766	1.8	465	2,383	1.8	55	150	0.3	479	12,233	1.8
West Virginia	126	185	0.3	65	45	0.4	19	19	0.2	42	120	0.3
Wisconsin	375	28,825	1.0	308	28,786	1.0	18	9	1.0	49	30	1.3
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-
Water Resources Regions												
Region 01 New England	1,301	21,380	1.4	688	15,568	1.1	219	4,782	2.5	394	1,031	0.8
Region 02 Mid-Atlantic	844	17,238	1.2	190	8,301	1.3	40	9	0.3	614	8,928	1.0
Region 03 South Atlantic-Gulf	1,911	44,325	1.6	643	15,617	1.0	26	21	0.3	1,242	28,688	2.0
Region 04 Great Lakes	1,019	17,026	0.9	346	8,091	(D)	68	64	(D)	605	8,872	(D)
Region 05 Ohio	587	876	0.3	245	429	0.3	21	21	0.2	321	426	0.4
Region 06 Tennessee	124	198	0.9	37	79	0.3	21	2	0.1	66	117	1.3
Region 07 Upper Mississippi	539	27,853	1.0	327	26,042	1.0	-	-	-	212	1,811	1.6
Region 08 Lower Mississippi	188	452	1.2	29	91	1.0	-	-	-	159	361	1.3
Region 09 Souris-Red-Rainy	70	79	0.3	52	76	0.3	-	-	-	18	4	0.3
Region 10 Missouri	333	328	0.7	83	(D)	(D)	2	(D)	(D)	248	306	0.7
Region 11 Arkansas-White-Red	305	966	0.9	44	74	1.4	56	221	1.0	205	671	0.8
Region 12 Texas-Gulf	334	1,010	0.4	19	2	1.7	-	-	-	315	1,009	0.4
Region 13 Rio Grande	51	256	0.5	17	(D)	0.9	6	(D)	0.3	28	242	0.5
Region 14 Upper Colorado	97	163	1.0	3	(Z)	0.1	53	101	0.7	41	62	1.6
Region 15 Lower Colorado	53	843	0.8	-	-	-	33	7	1.0	20	836	0.8
Region 16 Great Basin	98	230	2.2	27	3	2.5	-	-	-	71	227	2.2
Region 17 Pacific Northwest	2,672	35,290	1.3	1,311	13,122	1.1	152	2,411	1.6	1,209	19,757	1.5
Region 18 California	934	50,685	1.9	149	14,509	(D)	15	2	0.4	770	36,174	(D)
Region 19 Alaska	50	14	0.5	14	4	0.6	-	-	-	36	10	0.5
Region 20 Hawaii	52	42	1.2	-	-	-	-	-	-	52	42	1.2

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	All other crops ¹ (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 States2018	7,006	1,783,325	1.6	5,229	967,090	1.5	1,777	816,235	1.7
.....2013	26,309	2,320,822	1.7	23,709	1,619,163	1.7	2,600	701,659	1.9
2018 DATA									
Alabama	-	-	-	-	-	-	-	-	-
Alaska	2	(D)	(D)	1	(D)	(D)	1	(D)	(D)
Arizona	132	30,180	2.2	39	3,298	3.2	93	26,882	2.1
Arkansas	16	53	0.5	11	48	0.5	5	5	0.1
California	590	179,469	2.3	197	12,802	2.3	393	166,667	2.3
Colorado	456	36,649	1.0	312	24,877	1.0	144	11,772	0.9
Connecticut	93	817	0.3	93	817	0.3	-	-	-
Delaware	5	(D)	(D)	5	(D)	(D)	-	-	-
Florida	183	419,337	1.0	151	11,684	0.7	32	407,653	1.1
Georgia	37	9,808	0.4	37	9,808	0.4	-	-	-
Hawaii	102	201	0.9	36	36	0.6	66	165	1.0
Idaho	664	207,665	2.5	474	156,750	2.3	190	50,915	3.2
Illinois	69	23,587	0.8	69	23,587	0.8	-	-	-
Indiana	132	30,639	0.5	132	30,639	0.5	-	-	-
Iowa	21	1,734	0.4	21	1,734	0.4	-	-	-
Kansas	102	44,828	0.7	102	44,828	0.7	-	-	-
Kentucky	76	1,126	0.3	75	(D)	(D)	1	(D)	(D)
Louisiana	13	13	0.3	13	13	0.3	-	-	-
Maine	38	210	0.3	38	210	0.3	-	-	-
Maryland	36	1,242	0.3	36	1,242	0.3	-	-	-
Massachusetts	136	772	0.3	136	772	0.3	-	-	-
Michigan	113	3,756	0.4	113	3,756	0.4	-	-	-
Minnesota	17	7,900	0.9	3	5,100	0.8	14	2,800	1.0
Mississippi	16	(D)	0.4	16	(D)	0.4	-	-	-
Missouri	46	612	0.4	45	(D)	(D)	1	(D)	(D)
Montana	369	67,616	1.3	203	37,955	1.4	166	29,661	1.2
Nebraska	427	106,368	0.8	395	104,848	0.8	32	1,520	0.8
Nevada	58	21,962	2.1	23	18,312	2.2	35	3,650	1.8
New Hampshire	32	36	0.3	11	15	0.4	21	21	0.3
New Jersey	81	1,311	0.3	81	1,311	0.3	-	-	-
New Mexico	222	8,234	1.0	90	6,716	1.2	132	1,518	0.4
New York	222	2,623	0.3	199	2,577	0.3	23	46	1.0
North Carolina	253	10,072	0.9	253	10,072	0.9	-	-	-
North Dakota	81	28,698	0.8	27	11,390	0.7	54	17,308	0.8
Ohio	23	276	0.1	23	276	0.1	-	-	-
Oklahoma	65	12,605	0.7	65	12,605	0.7	-	-	-
Oregon	773	205,147	1.4	696	193,534	1.3	77	11,613	2.8
Pennsylvania	192	2,270	0.3	192	2,270	0.3	-	-	-
Rhode Island	11	14	0.7	11	14	0.7	-	-	-
South Carolina	66	1,730	1.0	66	1,730	1.0	-	-	-
South Dakota	24	5,564	0.9	24	5,564	0.9	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-
Texas	223	59,826	2.2	145	21,125	1.2	78	38,701	2.8
Utah	114	3,271	1.9	82	2,014	2.5	32	1,257	1.0
Vermont	7	51	0.3	7	51	0.3	-	-	-
Virginia	92	1,803	0.4	92	1,803	0.4	-	-	-
Washington	444	196,991	2.1	363	189,944	2.0	81	7,047	2.6
West Virginia	-	-	-	-	-	-	-	-	-
Wisconsin	10	(D)	0.3	10	(D)	0.3	-	-	-
Wyoming	122	45,491	2.1	16	9,107	1.7	106	36,384	2.2
Water Resources Regions									
Region 01 New England	315	1,896	0.3	294	1,875	0.3	21	21	0.3
Region 02 Mid-Atlantic	387	6,548	0.3	364	6,502	0.3	23	46	1.0
Region 03 South Atlantic-Gulf	647	442,766	1.0	615	35,113	0.7	32	407,653	1.1
Region 04 Great Lakes	230	5,121	0.3	230	5,121	0.3	-	-	-
Region 05 Ohio	212	24,142	0.6	211	(D)	(D)	1	(D)	(D)
Region 06 Tennessee	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	150	36,537	0.7	150	36,537	0.7	-	-	-
Region 08 Lower Mississippi	30	(D)	(D)	24	(D)	(D)	6	(D)	(D)
Region 09 Souris-Red-Rainy	15	4,400	0.9	1	(D)	(D)	14	(D)	(D)
Region 10 Missouri	1,319	292,550	1.1	905	198,643	1.0	414	93,907	1.5
Region 11 Arkansas-White-Red	253	65,891	0.9	213	64,521	0.9	40	1,370	1.0
Region 12 Texas-Gulf	166	42,936	2.6	88	4,235	0.6	78	38,701	2.8
Region 13 Rio Grande	189	4,298	0.8	90	2,813	1.0	99	1,485	0.3
Region 14 Upper Colorado	140	5,560	1.3	83	5,239	1.3	57	321	1.2
Region 15 Lower Colorado	134	30,680	2.3	39	3,298	3.2	95	27,382	2.2
Region 16 Great Basin	152	27,294	2.0	85	22,387	2.1	67	4,907	1.6
Region 17 Pacific Northwest	1,975	612,779	2.0	1,603	542,124	1.9	372	70,655	3.0
Region 18 California	588	178,969	2.3	197	12,802	2.3	391	166,167	2.3
Region 19 Alaska	2	(D)	(D)	1	(D)	(D)	1	(D)	(D)
Region 20 Hawaii	102	201	0.9	36	36	0.6	66	165	1.0

See footnote(s) at end of table.

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Table 36. Field Water Distribution for Selected Crops Harvested in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Irrigated pastureland, all types								
	Farms	Irrigated acres	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 2018	51,644	4,004,854	1.6	19,940	998,032	1.4	31,704	3,006,822	1.7
..... 2013	42,733	3,034,409	1.6	19,164	860,538	1.4	23,569	2,173,871	1.7
2018 DATA									
Alabama	7	128	0.5	7	128	0.5	-	-	-
Alaska	-	-	-	-	-	-	-	-	-
Arizona	1,117	28,650	2.1	180	6,048	2.1	937	22,602	2.0
Arkansas	57	10,456	0.3	28	1,680	0.2	29	8,776	0.3
California	5,237	699,056	2.7	680	12,704	1.9	4,557	686,352	2.7
Colorado	5,243	407,293	1.4	771	57,545	1.3	4,472	349,748	1.4
Connecticut	3	60	0.5	3	60	0.5	-	-	-
Delaware	22	110	1.0	22	110	1.0	-	-	-
Florida	583	33,841	1.7	496	18,481	2.1	87	15,360	1.2
Georgia	164	7,751	0.3	164	7,751	0.3	-	-	-
Hawaii	213	3,895	1.1	147	3,235	1.2	66	660	0.8
Idaho	8,552	450,482	1.9	3,246	146,005	1.8	5,306	304,477	2.0
Illinois	17	85	0.8	17	85	0.8	-	-	-
Indiana	36	162	0.3	36	162	0.3	-	-	-
Iowa	-	-	-	-	-	-	-	-	-
Kansas	33	9,271	1.1	33	9,271	1.1	-	-	-
Kentucky	26	52	0.1	-	-	-	26	52	0.1
Louisiana	27	4,910	0.3	-	-	-	27	4,910	0.3
Maine	59	59	1.0	32	32	1.0	27	27	1.0
Maryland	8	(D)	(D)	8	(D)	(D)	-	-	-
Massachusetts	28	336	1.0	-	-	-	28	336	1.0
Michigan	50	5,550	1.0	50	5,550	1.0	-	-	-
Minnesota	19	228	0.4	19	228	0.4	-	-	-
Mississippi	26	525	0.3	6	372	0.2	20	153	0.4
Missouri	125	16,576	1.2	107	16,468	1.2	18	108	1.0
Montana	4,090	507,345	1.1	1,403	95,788	1.2	2,687	411,557	1.1
Nebraska	772	73,612	0.8	505	54,594	0.7	267	19,018	0.8
Nevada	776	137,136	2.0	83	673	2.9	693	136,463	2.0
New Hampshire	11	18	0.6	11	18	0.6	-	-	-
New Jersey	58	760	1.0	58	760	1.0	-	-	-
New Mexico	3,216	99,552	1.2	691	24,861	1.3	2,525	74,691	1.2
New York	23	23	1.0	-	-	-	23	23	1.0
North Carolina	94	5,796	0.4	94	5,796	0.4	-	-	-
North Dakota	-	-	-	-	-	-	-	-	-
Ohio	2	(D)	(D)	2	(D)	(D)	-	-	-
Oklahoma	229	69,960	0.5	186	59,060	0.4	43	10,900	1.3
Oregon	5,949	344,462	1.7	3,900	118,199	1.5	2,049	226,263	1.8
Pennsylvania	24	376	0.1	24	376	0.1	-	-	-
Rhode Island	10	(D)	(D)	10	(D)	(D)	-	-	-
South Carolina	140	4,669	0.8	140	4,669	0.8	-	-	-
South Dakota	108	8,681	1.3	-	-	-	108	8,681	1.3
Tennessee	-	-	-	-	-	-	-	-	-
Texas	2,193	223,515	1.0	1,307	140,341	1.2	886	83,174	0.6
Utah	6,324	255,176	1.8	2,178	64,266	1.5	4,146	190,910	1.9
Vermont	2	(D)	(D)	2	(D)	(D)	-	-	-
Virginia	-	-	-	-	-	-	-	-	-
Washington	3,545	139,408	1.7	3,036	92,895	2.0	509	46,513	1.1
West Virginia	-	-	-	-	-	-	-	-	-
Wisconsin	19	399	0.2	19	399	0.2	-	-	-
Wyoming	2,407	454,414	1.1	239	49,346	1.7	2,168	405,068	1.0
Water Resources Regions									
Region 01 New England	111	483	0.9	56	120	0.7	55	363	1.0
Region 02 Mid-Atlantic	135	1,277	0.7	112	(D)	(D)	23	(D)	(D)
Region 03 South Atlantic-Gulf	984	52,584	1.2	884	37,082	1.3	100	15,502	1.2
Region 04 Great Lakes	52	5,606	1.0	52	5,606	1.0	-	-	-
Region 05 Ohio	28	54	0.1	2	(D)	(D)	26	(D)	(D)
Region 06 Tennessee	23	115	0.3	23	115	0.3	-	-	-
Region 07 Upper Mississippi	99	1,194	1.0	99	1,194	1.0	-	-	-
Region 08 Lower Mississippi	58	5,357	0.3	5	10	0.3	53	5,347	0.3
Region 09 Souris-Red-Rainy	23	437	1.0	23	437	1.0	-	-	-
Region 10 Missouri	6,420	789,649	1.1	1,541	178,106	1.3	4,879	611,543	1.1
Region 11 Arkansas-White-Red	1,178	212,768	0.9	524	147,138	0.9	654	65,630	0.9
Region 12 Texas-Gulf	1,913	165,828	0.9	1,111	89,510	1.1	802	76,318	0.7
Region 13 Rio Grande	2,618	113,609	1.3	415	18,678	1.5	2,203	94,931	1.2
Region 14 Upper Colorado	6,703	570,461	1.4	1,810	84,669	1.4	4,893	485,792	1.4
Region 15 Lower Colorado	1,469	37,676	2.0	282	6,968	2.2	1,187	30,708	2.0
Region 16 Great Basin	5,004	295,090	1.9	1,360	21,555	1.6	3,644	273,535	1.9
Region 17 Pacific Northwest	19,000	959,158	1.7	10,613	360,501	1.8	8,387	598,657	1.7
Region 18 California	5,613	789,613	2.6	881	41,852	1.0	4,732	747,761	2.6
Region 19 Alaska	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	213	3,895	1.1	147	3,235	1.2	66	660	0.8

¹ 2013 data include nursery and other horticultural crops grown in the open.

² Includes other pressurized systems.

Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Corn for silage or greenchop												
	Farms	Irrigated acres harvested	Chemigation				Water source ¹						
			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	2018 2013	7,930 8,382	1,648,789 1,729,358	1,912 2,087	479,350 440,327	630 325	153,271 66,653	4,169 4,329	1,005,446 1,164,020	1,431 1,309	320,085 306,772	3,581 4,318	606,782 562,021
2018 DATA													
Alabama	-	-	-	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	159	65,219	76	27,808	34	4,696	63	26,979	9	5,460	127	46,881	
Arkansas	5	400	-	-	-	-	-	-	5	400	-	-	
California	1,515	454,607	254	80,989	128	38,922	813	284,445	520	166,079	841	201,804	
Colorado	730	133,455	246	45,026	93	10,650	424	90,725	130	21,468	381	50,958	
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	
Delaware	9	780	-	-	-	-	9	780	-	-	-	-	
Florida	12	13,130	4	(D)	-	-	12	10,550	3	6,300	-	-	
Georgia	37	2,888	6	1,200	6	1,200	37	2,888	-	-	-	-	
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	
Idaho	985	235,357	150	45,813	46	27,510	240	73,854	101	36,263	707	127,036	
Illinois	-	-	-	-	-	-	-	-	-	-	-	-	
Indiana	98	8,504	-	-	-	-	98	8,504	9	144	-	-	
Iowa	18	720	-	-	-	-	-	-	18	720	-	-	
Kansas	301	72,418	92	32,479	16	2,345	287	70,681	47	5,388	7	4,160	
Kentucky	2	(D)	-	-	-	-	2	(D)	-	-	-	-	
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-	
Maine	-	-	-	-	-	-	-	-	-	-	-	-	
Maryland	14	2,800	-	-	-	-	14	2,800	-	-	-	-	
Massachusetts	29	58	-	-	-	-	-	-	29	58	-	-	
Michigan	170	14,790	30	2,500	-	-	99	6,650	101	7,440	10	700	
Minnesota	174	17,807	37	1,973	19	893	174	17,807	-	-	-	-	
Mississippi	7	665	-	-	-	-	-	-	7	665	-	-	
Missouri	16	2,720	-	-	-	-	-	-	16	2,720	-	-	
Montana	216	31,210	42	5,300	8	1,580	2	(D)	8	(D)	206	30,490	
Nebraska	825	109,372	190	43,036	17	643	675	102,273	104	11,632	103	4,465	
Nevada	98	9,501	24	5,115	7	2,940	16	2,311	-	-	96	9,052	
New Hampshire	-	-	2	(D)	-	-	-	-	-	-	-	-	
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-	
New Mexico	316	80,893	108	30,781	4	4,400	276	72,631	5	(D)	45	8,737	
New York	2	(D)	-	-	-	-	-	-	2	(D)	-	-	
North Carolina	-	-	-	-	-	-	-	-	-	-	-	-	
North Dakota	45	3,279	-	-	-	-	14	1,200	31	1,829	9	(D)	
Ohio	10	750	-	-	10	60	-	-	10	750	-	-	
Oklahoma	14	7,124	13	858	-	-	13	(D)	1	(D)	-	-	
Oregon	205	17,515	42	1,360	7	(D)	55	(D)	31	(D)	119	12,063	
Pennsylvania	24	(D)	-	-	-	-	2	(D)	22	22	-	-	
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	
South Carolina	52	5,200	-	-	-	-	26	2,860	26	2,340	-	-	
South Dakota	46	5,250	4	2,800	-	-	-	-	-	-	46	5,250	
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	
Texas	378	166,040	216	92,164	98	43,820	378	161,040	44	19,000	-	-	
Utah	653	61,833	124	21,070	86	9,394	160	21,726	73	6,926	454	34,081	
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	
Virginia	71	5,122	24	312	-	-	24	672	47	4,450	-	-	
Washington	318	62,858	108	19,153	1	(D)	87	(D)	1	(D)	231	49,031	
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	
Wisconsin	146	24,703	65	10,393	29	1,579	146	24,703	-	-	-	-	
Wyoming	230	30,802	55	8,070	21	2,184	23	1,622	31	8,156	199	21,524	
Water Resources Regions													
Region 01 New England	29	58	2	(D)	-	-	-	-	29	58	-	-	
Region 02 Mid-Atlantic	118	9,174	24	(D)	-	-	49	4,702	69	4,472	-	-	
Region 03 South Atlantic-Gulf	101	21,218	10	2,250	6	1,200	75	16,298	29	8,640	-	-	
Region 04 Great Lakes	299	34,097	64	6,540	20	860	216	24,680	113	8,717	10	700	
Region 05 Ohio	19	139	-	-	-	-	19	139	-	-	-	-	
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	
Region 07 Upper Mississippi	269	29,865	68	8,326	38	1,672	269	29,865	9	144	-	-	
Region 08 Lower Mississippi	7	665	-	-	-	-	-	-	7	665	-	-	
Region 09 Souris-Red-Rainy	15	3,000	-	-	-	-	15	3,000	-	-	-	-	
Region 10 Missouri	1,998	293,910	516	105,741	92	14,182	1,151	195,513	293	40,170	826	92,986	
Region 11 Arkansas-White-Red	553	159,271	186	67,610	68	17,189	475	145,336	122	33,089	42	7,392	
Region 12 Texas-Gulf	402	138,842	178	63,383	70	29,000	402	133,842	25	6,500	-	-	
Region 13 Rio Grande	101	34,101	61	22,889	4	4,400	62	26,339	-	-	44	8,237	
Region 14 Upper Colorado	140	24,419	47	2,851	27	1,251	4	1,200	-	-	140	23,919	
Region 15 Lower Colorado	191	66,440	78	27,928	34	4,696	63	26,979	9	5,460	159	48,102	
Region 16 Great Basin	731	73,315	131	25,095	96	12,844	192	25,837	73	6,926	510	42,614	
Region 17 Pacific Northwest	1,447	306,538	295	65,456	47	27,055	364	87,271	133	39,165	1,014	181,898	
Region 18 California	1,510	453,737	252	80,869	128	38,922	813	284,445	520	166,079	836	200,934	
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Sorghum for grain or seed												
	Farms	Irrigated acres harvested	Chemigation				Water source ¹						
			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	2018 2013	1,594 3,923	286,851 809,579	193 486	37,603 123,473	54 80	10,597 39,232	1,307 3,396	232,714 722,623	128 170	11,277 25,804	241 489	50,682 86,863
2018 DATA													
Alabama	-	-	-	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	41	22,346	-	-	-	-	-	34	5,346	-	-	24	20,026
Arkansas	38	2,865	-	-	-	-	-	26	2,105	17	835	-	-
California	7	1,750	-	-	-	-	-	7	1,750	-	-	-	-
Colorado	174	15,935	31	1,180	45	5,940	77	8,145	24	648	97	7,790	
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	-	-	-	-	-	-	-	-	-	-	-	-	-
Georgia	30	3,419	23	2,898	-	-	30	3,419	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois	5	250	-	-	-	-	5	250	-	-	-	-	-
Indiana	-	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	490	86,970	35	4,577	1	(D)	475	86,640	18	615	14	3,360	
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	-
Michigan	24	3,681	3	300	-	-	24	3,681	-	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana	16	1,824	-	-	-	-	-	-	-	-	16	1,824	
Nebraska	110	5,077	5	465	-	-	94	4,755	-	-	30	350	
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	73	5,982	5	1,000	-	-	66	5,954	7	28	-	-	
New York	-	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma	92	12,353	4	748	-	-	66	12,327	26	26	-	-	
Oregon	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas	484	123,669	87	26,435	8	(D)	393	97,612	36	9,125	60	17,332	
Utah	-	-	-	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming	10	730	-	-	-	-	10	730	-	-	-	-	-
Water Resources Regions													
Region 01 New England	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf	30	3,419	23	2,898	-	-	30	3,419	-	-	-	-	-
Region 04 Great Lakes	24	3,681	3	300	-	-	24	3,681	-	-	-	-	-
Region 05 Ohio	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	5	250	-	-	-	-	5	250	-	-	-	-	-
Region 08 Lower Mississippi	16	955	-	-	-	-	16	955	5	75	-	-	-
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri	243	22,975	5	465	-	-	211	20,829	-	-	46	2,174	
Region 11 Arkansas-White-Red	911	181,709	118	25,590	46	6,797	797	172,243	92	2,774	64	10,985	
Region 12 Texas-Gulf	225	48,474	39	7,350	8	3,800	145	23,142	24	8,400	60	17,332	
Region 13 Rio Grande	45	1,127	5	1,000	-	-	38	1,099	7	28	-	-	
Region 14 Upper Colorado	47	165	-	-	-	-	-	-	-	-	47	165	
Region 15 Lower Colorado	41	22,346	-	-	-	-	34	5,346	-	-	24	20,026	
Region 16 Great Basin	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California	7	1,750	-	-	-	-	7	1,750	-	-	-	-	
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Wheat for grain or seed												
	Farms	Irrigated acres harvested	Chemigation				Water source ¹						
			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	2018 2013	8,760 12,974	2,311,703 3,197,501	1,859 2,290	619,104 732,345	562 413	241,876 147,167	5,042 8,296	1,423,482 2,176,732	712 1,203	165,315 265,325	3,669 4,430	826,783 873,083
2018 DATA													
Alabama		26	2,915	-	-	-	-	26	2,915	-	-	-	-
Alaska		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Arizona		170	76,229	72	33,066	37	9,853	63	21,149	4	2,040	126	64,507
Arkansas		5	5,000	-	-	-	-	5	5,000	-	-	-	-
California		674	207,599	107	28,349	35	9,544	313	87,395	126	41,205	399	142,588
Colorado		521	75,935	114	13,612	13	1,716	368	63,210	27	354	185	17,283
Connecticut		-	-	-	-	-	-	-	-	-	-	-	-
Delaware		101	10,572	5	1,000	5	1,000	95	8,172	-	-	6	2,400
Florida		-	-	-	-	-	-	-	-	-	-	-	-
Georgia		102	22,020	24	4,200	-	-	102	22,020	-	-	-	-
Hawaii		-	-	-	-	-	-	-	-	-	-	-	-
Idaho		1,906	597,386	370	158,668	125	52,350	625	305,475	207	54,725	1,318	241,006
Illinois		65	5,904	18	1,260	-	-	47	5,004	18	900	-	-
Indiana		25	5,150	-	-	-	-	25	5,150	-	-	-	-
Iowa		-	-	-	-	-	-	-	-	-	-	-	-
Kansas		976	261,493	184	51,207	17	3,588	947	258,848	17	1,928	30	1,665
Kentucky		-	-	-	-	-	-	-	-	-	-	-	-
Louisiana		-	-	-	-	-	-	-	-	-	-	-	-
Maine		-	-	-	-	-	-	-	-	-	-	-	-
Maryland		29	4,719	-	-	-	-	28	(D)	1	(D)	-	-
Massachusetts		-	-	-	-	-	-	-	-	-	-	-	-
Michigan		125	17,673	-	-	-	-	125	(D)	2	(D)	-	-
Minnesota		51	10,040	-	-	-	-	51	10,040	-	-	-	-
Mississippi		-	-	-	-	-	-	-	-	-	-	-	-
Missouri		122	40,257	-	-	-	-	106	36,577	16	3,680	-	-
Montana		555	145,394	149	45,160	45	13,600	48	7,053	43	16,657	488	121,972
Nebraska		370	64,530	114	32,598	5	12,500	333	62,275	-	-	39	2,255
Nevada		28	19,698	16	833	-	-	7	4,323	-	-	21	15,375
New Hampshire		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey		12	2,217	-	-	-	-	11	(D)	1	(D)	-	-
New Mexico		177	41,372	41	12,590	34	10,540	108	25,838	34	102	40	15,952
New York		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina		28	1,850	-	-	-	-	28	1,850	-	-	-	-
North Dakota		167	41,094	6	(D)	5	(D)	74	8,380	-	-	97	33,914
Ohio		14	1,370	-	-	-	-	1	(D)	13	(D)	-	-
Oklahoma		325	103,858	96	45,347	68	39,419	286	87,378	14	7,730	25	8,750
Oregon		269	53,972	41	15,065	21	6,373	81	11,520	81	14,260	162	32,316
Pennsylvania		-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina		19	3,650	-	-	-	-	19	3,650	7	1,225	-	-
South Dakota		47	7,434	19	2,470	-	-	42	5,434	-	-	5	2,000
Tennessee		14	700	-	-	-	-	14	700	-	-	-	-
Texas		832	260,803	226	74,528	58	21,392	792	257,623	55	11,980	24	2,024
Utah		434	30,674	8	880	4	3,664	8	1,760	31	1,286	403	28,588
Vermont		-	-	-	-	-	-	-	-	-	-	-	-
Virginia		4	1,324	-	-	-	-	-	-	4	1,324	-	-
Washington		445	166,293	213	93,138	78	53,427	207	86,635	5	2,360	242	77,298
West Virginia		-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin		21	1,189	2	(D)	2	(D)	21	1,189	-	-	-	-
Wyoming		100	21,380	34	3,933	10	2,010	35	2,999	6	1,491	59	16,890
Water Resources Regions													
Region 01 New England		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic		146	18,832	5	(D)	5	(D)	134	(D)	6	1,874	6	(D)
Region 03 South Atlantic-Gulf		149	27,520	24	4,200	-	-	149	27,520	7	1,225	-	-
Region 04 Great Lakes		143	20,543	-	-	-	-	133	19,475	12	1,068	-	-
Region 05 Ohio		31	3,122	-	-	-	-	28	2,672	3	450	-	-
Region 06 Tennessee		26	2,915	-	-	-	-	26	2,915	-	-	-	-
Region 07 Upper Mississippi		120	13,253	20	1,860	2	(D)	94	11,681	26	1,572	-	-
Region 08 Lower Mississippi		117	40,997	-	-	-	-	117	40,997	-	-	-	-
Region 09 Souris-Red-Rainy		17	6,070	1	(D)	-	-	17	6,070	-	-	-	-
Region 10 Missouri		1,593	342,703	362	91,828	62	28,110	873	159,434	48	18,878	712	166,471
Region 11 Arkansas-White-Red		1,778	570,204	423	157,929	115	58,679	1,645	539,053	56	19,530	138	23,585
Region 12 Texas-Gulf		431	56,317	86	11,720	28	5,720	391	53,797	40	1,320	20	1,200
Region 13 Rio Grande		120	21,022	82	17,080	34	10,540	86	20,920	34	102	9	4,360
Region 14 Upper Colorado		83	(D)	17	2,196	13	1,716	-	-	-	-	83	(D)
Region 15 Lower Colorado		173	79,858	75	36,695	38	12,242	65	22,389	4	2,040	127	66,896
Region 16 Great Basin		581	86,093	20	1,233	4	3,664	82	32,036	31	1,286	483	53,731
Region 17 Pacific Northwest		2,580	804,426	640	268,343	227	112,450	890	383,801	319	74,765	1,693	354,092
Region 18 California		671	203,970	104	24,720	34	7,155	311	86,155	126	41,205	398	140,199
Region 19 Alaska		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Region 20 Hawaii		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Soybeans for beans											
	Farms	Irrigated acres harvested	Chemigation				Water source ¹					
			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	2018 21,316	8,215,031	1,224	383,511	597	204,007	19,508	7,594,411	2,970	604,100	1,428	224,447
.....	2013 21,755	7,413,276	1,173	263,701	569	187,665	20,080	6,858,900	2,739	613,234	1,510	175,358
2018 DATA												
Alabama	119	21,199	-	-	-	-	61	13,710	54	6,419	10	3,000
Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas	2,367	2,154,112	79	42,877	59	39,219	2,277	1,979,431	623	283,064	22	9,040
California	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	84	13,428	38	5,376	1	(D)	84	13,428	-	-	-	-
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	314	62,087	12	9,036	13	9,079	313	57,770	17	3,453	6	1,614
Florida	30	3,060	-	-	-	-	27	2,700	-	-	3	360
Georgia	153	26,770	47	14,345	-	-	126	24,860	52	1,910	-	-
Hawaii	7	250	4	199	1	(D)	-	-	3	(D)	4	(D)
Idaho	2	(D)	-	-	-	-	-	-	-	-	2	(D)
Illinois	618	184,406	-	-	-	-	565	175,888	58	6,410	17	2,108
Indiana	848	175,327	18	450	9	450	783	158,253	85	14,124	37	2,950
Iowa	201	45,974	50	5,510	34	5,510	201	45,974	-	-	-	-
Kansas	1,683	390,288	177	51,224	98	18,151	1,464	360,473	151	13,690	180	20,710
Kentucky	54	21,848	1	(D)	1	(D)	43	12,956	14	9,636	-	-
Louisiana	638	418,548	7	9,100	21	12,544	622	388,658	115	34,320	13	3,640
Maine	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	247	44,447	26	3,269	26	3,269	226	36,509	73	12,423	4	800
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-
Michigan	809	192,450	50	18,362	49	17,320	760	161,011	259	32,202	19	2,760
Minnesota	891	104,194	60	10,284	-	-	839	97,762	56	4,238	23	2,821
Mississippi	993	1,053,930	21	17,185	19	13,255	949	1,006,770	184	64,630	-	-
Missouri	1,139	640,311	11	12,900	11	6,900	1,025	614,258	162	36,013	-	-
Montana	23	4,078	8	2,040	8	2,040	-	-	4	520	19	3,558
Nebraska	7,821	2,202,453	451	147,652	205	55,219	7,445	2,096,348	623	32,081	814	109,379
Nevada	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	143	12,269	-	-	-	-	79	6,304	68	6,265	-	-
New Mexico	10	(D)	-	-	-	-	-	-	-	-	10	(D)
New York	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina	103	6,614	-	-	-	-	31	2,850	72	3,764	-	-
North Dakota	248	58,653	41	8,818	5	2,500	177	40,434	55	7,498	31	11,471
Ohio	42	4,745	-	-	-	-	14	2,246	27	(D)	1	(D)
Oklahoma	166	62,313	30	8,436	30	8,436	121	48,043	29	6,520	29	7,750
Oregon	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania	16	80	16	(D)	-	-	16	80	16	80	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	148	18,156	25	250	-	-	113	15,228	17	3,553	25	250
South Dakota	420	97,467	20	8,956	2	(D)	332	60,230	23	3,055	70	34,382
Tennessee	312	80,717	6	2,520	-	-	305	77,297	7	3,420	-	-
Texas	133	29,032	9	2,320	-	-	83	23,694	20	2,000	30	3,338
Utah	-	-	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	67	9,749	-	-	-	-	-	-	67	9,749	-	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	445	73,832	17	2,046	5	576	427	71,246	36	720	37	1,866
Wyoming	22	2,200	-	-	-	-	-	-	-	-	22	2,200
Water Resources Regions												
Region 01 New England	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	787	128,632	54	12,385	39	12,348	634	100,663	241	31,970	10	2,414
Region 03 South Atlantic-Gulf	536	71,995	72	14,595	-	-	335	52,521	212	19,983	28	610
Region 04 Great Lakes	1,138	255,751	71	18,848	52	17,356	1,069	220,317	287	34,190	38	4,767
Region 05 Ohio	568	142,249	1	(D)	10	726	521	126,935	67	15,808	1	(D)
Region 06 Tennessee	67	17,009	6	(D)	-	-	35	9,365	27	(D)	10	3,000
Region 07 Upper Mississippi	2,089	385,280	52	7,542	2	(D)	1,880	351,552	219	29,153	91	7,135
Region 08 Lower Mississippi	4,595	3,951,114	107	69,162	99	65,018	4,499	3,727,613	799	335,892	12	6,045
Region 09 Souris-Red-Rainy	230	42,570	56	10,898	-	-	145	31,802	105	10,835	4	(D)
Region 10 Missouri	9,518	2,564,114	593	175,281	256	75,414	8,791	2,365,791	811	59,959	1,107	179,254
Region 11 Arkansas-White-Red	1,701	651,431	208	71,805	138	32,587	1,561	606,598	199	59,905	81	16,831
Region 12 Texas-Gulf	68	4,592	-	-	-	-	38	1,254	-	-	30	3,338
Region 13 Rio Grande	10	(D)	-	-	-	-	-	-	-	-	10	(D)
Region 14 Upper Colorado	-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado	-	-	-	-	-	-	-	-	-	-	-	-
Region 16 Great Basin	-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest	2	(D)	-	-	-	-	-	-	-	-	2	(D)
Region 18 California	-	-	-	-	-	-	-	-	-	-	-	-
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	7	250	4	199	1	(D)	-	-	3	(D)	4	(D)

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Beans, dry edible											
	Farms	Irrigated acres harvested	Chemigation				Water source ¹					
			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	2,275	416,608	546	115,139	198	38,593	1,053	209,978	211	17,040	1,265	204,990
2013	2,793	433,590	356	109,391	137	50,067	903	222,123	292	38,259	1,836	204,574
2018 DATA												
Alabama	-	-	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	9	7,274	1	(D)	-	-	3	(D)	-	-	8	3,072
Arkansas	-	-	-	-	-	-	-	-	-	-	-	-
California	244	40,176	112	21,781	19	5,679	155	16,858	38	1,922	148	30,101
Colorado	141	18,913	49	8,148	5	(D)	83	15,913	14	(D)	44	(D)
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	-	-	-	-
Florida	27	270	27	270	-	-	27	270	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	641	77,397	57	(D)	26	7,245	43	5,857	52	4,731	559	66,809
Illinois	-	-	-	-	-	-	-	-	-	-	-	-
Indiana	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	13	8,210	-	-	4	1,440	13	8,210	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-
Maine	32	32	-	-	-	-	29	29	32	32	-	-
Maryland	4	420	4	420	-	-	4	420	-	-	-	-
Massachusetts	28	28	-	-	-	-	-	-	-	-	28	28
Michigan	111	18,223	-	-	-	-	102	14,758	12	2,124	9	1,665
Minnesota	130	49,311	34	23,944	4	4,000	126	46,846	27	2,705	-	-
Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-	-	-	-
Montana	24	3,089	16	2,080	-	-	-	-	4	477	20	2,612
Nebraska	414	103,771	96	25,950	26	4,840	241	50,484	14	(D)	237	56,517
Nevada	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	2	(D)	1	(D)	-	-	-	-	-	-	2	(D)
New York	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota	63	21,260	-	-	-	-	59	20,540	-	-	4	720
Ohio	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma	-	-	-	-	-	-	-	-	-	-	-	-
Oregon	35	4,827	1	(D)	-	-	2	(D)	7	(D)	26	4,320
Pennsylvania	24	24	-	-	-	-	22	(D)	-	-	2	(D)
Rhode Island	9	9	-	-	-	-	9	9	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota	1	(D)	-	-	1	(D)	-	-	1	(D)	-	-
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Texas	11	1,110	5	620	-	-	6	(D)	-	-	5	(D)
Utah	4	208	-	-	-	-	-	-	-	-	4	208
Vermont	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Washington	202	27,673	120	13,133	92	12,007	61	(D)	1	(D)	140	20,326
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	11	8,548	2	(D)	-	-	11	8,548	-	-	-	-
Wyoming	95	19,440	21	1,302	21	1,302	57	6,628	9	2,781	29	10,031
Water Resources Regions												
Region 01 New England	69	69	-	-	-	-	38	38	32	32	28	28
Region 02 Mid-Atlantic	6	422	4	420	-	-	4	(D)	-	-	2	(D)
Region 03 South Atlantic-Gulf	27	270	27	(D)	-	-	27	270	-	-	-	-
Region 04 Great Lakes	133	18,245	-	-	-	-	124	14,780	12	2,124	9	(D)
Region 05 Ohio	-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	129	51,899	32	23,539	4	4,000	129	51,234	19	665	-	-
Region 08 Lower Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy	71	26,500	4	2,800	-	-	67	24,700	8	2,040	-	-
Region 10 Missouri	675	154,416	182	37,480	57	9,662	393	81,205	39	5,244	321	71,897
Region 11 Arkansas-White-Red	2	(D)	-	-	-	-	2	(D)	-	-	-	-
Region 12 Texas-Gulf	10	920	5	620	-	-	5	300	-	-	5	620
Region 13 Rio Grande	-	-	-	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado	15	(D)	1	(D)	-	-	-	-	-	-	15	(D)
Region 15 Lower Colorado	9	7,274	1	(D)	-	-	3	(D)	-	-	8	3,072
Region 16 Great Basin	4	208	-	-	-	-	-	-	-	-	4	208
Region 17 Pacific Northwest	881	110,047	178	25,622	118	19,252	106	13,579	63	5,013	725	91,455
Region 18 California	244	40,176	112	21,781	19	5,679	155	16,858	38	1,922	148	30,101
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Rice												
	Farms	Irrigated acres harvested	Chemigation				Water source ¹						
			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	2018 2013	3,813 5,613	2,370,113 3,132,894	279 464	143,997 179,944	134 381	78,359 147,285	2,812 3,529	1,689,334 1,843,682	902 1,367	378,735 544,887	958 2,103	500,941 998,106
2018 DATA													
Alabama	-	-	-	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas	1,715	1,190,434	74	25,392	53	20,368	1,635	1,054,205	518	232,505	34	5,910	
California	837	393,275	154	70,039	66	33,961	178	66,860	142	66,352	723	322,658	
Colorado	-	-	-	-	-	-	-	-	-	-	-	-	
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	
Delaware	-	-	-	-	-	-	-	-	-	-	-	-	
Florida	16	(D)	-	-	-	-	-	-	8	(D)	8	18,999	
Georgia	-	-	-	-	-	-	-	-	-	-	-	-	
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	
Illinois	1	(D)	-	-	-	-	1	(D)	-	-	-	-	
Indiana	-	-	-	-	-	-	-	-	-	-	-	-	
Iowa	-	-	-	-	-	-	-	-	-	-	-	-	
Kansas	-	-	-	-	-	-	-	-	-	-	-	-	
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-	
Louisiana	561	282,375	26	3,536	-	-	473	232,287	153	45,759	26	15,002	
Maine	-	-	-	-	-	-	-	-	-	-	-	-	
Maryland	-	-	-	-	-	-	-	-	-	-	-	-	
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	
Michigan	-	-	-	-	-	-	-	-	-	-	-	-	
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-	
Mississippi	148	99,888	-	-	-	-	146	96,228	49	(D)	-	-	
Missouri	257	173,652	10	21,000	-	-	257	173,636	8	16	-	-	
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	1	(D)	-	-	-	-	1	(D)	-	-	-	-	
Texas	277	206,790	15	24,030	15	24,030	121	(D)	24	19,000	167	138,372	
Utah	-	-	-	-	-	-	-	-	-	-	-	-	
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	
Washington	-	-	-	-	-	-	-	-	-	-	-	-	
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	
Wisconsin	-	-	-	-	-	-	-	-	-	-	-	-	
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	
Water Resources Regions													
Region 01 New England	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf	16	(D)	-	-	-	-	-	-	8	4,000	8	(D)	
Region 04 Great Lakes	-	-	-	-	-	-	-	-	-	-	-	-	
Region 05 Ohio	-	-	-	-	-	-	-	-	-	-	-	-	
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	
Region 07 Upper Mississippi	1	(D)	-	-	-	-	1	(D)	-	-	-	-	
Region 08 Lower Mississippi	2,279	1,456,107	100	28,928	53	20,368	2,128	1,282,463	634	237,280	50	19,432	
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-	-	-	-	
Region 10 Missouri	-	-	-	-	-	-	-	-	-	-	-	-	
Region 11 Arkansas-White-Red	403	290,592	10	21,000	-	-	384	274,243	94	52,103	10	(D)	
Region 12 Texas-Gulf	277	206,790	15	24,030	15	24,030	121	(D)	24	19,000	167	138,372	
Region 13 Rio Grande	-	-	-	-	-	-	-	-	-	-	-	-	
Region 14 Upper Colorado	-	-	-	-	-	-	-	-	-	-	-	-	
Region 15 Lower Colorado	-	-	-	-	-	-	-	-	-	-	-	-	
Region 16 Great Basin	-	-	-	-	-	-	-	-	-	-	-	-	
Region 17 Pacific Northwest	-	-	-	-	-	-	-	-	-	-	-	-	
Region 18 California	837	393,275	154	70,039	66	33,961	178	66,860	142	66,352	723	322,658	
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Other small grains (barley, oats, rye, etc.)											
	Farms	Irrigated acres harvested	Chemigation				Water source ¹					
			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 2018 2013	5,767 6,258	1,026,289 1,209,527	677 801	147,936 167,846	289 203	68,478 63,353	1,621 2,125	370,265 487,333	948 812	157,088 140,103	3,606 3,903	566,757 640,456
2018 DATA												
Alabama	4	8	-	-	-	-	-	-	4	4	4	8
Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	130	13,912	19	3,115	17	(D)	41	2,442	17	1,680	89	11,470
Arkansas	-	-	-	-	-	-	-	-	-	-	-	-
California	551	127,718	50	5,009	45	4,645	177	46,361	143	43,400	426	88,956
Colorado	366	81,378	82	25,818	45	21,628	211	66,491	29	1,332	151	16,283
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	10	1,300	-	-	-	-	4	100	-	-	6	1,200
Florida	56	9,630	-	-	-	-	53	9,270	-	-	3	360
Georgia	25	732	-	-	-	-	25	732	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	1,580	388,697	167	34,628	102	20,014	388	115,859	272	59,732	1,017	214,166
Illinois	-	-	-	-	-	-	-	-	-	-	-	-
Indiana	35	2,342	-	-	-	-	17	2,288	18	54	-	-
Iowa	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	10	4,135	6	2,535	-	-	10	4,135	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	31	1,351	-	-	-	-	31	1,351	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-
Michigan	11	507	-	-	-	-	2	(D)	9	(D)	-	-
Minnesota	27	2,020	-	-	-	-	27	2,020	-	-	-	-
Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-	-	-	-
Montana	537	141,966	57	33,322	10	9,292	2	(D)	65	(D)	490	130,147
Nebraska	84	7,930	18	4,380	-	-	68	6,718	-	-	20	2,232
Nevada	137	13,163	36	3,716	7	966	57	7,880	-	-	80	5,283
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	79	9,507	11	5,358	-	-	12	7,158	34	204	33	2,145
New York	3	9	-	-	-	-	-	-	3	9	-	-
North Carolina	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota	15	4,100	5	1,100	5	1,100	10	3,100	5	750	5	1,000
Ohio	23	690	-	-	-	-	-	-	23	690	-	-
Oklahoma	22	22,590	-	-	-	-	22	22,590	-	-	-	-
Oregon	181	18,081	-	-	-	-	37	5,215	79	5,516	65	7,350
Pennsylvania	22	176	-	-	-	-	-	-	22	176	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota	28	4,091	19	2,356	-	-	27	(D)	-	-	1	(D)
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Texas	168	46,444	39	4,580	-	-	117	38,044	51	8,400	-	-
Utah	947	45,301	92	5,640	20	(D)	108	14,415	93	11,196	777	27,250
Vermont	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Washington	210	22,136	12	2,727	9	1,767	111	6,330	32	1,652	67	14,154
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	33	1,777	-	-	-	-	33	1,777	-	-	-	-
Wyoming	442	54,598	64	13,652	29	7,560	31	1,727	49	11,124	372	43,747
Water Resources Regions												
Region 01 New England	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	66	2,836	-	-	-	-	35	1,451	25	185	6	1,200
Region 03 South Atlantic-Gulf	85	10,370	-	-	-	-	78	10,002	4	4	7	368
Region 04 Great Lakes	21	(D)	-	-	-	-	12	(D)	9	315	-	-
Region 05 Ohio	58	3,032	-	-	-	-	17	2,288	41	744	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	49	2,697	-	-	-	-	49	2,697	-	-	-	-
Region 08 Lower Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy	1	(D)	-	-	-	-	1	(D)	-	-	-	-
Region 10 Missouri	1,156	213,627	161	51,266	62	18,900	236	25,063	79	21,144	864	171,210
Region 11 Arkansas-White-Red	137	42,669	26	4,940	-	-	90	35,115	-	-	60	7,554
Region 12 Texas-Gulf	94	32,755	20	2,300	-	-	54	29,855	40	2,900	-	-
Region 13 Rio Grande	153	67,629	51	25,593	18	17,080	107	61,355	49	6,948	9	2,054
Region 14 Upper Colorado	377	17,247	79	7,322	-	-	23	2,645	51	752	303	13,850
Region 15 Lower Colorado	159	14,980	21	4,075	17	(D)	43	3,402	44	1,788	89	11,470
Region 16 Great Basin	941	80,846	81	7,076	34	(D)	188	32,495	69	11,178	718	44,733
Region 17 Pacific Northwest	1,893	406,196	190	41,315	113	25,241	513	117,204	390	66,850	1,100	223,202
Region 18 California	577	129,798	48	4,049	45	4,645	175	45,401	147	44,280	450	91,116
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. 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 ¹					
			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	2018 48,697	6,165,406	4,191	822,568	1,516	422,141	12,313	2,154,456	6,460	828,537	32,974	3,469,156
	2013 46,181	5,512,871	3,213	620,206	1,514	277,656	14,257	2,216,445	5,276	817,582	29,652	2,927,186
2018 DATA												
Alabama	25	2,000	-	-	-	-	-	-	-	-	25	2,000
Alaska	1	(D)	-	-	-	-	-	(D)	-	-	-	-
Arizona	824	304,152	100	86,115	44	30,894	255	102,494	58	15,411	622	231,572
Arkansas	10	360	-	-	-	-	-	10	360	-	-	-
California	2,544	701,813	232	126,065	147	85,328	1,322	334,150	458	109,835	1,336	375,011
Colorado	6,749	592,838	619	51,029	147	21,640	985	168,049	832	70,336	5,245	385,884
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	28	162	6	30	-	-	22	132	-	-	6	30
Florida	-	-	-	-	-	-	-	-	-	-	-	-
Georgia	57	1,145	-	-	-	-	23	575	34	570	-	-
Hawaii	3	27	-	-	-	-	-	-	3	27	-	-
Idaho	7,361	856,511	466	55,029	125	27,702	1,236	267,817	970	106,128	5,520	498,002
Illinois	-	-	-	-	-	-	-	-	-	-	-	-
Indiana	55	2,966	-	-	-	-	55	2,966	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	646	156,569	89	35,768	82	49,323	589	150,239	32	2,490	52	9,404
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	5	350	-	-	-	-	4	(D)	1	(D)	-	-
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-
Michigan	228	12,180	40	1,920	-	-	146	8,410	102	3,870	-	-
Minnesota	302	21,055	-	-	-	-	261	19,355	-	-	41	1,700
Mississippi	12	222	-	-	-	-	-	-	6	132	6	90
Missouri	23	476	-	-	-	-	-	-	16	464	7	14
Montana	4,836	872,353	255	77,922	41	1,958	446	42,942	752	233,332	3,858	598,776
Nebraska	2,584	325,052	136	29,865	30	15,230	1,998	223,004	197	22,524	621	85,682
Nevada	1,090	332,309	230	100,572	63	37,194	443	210,865	196	28,134	549	108,425
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	7	175	-	-	-	-	-	-	7	175	-	-
New Mexico	3,712	135,448	267	23,344	101	10,718	768	60,119	474	5,909	2,788	80,989
New York	2	(D)	-	-	-	-	-	-	2	(D)	-	-
North Carolina	12	84	-	-	-	-	-	-	12	84	-	-
North Dakota	176	9,538	31	2,170	-	-	99	4,915	2	(D)	79	4,827
Ohio	26	1,110	-	-	-	-	3	420	23	690	-	-
Oklahoma	243	34,640	51	9,430	-	-	177	18,727	66	15,913	25	8,000
Oregon	2,634	331,194	153	31,913	41	9,777	680	136,198	434	44,425	1,678	154,715
Pennsylvania	23	288	-	-	-	-	1	(D)	22	(D)	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota	347	45,734	-	-	-	-	120	15,347	23	2,760	204	27,627
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Texas	621	56,268	143	16,341	79	7,241	436	48,497	58	(D)	223	7,156
Utah	7,724	611,229	617	50,284	349	67,283	813	160,460	872	53,107	6,295	408,334
Vermont	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Washington	2,569	278,089	423	63,903	121	23,150	833	76,982	333	14,315	1,561	192,254
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin	224	23,936	29	1,396	-	-	224	23,936	-	-	-	-
Wyoming	2,994	454,316	304	59,472	146	34,703	373	77,262	465	95,250	2,233	288,664
Water Resources Regions												
Region 01 New England	-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	63	975	6	30	-	-	27	(D)	30	(D)	6	30
Region 03 South Atlantic-Gulf	106	3,451	-	-	-	-	23	575	52	786	31	2,090
Region 04 Great Lakes	371	27,192	50	2,670	-	-	287	22,702	104	4,590	-	-
Region 05 Ohio	23	(D)	-	-	-	-	-	-	23	(D)	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	399	26,174	19	646	-	-	373	25,400	-	-	26	774
Region 08 Lower Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy	121	17,607	-	-	-	-	83	9,867	16	6,800	22	940
Region 10 Missouri	11,483	1,680,634	751	171,032	299	59,403	3,708	449,224	1,333	283,444	7,084	967,192
Region 11 Arkansas-White-Red	1,754	305,005	187	51,337	124	54,012	792	193,667	231	26,083	834	104,299
Region 12 Texas-Gulf	476	34,330	159	14,251	94	6,458	357	30,340	20	900	119	3,090
Region 13 Rio Grande	3,218	172,691	172	21,512	85	14,040	813	112,273	469	16,482	2,336	75,511
Region 14 Upper Colorado	7,082	430,590	692	40,645	54	8,500	149	3,740	893	68,810	6,179	362,575
Region 15 Lower Colorado	1,093	337,052	118	97,103	45	37,807	336	110,739	142	15,987	726	255,651
Region 16 Great Basin	6,776	849,809	680	137,003	368	94,462	1,210	372,089	791	66,206	5,142	436,221
Region 17 Pacific Northwest	13,080	1,574,264	1,099	164,512	296	64,049	2,831	487,332	1,891	222,784	9,029	887,540
Region 18 California	2,648	704,820	258	121,827	151	83,410	1,323	335,781	462	114,635	1,440	373,243
Region 19 Alaska	1	(D)	-	-	-	-	1	(D)	-	-	-	-
Region 20 Hawaii	3	27	-	-	-	-	-	-	3	27	-	-

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. 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 ¹						
			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	2018 2013	25,402 28,142	3,263,946 3,300,889	2,348 2,167	408,310 394,785	667 340	111,137 58,107	7,074 7,966	1,077,251 1,123,754	4,672 5,578	750,536 803,159	15,157 16,207	1,611,602 1,604,734
2018 DATA													
Alabama		50	425	-	-	-	-	25	375	25	50	-	-
Alaska		4	713	-	(D)	-	-	4	713	-	-	-	-
Arizona		251	44,101	56	14,170	1	(D)	119	14,597	35	3,586	155	30,412
Arkansas		93	7,205	5	(D)	-	-	27	1,285	66	5,920	-	-
California		1,961	557,566	208	93,873	129	48,195	777	260,095	392	99,482	1,248	314,691
Colorado		3,917	362,160	150	22,659	1	(D)	499	58,803	770	115,774	2,776	199,708
Connecticut		-	-	-	-	-	-	-	-	-	-	-	-
Delaware		-	-	-	-	-	-	-	-	-	-	-	-
Florida		179	35,676	-	-	-	-	109	6,489	62	7,737	8	21,450
Georgia		214	20,251	-	-	-	-	108	15,655	83	4,276	24	720
Hawaii		-	-	-	-	-	-	-	-	-	-	-	-
Idaho		1,701	156,806	81	6,892	43	1,030	123	33,570	400	27,074	1,236	98,379
Illinois		12	1,800	-	-	-	-	12	1,800	-	-	-	-
Indiana		9	540	-	-	-	-	9	(D)	9	(D)	-	-
Iowa		-	-	-	-	-	-	-	-	-	-	-	-
Kansas		355	47,827	8	4,020	-	-	325	45,697	33	3,675	19	3,450
Kentucky		-	-	-	-	-	-	-	-	-	-	-	-
Louisiana		49	2,506	-	-	-	-	14	280	35	2,226	-	-
Maine		-	-	-	-	-	-	-	-	-	-	-	-
Maryland		41	1,133	-	-	-	-	-	-	41	1,133	-	-
Massachusetts		-	-	-	-	-	-	-	-	-	-	-	-
Michigan		-	-	-	-	-	-	-	-	-	-	-	-
Minnesota		-	-	-	-	-	-	-	-	-	-	-	-
Mississippi		31	2,284	-	-	-	-	12	120	19	2,164	-	-
Missouri		72	4,160	-	-	-	-	24	1,328	48	2,832	8	480
Montana		2,035	332,932	192	23,780	57	2,065	106	7,297	462	122,311	1,474	203,324
Nebraska		829	94,336	80	14,736	14	3,052	690	85,572	90	6,331	99	5,630
Nevada		417	150,331	72	16,142	15	8,327	155	39,799	167	82,675	186	33,671
New Hampshire		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey		2	(D)	-	-	-	-	2	(D)	2	(D)	-	-
New Mexico		1,957	101,446	143	19,704	71	8,055	751	70,756	112	7,126	1,251	32,120
New York		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina		92	3,036	-	-	-	-	-	-	92	3,036	-	-
North Dakota		63	3,707	-	-	-	-	63	3,707	-	-	-	-
Ohio		-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma		280	44,201	68	10,225	-	-	226	39,595	28	3,306	26	1,300
Oregon		3,363	276,496	237	14,945	70	538	476	47,604	676	75,456	2,272	154,312
Pennsylvania		-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina		76	1,445	-	-	-	-	51	1,045	-	-	25	400
South Dakota		84	20,349	19	8,569	-	-	1	(D)	-	-	84	19,737
Tennessee		21	1,680	-	-	-	-	21	1,680	-	-	-	-
Texas		2,341	275,863	480	70,470	121	18,800	1,676	245,446	221	22,564	529	13,233
Utah		1,924	133,745	152	14,382	27	(D)	174	16,930	255	10,403	1,650	109,565
Vermont		-	-	-	-	-	-	-	-	-	-	-	-
Virginia		-	-	-	-	-	-	-	-	-	-	-	-
Washington		1,204	149,317	231	53,489	97	19,851	327	40,049	204	10,973	764	99,017
West Virginia		20	(D)	-	-	-	-	20	(D)	-	-	-	-
Wisconsin		4	1,440	-	(D)	-	-	4	1,440	-	-	-	-
Wyoming		1,751	428,427	164	18,284	21	420	144	34,403	345	130,251	1,323	270,003
Water Resources Regions													
Region 01 New England		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic		43	1,155	-	-	-	-	2	(D)	43	1,155	-	-
Region 03 South Atlantic-Gulf		617	63,067	-	-	-	-	305	23,684	256	17,213	57	22,570
Region 04 Great Lakes		-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio		32	1,820	-	-	-	-	32	1,820	-	-	-	-
Region 06 Tennessee		25	50	-	-	-	-	-	-	25	50	-	-
Region 07 Upper Mississippi		29	2,220	1	(D)	-	-	21	1,875	17	345	-	-
Region 08 Lower Mississippi		84	3,276	-	-	-	-	49	2,210	35	1,066	-	-
Region 09 Souris-Red-Rainy		31	2,077	-	-	-	-	31	2,077	-	-	-	-
Region 10 Missouri		4,788	710,252	396	62,389	68	4,889	1,380	145,095	726	202,602	2,806	368,903
Region 11 Arkansas-White-Red		1,475	233,157	198	58,168	32	3,240	845	193,929	225	22,756	424	22,682
Region 12 Texas-Gulf		2,040	219,664	361	40,555	89	15,560	1,434	194,767	250	27,874	450	7,673
Region 13 Rio Grande		1,630	71,023	124	9,178	38	3,930	601	31,373	71	1,333	1,135	51,348
Region 14 Upper Colorado		3,185	364,806	96	(D)	1	(D)	143	(D)	656	127,496	2,518	221,173
Region 15 Lower Colorado		409	52,440	89	18,295	34	(D)	186	20,082	50	3,766	231	33,086
Region 16 Great Basin		2,117	297,058	219	29,159	42	8,678	329	68,724	429	73,623	1,593	165,298
Region 17 Pacific Northwest		6,818	667,792	650	84,935	234	22,067	865	102,234	1,492	169,480	4,639	396,977
Region 18 California		2,075	573,376	213	95,238	129	48,195	847	267,165	397	101,777	1,304	321,892
Region 19 Alaska		4	713	1	(D)	-	-	4	713	-	-	-	-
Region 20 Hawaii		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Peanuts												
	Farms	Irrigated acres harvested	Chemigation				Water source ¹						
			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	2018 2013	1,701 1,605	460,155 371,634	126 106	27,220 20,650	108 67	29,124 12,623	1,427 1,342	417,239 329,190	428 379	60,826 51,821	6 23	600 2,889
2018 DATA													
Alabama		85	18,150	-	-	-	-	70	15,585	29	10,360	-	-
Alaska		-	-	-	-	-	-	-	-	-	-	-	-
Arizona		-	-	-	-	-	-	-	-	-	-	-	-
Arkansas		43	18,553	5	(D)	-	-	43	17,503	7	1,050	-	-
California		3	3	3	3	-	-	3	3	-	-	-	-
Colorado		-	-	-	-	-	-	-	-	-	-	-	-
Connecticut		-	-	-	-	-	-	-	-	-	-	-	-
Delaware		-	-	-	-	-	-	-	-	-	-	-	-
Florida		164	55,617	33	4,362	3	3,615	164	55,617	-	-	-	-
Georgia		849	247,135	12	6,822	55	13,343	692	213,792	279	39,498	6	600
Hawaii		-	-	-	-	-	-	-	-	-	-	-	-
Idaho		-	-	-	-	-	-	-	-	-	-	-	-
Illinois		-	-	-	-	-	-	-	-	-	-	-	-
Indiana		-	-	-	-	-	-	-	-	-	-	-	-
Iowa		-	-	-	-	-	-	-	-	-	-	-	-
Kansas		-	-	-	-	-	-	-	-	-	-	-	-
Kentucky		-	-	-	-	-	-	-	-	-	-	-	-
Louisiana		19	3,040	-	-	-	-	6	960	13	2,080	-	-
Maine		-	-	-	-	-	-	-	-	-	-	-	-
Maryland		-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts		-	-	-	-	-	-	-	-	-	-	-	-
Michigan		-	-	-	-	-	-	-	-	-	-	-	-
Minnesota		-	-	-	-	-	-	-	-	-	-	-	-
Mississippi		11	1,425	-	-	-	-	11	1,425	-	-	-	-
Missouri		-	-	-	-	-	-	-	-	-	-	-	-
Montana		-	-	-	-	-	-	-	-	-	-	-	-
Nebraska		-	-	-	-	-	-	-	-	-	-	-	-
Nevada		-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey		-	-	-	-	-	-	-	-	-	-	-	-
New Mexico		24	4,272	1	(D)	-	-	24	4,272	-	-	-	-
New York		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina		54	2,306	-	-	-	-	-	-	54	2,306	-	-
North Dakota		-	-	-	-	-	-	-	-	-	-	-	-
Ohio		-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma		17	2,265	-	-	-	-	17	2,265	-	-	-	-
Oregon		-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania		-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina		124	17,791	-	-	-	-	111	16,241	13	1,550	-	-
South Dakota		-	-	-	-	-	-	-	-	-	-	-	-
Tennessee		22	22	-	-	-	-	-	-	22	22	-	-
Texas		286	89,576	72	14,306	50	12,166	286	89,576	11	3,960	-	-
Utah		-	-	-	-	-	-	-	-	-	-	-	-
Vermont		-	-	-	-	-	-	-	-	-	-	-	-
Virginia		-	-	-	-	-	-	-	-	-	-	-	-
Washington		-	-	-	-	-	-	-	-	-	-	-	-
West Virginia		-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin		-	-	-	-	-	-	-	-	-	-	-	-
Wyoming		-	-	-	-	-	-	-	-	-	-	-	-
Water Resources Regions													
Region 01 New England		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic		-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf		1,276	340,999	45	11,184	58	16,958	1,037	301,235	375	53,714	6	600
Region 04 Great Lakes		-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio		-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee		22	22	-	-	-	-	-	-	22	22	-	-
Region 07 Upper Mississippi		-	-	-	-	-	-	-	-	-	-	-	-
Region 08 Lower Mississippi		56	19,265	5	(D)	-	-	43	17,185	13	2,080	-	-
Region 09 Souris-Red-Rainy		-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri		-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red		54	(D)	-	-	-	-	54	(D)	7	1,050	-	-
Region 12 Texas-Gulf		289	91,251	72	14,306	50	12,166	289	91,251	11	3,960	-	-
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		3	3	3	3	-	-	3	3	-	-	-	-
Region 19 Alaska		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Cotton												
	Farms	Irrigated acres harvested	Chemigation				Water source ¹						
			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	2018 2013	6,918 6,804	3,697,167 2,954,457	1,394 1,663	751,823 595,950	498 284	302,550 84,809	5,766 5,856	3,181,982 2,558,510	896 716	242,212 163,429	951 971	469,060 380,937
2018 DATA													
Alabama		199	52,608	-	-	-	-	137	34,438	55	13,882	39	8,994
Alaska		-	-	-	-	-	-	-	-	-	-	-	-
Arizona		277	164,846	116	71,957	58	31,640	121	67,130	45	25,286	177	109,754
Arkansas		410	386,089	17	10,541	17	10,541	396	375,049	31	11,440	-	-
California		461	254,785	165	92,049	82	37,890	284	154,592	107	40,526	293	168,912
Colorado		-	-	-	-	-	-	-	-	-	-	-	-
Connecticut		-	-	-	-	-	-	-	-	-	-	-	-
Delaware		-	-	-	-	-	-	-	-	-	-	-	-
Florida		31	(D)	4	4,068	-	-	31	(D)	-	-	-	-
Georgia		1,041	463,450	107	37,664	78	23,760	840	398,273	330	51,745	24	18,600
Hawaii		-	-	-	-	-	-	-	-	-	-	-	-
Idaho		-	-	-	-	-	-	-	-	-	-	-	-
Illinois		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Indiana		-	-	-	-	-	-	-	-	-	-	-	-
Iowa		-	-	-	-	-	-	-	-	-	-	-	-
Kansas		127	40,974	15	7,036	4	3,872	124	40,254	-	-	3	720
Kentucky		-	-	-	-	-	-	-	-	-	-	-	-
Louisiana		75	33,908	7	2,450	7	2,450	75	31,248	14	2,660	-	-
Maine		-	-	-	-	-	-	-	-	-	-	-	-
Maryland		-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts		-	-	-	-	-	-	-	-	-	-	-	-
Michigan		-	-	-	-	-	-	-	-	-	-	-	-
Minnesota		-	-	-	-	-	-	-	-	-	-	-	-
Mississippi		235	209,107	-	-	-	-	203	193,449	43	29,094	-	-
Missouri		204	208,092	-	-	-	-	204	208,092	10	12,000	-	-
Montana		-	-	-	-	-	-	-	-	-	-	-	-
Nebraska		-	-	-	-	-	-	-	-	-	-	-	-
Nevada		-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey		-	-	-	-	-	-	-	-	-	-	-	-
New Mexico		230	51,304	37	5,442	-	-	140	39,967	-	-	91	11,588
New York		-	-	-	-	-	-	-	-	-	-	-	-
North Carolina		101	14,202	-	-	-	-	11	3,100	92	11,102	-	-
North Dakota		-	-	-	-	-	-	-	-	-	-	-	-
Ohio		-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma		250	113,902	85	36,775	3	540	185	83,382	4	1,280	65	29,240
Oregon		-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania		-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island		-	-	-	-	-	-	-	-	-	-	-	-
South Carolina		199	39,558	-	-	-	-	187	33,598	16	6,095	-	-
South Dakota		-	-	-	-	-	-	-	-	-	-	-	-
Tennessee		93	23,539	-	-	-	-	71	23,517	22	22	-	-
Texas		2,974	1,632,965	841	483,841	249	191,857	2,746	1,488,265	117	36,870	259	121,252
Utah		-	-	-	-	-	-	-	-	-	-	-	-
Vermont		-	-	-	-	-	-	-	-	-	-	-	-
Virginia		10	400	-	-	-	-	10	190	10	210	-	-
Washington		-	-	-	-	-	-	-	-	-	-	-	-
West Virginia		-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin		-	-	-	-	-	-	-	-	-	-	-	-
Wyoming		-	-	-	-	-	-	-	-	-	-	-	-
Water Resources Regions													
Region 01 New England		-	-	-	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic		-	-	-	-	-	-	-	-	-	-	-	-
Region 03 South Atlantic-Gulf		1,504	570,825	111	41,732	78	23,760	1,154	466,416	495	89,340	27	21,228
Region 04 Great Lakes		-	-	-	-	-	-	-	-	-	-	-	-
Region 05 Ohio		-	-	-	-	-	-	-	-	-	-	-	-
Region 06 Tennessee		131	(D)	-	-	-	-	68	(D)	56	7,634	36	6,366
Region 07 Upper Mississippi		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Region 08 Lower Mississippi		950	844,580	24	12,991	24	12,991	930	829,140	72	41,276	-	-
Region 09 Souris-Red-Rainy		-	-	-	-	-	-	-	-	-	-	-	-
Region 10 Missouri		-	-	-	-	-	-	-	-	-	-	-	-
Region 11 Arkansas-White-Red		1,059	522,693	302	129,051	71	22,362	991	491,453	28	7,680	68	29,960
Region 12 Texas-Gulf		2,309	1,270,679	621	386,684	180	173,307	2,105	1,147,051	74	30,280	216	100,028
Region 13 Rio Grande		226	47,646	55	17,359	5	600	112	15,237	19	190	134	32,812
Region 14 Upper Colorado		-	-	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado		285	169,313	121	75,287	58	31,640	121	67,130	45	25,286	185	114,221
Region 16 Great Basin		-	-	-	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest		-	-	-	-	-	-	-	-	-	-	-	-
Region 18 California		453	250,318	160	88,719	82	37,890	284	154,592	107	40,526	285	164,445
Region 19 Alaska		-	-	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii		-	-	-	-	-	-	-	-	-	-	-	-

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Sweet corn												
	Farms	Irrigated acres harvested	Chemigation				Water source ¹						
			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	2018 2013	5,476 5,923	285,749 321,992	708 582	110,117 101,058	234 151	41,535 30,281	3,058 3,335	167,972 198,173	1,562 1,704	32,385 54,934	1,060 1,283	87,579 83,306
2018 DATA													
Alabama	66	629	-	-	-	-	-	41	(D)	25	(D)	-	-
Alaska	10	1	-	-	-	-	-	10	1	-	-	-	-
Arizona	16	16	-	-	-	-	-	-	-	-	-	16	16
Arkansas	9	18	4	8	-	-	5	10	4	8	-	-	-
California	205	19,166	72	11,595	13	2,939	154	7,420	10	1,546	57	11,973	
Colorado	144	3,050	-	-	8	(D)	84	758	-	-	64	2,292	
Connecticut	71	92	-	-	-	-	1	(D)	70	(D)	-	-	
Delaware	55	10,184	7	1,160	7	1,160	52	9,584	4	878	-	-	
Florida	141	20,610	54	2,165	27	5	131	(D)	1	(D)	9	10,000	
Georgia	114	23,965	47	8,790	24	24	114	23,965	-	-	-	-	
Hawaii	1	(D)	-	-	-	-	1	(D)	-	-	-	-	
Idaho	196	3,178	-	-	-	-	50	(D)	67	(D)	79	2,291	
Illinois	64	6,268	1	(D)	-	-	64	6,268	-	-	-	-	
Indiana	94	5,461	9	1,201	8	1,200	74	5,253	19	(D)	1	(D)	
Iowa	45	1,676	-	-	-	-	45	1,676	-	-	-	-	
Kansas	49	86	-	-	-	-	45	86	-	-	4	(D)	
Kentucky	59	306	2	(D)	2	(D)	6	8	31	278	22	20	
Louisiana	63	168	-	-	-	-	37	141	13	26	13	1	
Maine	126	1,163	3	(Z)	-	-	47	10	113	1,156	-	-	
Maryland	175	12,555	62	4,896	-	-	121	9,966	82	2,589	-	-	
Massachusetts	77	482	-	-	-	-	-	-	77	482	-	-	
Michigan	233	1,469	-	-	-	-	169	(D)	64	(D)	-	-	
Minnesota	181	17,942	23	5,028	-	-	162	17,752	19	190	-	-	
Mississippi	75	164	-	-	-	-	56	148	23	23	12	8	
Missouri	86	228	11	66	11	66	36	119	42	101	8	8	
Montana	57	83	10	34	6	9	25	35	13	4	25	44	
Nebraska	61	233	-	-	-	-	57	229	-	-	4	4	
Nevada	17	5	3	2	3	2	-	-	14	3	3	2	
New Hampshire	9	152	-	-	-	-	-	-	8	(D)	1	(D)	
New Jersey	158	3,617	50	560	-	-	50	1,687	50	1,473	59	457	
New Mexico	176	120	-	-	-	-	33	3	33	17	110	101	
New York	238	3,504	22	18	-	-	102	454	134	2,996	26	117	
North Carolina	170	347	26	3	-	-	89	61	81	281	27	8	
North Dakota	40	18	-	-	-	-	5	8	-	-	35	10	
Ohio	201	2,815	23	230	-	-	102	1,599	57	1,198	43	36	
Oklahoma	53	2,343	26	2,340	-	-	53	2,343	-	-	-	-	
Oregon	344	21,363	1	(D)	1	(D)	207	6,981	41	3,038	107	11,344	
Pennsylvania	292	2,684	16	401	3	313	150	1,490	141	1,081	3	117	
Rhode Island	13	77	-	-	-	-	12	(D)	-	-	1	(D)	
South Carolina	144	948	-	-	-	-	114	869	30	79	-	-	
South Dakota	36	257	-	-	-	-	-	-	7	14	29	243	
Tennessee	136	679	29	(D)	22	33	1	(D)	85	(D)	50	42	
Texas	69	2,881	19	13	-	-	8	2,700	39	162	22	19	
Utah	95	341	27	27	27	27	34	28	27	27	61	313	
Vermont	25	97	4	6	-	-	4	24	16	(D)	5	9	
Virginia	124	4,638	22	110	-	-	31	35	71	4,601	22	2	
Washington	432	60,256	83	(D)	54	(D)	277	(D)	19	(D)	142	47,960	
West Virginia	3	3	-	-	-	-	3	3	-	-	-	-	
Wisconsin	228	49,107	52	26,200	18	4,518	196	47,472	32	1,635	-	-	
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	
Water Resources Regions													
Region 01 New England	304	2,011	3	(Z)	-	-	64	(D)	272	1,828	2	(D)	
Region 02 Mid-Atlantic	819	34,844	177	7,125	10	1,473	432	22,820	357	11,731	62	574	
Region 03 South Atlantic-Gulf	727	46,747	127	10,958	51	29	545	29,153	183	7,602	42	10,011	
Region 04 Great Lakes	469	11,335	33	3,370	15	(D)	286	8,069	172	3,179	35	150	
Region 05 Ohio	388	6,581	36	1,453	10	1,204	138	5,675	169	883	82	41	
Region 06 Tennessee	116	74	29	34	22	33	22	11	43	27	51	36	
Region 07 Upper Mississippi	492	69,485	47	28,864	3	(D)	446	67,642	37	1,810	9	33	
Region 08 Lower Mississippi	61	744	4	8	-	-	38	704	17	34	6	6	
Region 09 Souris-Red-Rainy	37	10	-	-	-	-	2	(D)	-	-	35	10	
Region 10 Missouri	324	3,821	19	76	17	75	188	1,150	51	116	89	2,555	
Region 11 Arkansas-White-Red	144	2,429	26	2,340	8	1	107	2,404	-	-	37	25	
Region 12 Texas-Gulf	69	2,881	19	13	-	-	8	2,700	39	162	22	19	
Region 13 Rio Grande	76	(D)	-	-	-	-	-	-	33	17	43	(D)	
Region 14 Upper Colorado	80	81	-	-	-	-	-	-	-	-	80	81	
Region 15 Lower Colorado	49	19	-	-	-	-	33	3	-	-	16	16	
Region 16 Great Basin	112	346	30	29	30	29	34	28	41	30	64	315	
Region 17 Pacific Northwest	993	84,827	86	44,251	55	31,233	550	19,813	138	3,420	328	61,595	
Region 18 California	205	19,166	72	11,595	13	2,939	154	7,420	10	1,546	57	11,973	
Region 19 Alaska	10	1	-	-	-	-	10	1	-	-	-	-	
Region 20 Hawaii	1	(D)	-	-	-	-	1	(D)	-	-	-	-	

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Tomatoes in the open											
	Farms	Irrigated acres harvested	Chemigation				Water source ¹					
			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 2018	8,879	288,114	1,246	162,695	433	40,017	4,984	147,928	2,269	45,702	2,061	128,300
..... 2013	10,496	358,985	1,487	154,006	380	101,448	6,929	193,759	1,990	36,394	2,172	187,987
2018 DATA												
Alabama	104	1,174	-	-	25	125	79	174	25	1,000	-	-
Alaska	12	2	-	-	-	-	3	1	-	-	9	1
Arizona	16	2	-	-	-	-	-	-	16	2	-	-
Arkansas	63	170	9	48	-	-	33	124	18	43	12	3
California	1,007	240,734	247	147,449	45	27,628	550	109,718	93	37,965	516	126,734
Colorado	186	104	-	-	-	-	79	13	23	7	84	84
Connecticut	127	73	-	-	-	-	71	65	56	8	-	-
Delaware	8	5	4	4	-	-	8	5	-	-	-	-
Florida	181	21,795	56	7,281	56	7,276	181	21,795	-	-	-	-
Georgia	98	141	-	-	-	-	94	41	4	100	-	-
Hawaii	34	(D)	-	-	-	-	-	-	-	-	34	(D)
Idaho	151	49	-	-	-	-	95	36	24	2	34	11
Illinois	135	157	20	95	-	-	112	151	38	17	-	-
Indiana	160	2,427	67	75	22	2	116	2,292	29	136	16	2
Iowa	83	(D)	5	5	-	-	65	(D)	-	-	18	2
Kansas	73	81	-	-	-	-	44	56	11	11	29	(D)
Kentucky	264	346	143	243	31	49	15	22	205	286	44	38
Louisiana	60	69	10	10	-	-	37	53	-	-	23	16
Maine	105	23	7	7	-	-	82	9	51	(D)	3	(D)
Maryland	170	503	29	128	29	128	86	378	93	125	-	-
Massachusetts	261	226	39	39	-	-	137	103	96	118	28	6
Michigan	509	5,508	43	781	-	-	418	2,540	91	2,968	-	-
Minnesota	100	76	-	-	-	-	81	73	19	4	-	-
Mississippi	135	209	6	12	11	10	98	144	29	55	24	52
Missouri	267	204	71	82	26	26	139	141	112	48	32	(D)
Montana	102	38	4	4	6	2	39	4	51	19	35	27
Nebraska	73	37	-	-	-	-	73	37	-	-	-	-
Nevada	21	4	3	3	3	2	2	(D)	14	(D)	5	2
New Hampshire	16	14	1	1	7	7	14	(D)	(D)	1	(D)	(D)
New Jersey	333	1,905	109	555	28	195	227	1,431	93	435	36	41
New Mexico	323	163	-	-	-	-	140	(D)	67	(D)	190	103
New York	337	500	55	129	22	2	163	105	145	360	29	35
North Carolina	204	550	30	354	12	168	131	69	73	478	27	5
North Dakota	38	9	-	-	-	-	5	2	-	-	33	7
Ohio	325	1,029	47	127	-	-	81	653	156	312	111	63
Oklahoma	227	296	36	36	25	13	165	116	50	175	12	5
Oregon	372	271	-	-	-	-	194	191	84	35	94	45
Pennsylvania	344	761	49	478	7	17	181	391	95	356	72	14
Rhode Island	30	100	9	54	-	-	29	(D)	1	(D)	1	(D)
South Carolina	176	4,808	12	4,320	12	4,320	151	4,758	-	-	25	50
South Dakota	41	13	-	-	-	-	31	12	-	-	12	1
Tennessee	262	277	42	42	22	4	85	227	106	32	71	18
Texas	250	204	20	20	-	-	114	108	40	60	96	36
Utah	106	186	-	-	-	-	7	1	27	27	72	158
Vermont	25	16	5	5	-	-	16	(D)	14	15	-	-
Virginia	235	1,755	22	220	-	-	33	(D)	135	(D)	67	11
Washington	285	111	-	-	-	-	199	92	3	(Z)	83	19
West Virginia	92	32	3	3	27	14	2	(D)	50	25	40	(D)
Wisconsin	310	273	36	75	17	31	279	239	31	35	-	-
Wyoming	43	46	-	-	-	-	-	-	-	-	43	46
Water Resources Regions												
Region 01 New England	543	439	63	111	7	7	335	236	207	185	33	21
Region 02 Mid-Atlantic	1,125	5,001	217	1,384	62	335	633	3,659	439	1,287	89	57
Region 03 South Atlantic-Gulf	856	28,215	92	11,631	99	11,730	698	26,934	109	1,230	92	96
Region 04 Great Lakes	1,006	6,652	159	1,000	37	23	670	3,342	253	3,251	88	64
Region 05 Ohio	811	2,722	238	433	82	69	183	1,935	440	702	211	85
Region 06 Tennessee	274	732	54	378	34	172	74	221	124	495	76	16
Region 07 Upper Mississippi	557	943	25	108	12	11	458	834	97	112	26	(D)
Region 08 Lower Mississippi	132	325	19	58	5	1	87	271	15	15	30	40
Region 09 Souris-Red-Rainy	35	7	-	-	-	-	2	(D)	-	-	33	7
Region 10 Missouri	470	304	70	81	19	25	277	162	96	48	130	111
Region 11 Arkansas-White-Red	365	398	39	39	28	14	250	155	70	220	56	33
Region 12 Texas-Gulf	238	187	20	20	-	-	102	91	40	60	96	36
Region 13 Rio Grande	223	109	-	-	-	-	107	(D)	67	51	123	52
Region 14 Upper Colorado	154	(D)	-	-	-	-	-	-	23	7	131	(D)
Region 15 Lower Colorado	53	605	2	(D)	-	-	35	603	16	2	2	(D)
Region 16 Great Basin	125	190	3	(D)	3	2	9	2	41	28	75	160
Region 17 Pacific Northwest	861	441	-	-	-	-	513	322	139	45	211	75
Region 18 California	1,005	240,134	245	146,849	45	27,628	548	109,118	93	37,965	516	126,734
Region 19 Alaska	12	2	-	-	-	-	3	1	-	-	9	1
Region 20 Hawaii	34	(D)	-	-	-	-	-	-	-	-	34	(D)

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Lettuce and romaine												
	Farms	Irrigated acres harvested	Chemigation				Water source ¹						
			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	2018	4,589	277,616	581	155,144	98	53,276	2,801	156,588	1,070	40,288	959	98,421
	2013	5,052	264,154	373	96,254	60	43,498	3,306	151,658	768	8,094	1,158	109,915
2018 DATA													
Alabama		-	-	-	-	-	-	-	-	-	-	-	-
Alaska		33	49	-	-	-	-	22	48	3	(D)	9	1
Arizona		43	44,363	31	33,462	21	19,523	9	1,041	-	-	38	44,362
Arkansas		20	26	8	21	4	(D)	-	-	6	22	14	4
California		563	198,895	144	119,244	33	33,726	370	148,537	57	15,598	185	49,124
Colorado		134	33	-	-	-	-	80	15	23	2	31	15
Connecticut		88	28	-	-	-	-	45	24	46	7	-	-
Delaware		-	-	-	-	-	-	-	-	-	-	-	-
Florida		112	25,620	-	-	-	-	104	435	3	22,545	5	2,640
Georgia		67	14	-	-	-	-	67	14	-	-	-	-
Hawaii		85	328	-	-	-	-	1	(D)	7	35	77	288
Idaho		87	18	-	-	-	-	57	13	26	3	6	2
Illinois		79	99	-	-	-	-	62	98	32	23	-	-
Indiana		76	94	43	12	-	-	43	12	17	80	16	2
Iowa		18	2	-	-	-	-	-	-	-	-	18	2
Kansas		19	2	-	-	-	-	15	2	-	-	4	(D)
Kentucky		76	57	44	28	-	-	-	-	46	30	30	27
Louisiana		36	5	-	-	-	-	13	1	-	-	23	3
Maine		177	55	14	26	3	9	153	36	55	20	3	(D)
Maryland		80	36	-	-	-	-	41	14	39	22	-	-
Massachusetts		203	1,055	39	7	-	-	107	32	68	1,018	28	6
Michigan		101	2,012	-	-	-	-	101	2,012	-	-	-	-
Minnesota		52	21	-	-	-	-	34	18	18	4	-	-
Mississippi		55	45	-	-	-	-	49	44	16	16	6	1
Missouri		62	25	-	-	-	-	42	22	12	2	8	1
Montana		103	33	6	1	6	1	40	5	55	23	33	22
Nebraska		58	14	9	(D)	-	-	58	14	-	-	-	-
Nevada		19	2	3	1	3	1	-	-	14	1	5	1
New Hampshire		7	7	7	-	-	-	-	-	-	-	7	7
New Jersey		145	2,052	51	619	-	-	109	1,978	45	572	13	52
New Mexico		101	1,653	5	1,635	-	-	55	1,647	-	-	58	1,645
New York		185	93	44	4	-	-	94	45	88	42	3	6
North Carolina		127	32	7	1	-	-	81	24	46	7	27	5
North Dakota		9	5	-	-	-	-	5	4	-	-	4	(Z)
Ohio		89	37	2	(D)	-	-	18	16	16	16	71	21
Oklahoma		29	4	-	-	-	-	27	(D)	-	-	2	(D)
Oregon		360	200	-	-	-	-	178	49	87	20	95	131
Pennsylvania		73	48	8	5	2	(D)	57	34	12	13	6	3
Rhode Island		29	41	8	24	-	-	29	41	-	-	-	-
South Carolina		48	8	-	-	-	-	34	7	-	-	14	1
South Dakota		12	2	-	-	-	-	9	1	-	-	12	2
Tennessee		49	5	28	3	-	-	-	-	42	4	7	1
Texas		113	90	20	20	-	-	62	49	20	20	31	22
Utah		27	27	-	-	-	-	-	-	27	27	-	-
Vermont		57	59	-	-	-	-	40	28	19	32	2	(D)
Virginia		143	90	22	4	-	-	32	13	89	75	22	2
Washington		314	155	9	5	-	-	256	132	12	6	46	17
West Virginia		29	14	29	14	26	13	23	12	6	2	-	-
Wisconsin		196	65	-	-	-	-	178	63	18	2	-	-
Wyoming		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Water Resources Regions													
Region 01 New England		521	1,203	68	64	3	9	346	135	178	1,060	38	16
Region 02 Mid-Atlantic		493	2,234	104	631	2	(D)	312	2,068	188	663	17	55
Region 03 South Atlantic-Gulf		377	25,686	7	1	-	-	303	491	65	22,568	52	2,648
Region 04 Great Lakes		294	2,117	46	5	-	-	211	2,065	55	34	28	18
Region 05 Ohio		289	235	75	42	26	13	63	39	146	173	96	39
Region 06 Tennessee		62	17	28	3	-	-	12	12	21	2	29	3
Region 07 Upper Mississippi		316	183	18	9	-	-	251	176	62	27	18	2
Region 08 Lower Mississippi		52	45	4	20	-	-	33	23	4	20	15	3
Region 09 Souris-Red-Rainy		24	4	-	-	-	-	2	(D)	18	4	4	(Z)
Region 10 Missouri		226	65	15	2	6	(D)	160	41	25	12	73	25
Region 11 Arkansas-White-Red		93	20	4	1	4	1	67	(D)	2	(D)	24	6
Region 12 Texas-Gulf		113	90	20	20	-	-	62	49	20	20	31	22
Region 13 Rio Grande		101	1,653	5	1,635	-	-	55	1,647	-	-	58	1,645
Region 14 Upper Colorado		36	12	-	-	-	-	-	-	23	2	13	10
Region 15 Lower Colorado		45	44,363	31	33,462	21	19,523	9	1,041	-	-	40	44,362
Region 16 Great Basin		44	29	3	1	3	1	-	-	41	28	3	1
Region 17 Pacific Northwest		822	388	9	5	-	-	522	199	155	39	149	156
Region 18 California		563	198,895	144	119,244	33	33,726	370	148,537	57	15,598	185	49,124
Region 19 Alaska		33	49	-	-	-	-	22	48	3	(D)	9	1
Region 20 Hawaii		85	328	-	-	-	-	1	(D)	7	35	77	288

See footnote(s) at end of table.

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Table 37. Chemigation and Water Source for Selected Crops in the Open and Irrigated Pastureland: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Potatoes, excluding sweet potatoes												
	Farms	Irrigated acres harvested	Chemigation				Water source ¹						
			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	2018 2013	5,361 5,596	866,288 903,297	914 864	417,732 446,114	466 492	211,425 256,388	3,095 3,727	457,307 592,169	1,220 1,054	66,273 100,654	1,371 1,406	352,375 282,442
2018 DATA													
Alabama		22	33	-	-	-	-	22	33	-	-	-	-
Alaska		41	203	-	-	-	-	30	202	-	-	11	2
Arizona		22	3,109	16	1,808	-	-	21	(D)	-	-	-	(D)
Arkansas		12	5	8	3	4	1	-	-	4	2	8	3
California		252	25,442	72	20,733	47	14,793	96	2,739	25	22	157	23,430
Colorado		171	46,579	12	23,724	8	5,724	102	46,488	16	2,800	67	91
Connecticut		13	4	-	-	-	-	-	-	13	4	-	-
Delaware		1	(D)	-	-	-	-	1	(D)	1	(D)	-	-
Florida		81	4,608	27	5	27	5	81	4,608	-	-	-	-
Georgia		99	113	-	-	-	-	99	113	-	-	-	-
Hawaii		33	17	-	-	-	-	-	-	-	-	33	17
Idaho		576	296,665	231	119,252	65	49,606	261	110,519	88	30,894	318	155,762
Illinois		82	(D)	1	(D)	-	-	65	(D)	32	(D)	-	-
Indiana		69	(D)	1	(D)	-	-	19	6	33	20	17	(D)
Iowa		40	21	-	-	-	-	22	18	-	-	18	4
Kansas		50	2,381	-	-	-	-	36	2,377	-	-	14	4
Kentucky		42	68	5	7	3	3	7	5	31	60	4	2
Louisiana		13	1	-	-	-	-	13	1	-	-	-	-
Maine		238	9,195	12	1,904	4	1,900	112	18	125	6,777	3	2,400
Maryland		77	364	4	4	4	4	27	14	50	350	-	-
Massachusetts		67	359	28	(D)	-	-	28	(D)	39	(D)	-	-
Michigan		232	46,712	2	(D)	-	-	171	43,668	65	3,044	-	-
Minnesota		89	18,783	8	13,518	-	-	52	17,512	40	1,601	-	-
Mississippi		13	10	-	-	-	-	13	10	-	-	-	-
Missouri		104	2,028	20	3	2	(D)	61	2,016	35	12	8	1
Montana		152	6,923	12	1,083	6	31	50	15	34	500	91	6,420
Nebraska		79	20,530	24	20,485	15	20,484	79	20,530	-	-	-	-
Nevada		21	(D)	4	(D)	4	(D)	1	(D)	14	1	6	3
New Hampshire		-	-	-	-	-	-	-	-	-	-	-	-
New Jersey		86	1,272	13	4	-	-	62	740	4	530	23	2
New Mexico		141	(D)	1	(D)	-	-	66	10	33	17	42	(D)
New York		177	3,140	-	-	-	-	55	1,139	123	1,881	2	(D)
North Carolina		132	54	-	-	-	-	105	40	27	8	27	8
North Dakota		48	22,294	6	6,529	5	1,250	17	16,005	4	8,852	31	9
Ohio		99	170	2	(D)	-	-	43	147	18	20	54	19
Oklahoma		65	31	11	1	-	-	63	(D)	-	-	2	(D)
Oregon		344	41,695	18	15,436	18	15,436	183	3,786	47	42	120	37,867
Pennsylvania		143	1,078	50	50	48	50	102	336	40	538	9	256
Rhode Island		17	812	-	-	-	-	12	12	-	-	5	800
South Carolina		60	(D)	1	(D)	-	-	60	(D)	1	(D)	-	-
South Dakota		19	5	-	-	-	-	9	1	-	-	12	4
Tennessee		72	12	29	7	22	7	-	-	43	4	29	7
Texas		134	22,010	49	13,284	30	13,280	110	22,001	19	4	5	5
Utah		102	145	27	54	27	54	34	55	27	81	68	64
Vermont		60	71	2	(D)	-	-	45	(D)	13	(D)	5	3
Virginia		145	3,378	-	-	-	-	39	2,193	83	1,183	23	2
Washington		480	166,613	144	96,292	91	82,521	329	46,943	35	5,822	158	115,671
West Virginia		50	17	23	9	23	9	26	12	24	5	-	-
Wisconsin		295	84,234	51	46,251	13	(D)	265	83,968	34	266	-	-
Wyoming		1	(D)	-	-	-	-	1	(D)	-	-	-	-
Water Resources Regions													
Region 01 New England		346	10,391	40	1,907	4	1,900	159	62	181	7,129	8	3,200
Region 02 Mid-Atlantic		459	7,084	69	59	52	54	263	3,836	181	3,291	27	8
Region 03 South Atlantic-Gulf		422	22,887	28	(D)	27	5	372	22,805	51	577	27	8
Region 04 Great Lakes		487	58,728	29	12,417	12	12	286	53,941	185	4,398	27	628
Region 05 Ohio		265	(D)	31	19	26	12	95	(D)	126	106	60	(D)
Region 06 Tennessee		97	27	29	7	22	7	23	15	22	2	52	10
Region 07 Upper Mississippi		410	97,644	30	58,282	1	(D)	313	96,703	97	942	18	4
Region 08 Lower Mississippi		36	2,011	4	2	-	-	30	2,008	4	(D)	2	(D)
Region 09 Souris-Red-Rainy		57	9,942	4	7,529	-	-	8	9,479	21	784	31	9
Region 10 Missouri		373	56,182	65	40,734	32	22,730	234	49,230	43	9,349	125	(D)
Region 11 Arkansas-White-Red		123	18,854	17	7,792	6	7,791	115	18,850	-	-	8	4
Region 12 Texas-Gulf		131	5,556	47	5,494	28	5,490	107	5,547	19	4	5	5
Region 13 Rio Grande		103	26,782	4	(D)	4	(D)	63	26,763	47	2,817	7	3
Region 14 Upper Colorado		68	(D)	1	(D)	-	-	-	-	-	-	68	(D)
Region 15 Lower Colorado		55	3,112	16	1,808	-	-	54	(D)	-	-	1	(D)
Region 16 Great Basin		132	11,583	37	6,688	37	5,488	35	(D)	41	(D)	83	9,866
Region 17 Pacific Northwest		1,471	501,719	391	227,231	168	143,963	812	161,256	177	36,767	621	306,030
Region 18 California		252	25,442	72	20,733	47	14,793	96	2,739	25	22	157	23,430
Region 19 Alaska		41	203	-	-	-	-	30	202	-	-	11	2
Region 20 Hawaii		33	17	-	-	-	-	-	-	-	-	33	17

See footnote(s) at end of table.

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Table 38. Selected Crops Irrigated and Harvested in the Open and Irrigated Pastureland by Primary Method of Water Distribution – United States: 2018

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Irrigated crop	All methods		Pressure systems		Gravity systems					
	Farms	Acres	Farms	Acres	Farms	Acres				
Corn for grain or seed	31,828	11,610,238	26,186	10,052,218	5,642	1,558,020				
Corn for silage or greenchop	7,930	1,648,789	4,654	991,891	3,276	656,898				
Sorghum for grain or seed	1,594	286,851	1,220	228,197	374	58,654				
Wheat for grain or seed	8,760	2,311,703	6,363	1,831,164	2,397	480,539				
Soybeans for beans	21,316	8,215,031	16,326	4,496,694	4,990	3,718,337				
Beans, dry edible	2,275	416,608	1,558	328,169	717	88,439				
Rice	3,813	2,370,113	33	10,600	3,780	2,359,513				
Other small grains (barley, oats, rye, etc.)	5,767	1,026,289	3,372	713,678	2,395	312,611				
Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage)	48,697	6,165,406	25,263	3,790,205	23,434	2,375,201				
All other hay (dry hay, greenchop, and silage)	25,402	3,263,946	11,877	1,212,542	13,525	2,051,404				
Peanuts	1,701	460,155	1,629	447,984	72	12,171				
Cotton	6,918	3,697,167	4,709	2,325,716	2,209	1,371,451				
Land in vegetables	23,087	3,127,705	20,405	2,741,028	2,682	386,677				
Selected vegetables:										
Sweet corn	5,476	285,749	4,725	262,282	751	23,468				
Tomatoes in the open	8,879	288,114	7,793	249,269	1,086	38,846				
Lettuce and romaine	4,589	277,616	4,230	217,153	359	60,464				
Potatoes, excluding sweet potatoes	5,361	866,288	4,881	846,915	480	19,373				
All berries	11,562	219,254	10,850	211,611	712	7,643				
Land in orchards, vineyards, and nut trees	52,959	5,021,860	45,031	4,655,112	7,928	366,748				
Nursery and other horticultural crops (see text)	15,623	581,936	14,971	539,945	652	41,991				
All other crops (see text)	7,006	1,783,325	5,229	967,090	1,777	816,235				
Irrigated pastureland, all types	51,644	4,004,854	19,940	998,032	31,704	3,006,822				
	Pressure irrigation distribution systems ¹									
Irrigated 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 ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²
Corn for grain or seed	0.3	(Z)	0.5	0.1	0.7	0.4	1.4	0.3	0.7	0.3
Corn for silage or greenchop	1.1	(Z)	0.2	0.4	0.8	0.3	4.0	1.8	0.8	0.3
Sorghum for grain or seed	1.6	(Z)	2.1	1.6	0.2	0.1	0.3	(Z)	2.3	0.9
Wheat for grain or seed	1.3	0.9	0.6	0.3	7.1	4.9	0.4	0.1	0.7	0.9
Soybeans for beans	-	-	0.2	(Z)	0.2	0.1	1.0	0.2	0.9	0.2
Beans, dry edible	4.1	0.5	0.3	(Z)	7.8	6.0	1.1	0.5	8.4	4.3
Rice	-	-	(Z)	(D)	0.3	(D)	-	-	-	-
Other small grains (barley, oats, rye, etc.)	3.0	0.6	0.7	0.5	14.3	6.1	0.2	(Z)	0.3	0.3
Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage)	5.5	1.0	1.0	0.2	16.2	10.7	1.3	0.4	0.2	0.6
All other hay (dry hay, greenchop, and silage)	7.4	0.8	2.4	0.4	8.7	4.4	4.6	1.7	1.1	0.4
Peanuts	-	-	-	-	1.4	0.4	0.4	1.8	4.5	0.1
Cotton	-	-	1.0	1.0	0.9	0.3	0.5	0.4	4.7	2.7
Land in vegetables	14.1	1.4	4.5	5.0	1.4	2.0	3.3	2.9	50.2	30.3
Selected vegetables:										
Sweet corn	17.4	2.2	5.9	1.7	1.1	0.8	10.2	5.3	33.1	9.6
Tomatoes in the open	14.2	2.0	2.5	0.6	0.2	(Z)	1.8	0.1	62.8	80.8
Lettuce and romaine	18.5	3.4	5.8	10.4	0.3	(Z)	1.4	8.9	58.0	40.3
Potatoes, excluding sweet potatoes	17.3	0.9	5.0	1.5	3.1	5.8	3.4	0.8	42.8	0.9
All berries	13.3	1.7	14.9	38.8	0.3	(Z)	1.3	2.8	57.3	50.0
Land in orchards, vineyards, and nut trees	3.6	0.5	11.4	10.3	0.2	(Z)	0.2	(Z)	65.5	78.5
Nursery and other horticultural crops (see text)	23.5	5.2	15.6	13.5	1.7	5.8	3.1	9.8	39.6	19.6
All other crops (see text)	9.3	1.5	2.9	2.0	4.2	3.3	6.5	3.8	20.0	5.5
Irrigated pastureland, all types	11.9	1.8	5.1	0.5	7.2	4.9	3.5	1.7	0.8	0.2

See footnote(s) at end of table.

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Table 38. Selected Crops Irrigated and Harvested in the Open and Irrigated Pastureland by Primary Method of Water Distribution – United States: 2018 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Irrigated crop	Pressure irrigation distribution systems ¹ - con.									
	Center pivot and linear move tower 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 ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²
Corn for grain or seed	3.4	3.5	22.5	25.6	46.8	52.3	5.7	4.0	0.3	0.1
Corn for silage or greenchop	2.6	3.4	18.8	23.0	23.1	24.8	6.2	5.9	1.2	0.2
Sorghum for grain or seed	13.9	13.3	39.1	47.1	16.7	16.3	0.3	0.2	-	-
Wheat for grain or seed	6.6	5.4	24.5	30.1	26.6	31.6	4.3	4.9	0.6	0.2
Soybeans for beans	2.3	1.4	17.0	12.3	48.9	37.4	5.8	3.2	0.2	(Z)
Beans, dry edible	1.0	2.0	12.2	20.1	29.4	41.9	4.1	3.3	0.1	0.1
Rice	0.3	0.1	-	-	-	-	-	-	0.2	0.2
Other small grains (barley, oats, rye, etc.)	1.9	3.2	13.2	19.3	18.8	34.7	4.5	3.7	1.5	1.2
Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage)	1.8	2.6	7.8	15.4	14.5	26.2	2.6	3.7	0.9	0.6
All other hay (dry hay, greenchop, and silage)	2.9	4.0	7.4	12.2	8.9	11.7	1.5	1.1	1.8	0.5
Peanuts	8.0	3.3	35.3	33.5	42.1	55.9	4.1	2.4	-	-
Cotton	12.0	12.1	29.0	29.6	18.4	15.7	1.7	1.1	-	-
Land in vegetables	1.2	1.1	3.0	11.0	5.0	27.6	2.0	4.9	3.5	1.4
Selected vegetables:										
Sweet corn	0.6	0.1	4.5	16.9	7.7	39.8	4.5	13.7	1.4	1.6
Tomatoes in the open	0.7	(Z)	1.6	0.1	0.5	1.2	0.7	1.1	2.7	0.4
Lettuce and romaine	0.1	(Z)	1.4	0.3	1.1	9.0	0.8	2.4	4.8	3.5
Potatoes, excluding sweet potatoes	0.9	1.4	4.6	26.9	8.9	51.1	2.4	8.3	2.7	0.1
All berries	-	-	0.6	0.2	0.9	0.5	0.4	0.2	4.9	2.4
Land in orchards, vineyards, and nut trees	(Z)	(Z)	0.1	0.2	0.2	0.1	0.1	(Z)	3.8	3.0
Nursery and other horticultural crops (see text)	0.4	0.9	1.7	11.9	2.3	18.8	0.5	1.8	7.5	5.3
All other crops (see text)	1.0	0.7	12.4	15.4	14.8	20.6	2.3	1.2	1.2	0.3
Irrigated pastureland, all types	0.7	1.0	1.9	5.0	3.6	7.2	1.1	1.5	2.9	1.1
Irrigated crop	Gravity irrigation distribution systems ¹									
	Down rows or furrows from unlined open ditches		Down rows or furrows from lined open ditches		Down rows or furrows from poly pipe, lay-flat tubing, or above or underground pipe		Controlled flooding within field borders from unlined open ditches			
	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²
Corn for grain or seed	3.1	1.2	1.3	0.5	12.1	10.6	0.7	0.8		0.8
Corn for silage or greenchop	8.7	7.0	5.0	4.7	11.2	8.2	4.9	4.6		4.6
Sorghum for grain or seed	3.8	2.5	3.6	(D)	12.5	11.3	0.4	(D)		(D)
Wheat for grain or seed	5.2	5.7	5.2	2.9	6.3	3.1	6.1	4.6		4.6
Soybeans for beans	1.0	0.6	(Z)	(Z)	21.5	43.7	0.2	0.2		0.2
Beans, dry edible	10.6	8.1	10.7	4.7	7.2	5.6	0.9	0.8		0.8
Rice	2.2	1.4	0.5	0.3	5.5	4.0	37.0	36.4		36.4
Other small grains (barley, oats, rye, etc.)	5.1	3.4	3.4	2.6	7.3	3.9	14.0	12.9		12.9
Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage)	8.2	4.8	3.2	2.6	9.1	4.4	14.5	15.8		15.8
All other hay (dry hay, greenchop, and silage)	8.2	6.8	1.4	2.4	5.7	3.3	18.8	29.8		29.8
Peanuts	5.7	5.5	4.7	5.1	2.8	2.0	-	-		-
Cotton	3.2	5.5	4.7	3.8	17.3	24.3	1.5	1.2		1.2
Land in vegetables	3.2	4.7	1.5	3.8	4.0	2.9	0.9	0.2		0.2
Selected vegetables:										
Sweet corn	5.7	1.1	2.3	1.2	3.0	0.8	0.3	1.6		1.6
Tomatoes in the open	4.5	10.2	0.6	(Z)	3.7	3.2	1.1	(Z)		(Z)
Lettuce and romaine	3.1	4.2	1.4	11.0	1.5	4.6	0.2	(D)		(D)
Potatoes, excluding sweet potatoes	2.6	1.4	0.6	(Z)	2.9	0.8	0.4	(Z)		(Z)
All berries	1.1	0.1	-	-	2.2	0.2	0.4	1.4		1.4
Land in orchards, vineyards, and nut trees	2.8	0.7	0.5	0.4	3.6	1.9	2.7	0.7		0.7
Nursery and other horticultural crops (see text)	0.7	0.7	0.7	3.5	1.8	1.2	0.2	0.2		0.2
All other crops (see text)	8.7	9.7	4.6	3.8	5.8	4.9	3.2	26.4		26.4
Irrigated pastureland, all types	6.9	4.8	1.7	2.5	5.4	2.5	15.4	23.3		23.3

See footnote(s) at end of table.

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Table 38. Selected Crops Irrigated and Harvested in the Open and Irrigated Pastureland by Primary Method of Water Distribution – United States: 2018 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Irrigated crop	Gravity irrigation distribution systems ¹ - con.									
	Controlled flooding within field borders from lined open ditches		Controlled flooding within field borders from poly pipe, lay-flat tubing, or above ground pipe		Controlled flooding within field borders from underground pipe		Uncontrolled flooding of rangeland, pastureland, etc. including open discharge from well or pump		Other gravity systems	
	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²	Percent of farms	Percent of acres ²
Corn for grain or seed	0.1	(Z)	0.3	0.2	0.1	0.1	-	-	-	-
Corn for silage or greenchop	1.7	1.8	0.7	0.4	8.7	12.6	-	-	0.6	0.6
Sorghum for grain or seed	0.4	5.2	0.7	0.4	2.1	0.2	-	-	-	-
Wheat for grain or seed	2.5	2.7	0.6	0.3	1.3	1.3	0.2	(D)	(Z)	(D)
Soybeans for beans	-	-	0.3	0.3	0.3	0.3	-	-	-	-
Beans, dry edible	1.5	1.5	-	-	0.6	0.6	-	-	-	-
Rice	3.0	2.6	23.3	25.1	26.4	28.6	0.4	0.1	0.8	1.0
Other small grains (barley, oats, rye, etc.)	4.2	1.9	1.4	0.5	3.5	3.5	1.9	1.7	0.8	0.1
Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage)	4.8	5.6	2.0	1.2	2.2	2.3	2.7	1.4	1.4	0.5
All other hay (dry hay, greenchop, and silage)	3.6	3.5	3.5	1.4	2.4	4.8	8.2	10.3	1.5	0.5
Peanuts	-	-	-	-	-	-	1.5	0.6	-	-
Cotton	0.5	0.3	0.8	0.4	0.8	(Z)	0.4	0.1	0.3	0.1
Land in vegetables	0.2	0.3	0.6	0.1	(Z)	(D)	0.1	(Z)	1.1	0.3
Selected vegetables:										
Sweet corn	0.1	(D)	1.1	0.8	-	-	-	-	1.2	(D)
Tomatoes in the open	-	-	1.0	(Z)	-	-	0.1	(Z)	1.4	(Z)
Lettuce and romaine	(Z)	(D)	-	-	-	-	-	-	1.6	(Z)
Potatoes, excluding sweet potatoes	-	-	0.6	(Z)	-	-	0.1	(Z)	1.8	(Z)
All berries	0.6	0.8	0.7	(Z)	0.2	1.0	(Z)	(Z)	0.8	(Z)
Land in orchards, vineyards, and nut trees	1.5	1.2	0.5	0.4	2.5	1.9	0.4	0.1	0.5	(Z)
Nursery and other horticultural crops (see text)	(Z)	0.8	0.1	0.8	-	-	0.1	(Z)	0.4	(Z)
All other crops (see text)	1.1	0.4	0.1	(Z)	0.7	0.3	0.7	0.1	0.5	0.2
Irrigated pastureland, all types	2.2	1.8	2.3	1.0	2.1	3.6	23.3	34.7	2.0	0.9

¹ Percentages are calculated across all methods by irrigated crop and primary method. Data not comparable to previous farm and ranch irrigation survey published data.

² The sum of percent acres irrigated across systems for a crop may not add to 100 percent.

Table 39. Water Management Practices Used by Producers with Gravity Systems for Acres in the Open: 2018 and 2013

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	All farms	Acres irrigated ¹	Any water management practice used ² (see text)		Water management practice used ¹ (see text)	
			Farms	Acres irrigated	Tailwater pits, diking, time limits, or alternative row irrigation	
					Farms	Acres irrigated
United States2018	85,888	20,187,048	25,799	7,274,584	16,720	2,834,636
.....2013	85,159	21,504,684	33,629	9,851,730	20,990	4,205,281
2018 DATA						
Alabama	94	12,046	63	4,328	50	(D)
Alaska	23	89	1	(D)	1	(D)
Arizona	2,347	837,762	891	580,162	368	132,971
Arkansas	2,667	3,891,251	958	1,546,902	511	600,643
California	13,717	3,888,723	5,385	1,609,987	3,339	690,058
Colorado	11,185	1,098,563	2,420	222,860	1,961	183,278
Connecticut	115	246	-	-	-	-
Delaware	12	(D)	4	4	-	-
Florida	455	532,796	77	35,260	36	7,830
Georgia	210	2,143	34	57	23	46
Hawaii	416	2,449	7	42	-	-
Idaho	8,759	836,989	2,709	275,697	2,040	142,584
Illinois	27	(D)	-	-	-	-
Indiana	25	1,188	-	-	-	-
Iowa	29	50	18	18	18	18
Kansas	777	66,053	324	36,471	247	25,634
Kentucky	63	2,992	-	-	-	-
Louisiana	1,318	975,326	426	395,480	153	105,605
Maine	55	145	3	6	-	-
Maryland	92	268	-	-	-	-
Massachusetts	238	6,593	29	836	28	(D)
Michigan	61	81	20	40	-	-
Minnesota	35	2,829	-	-	-	-
Mississippi	1,019	1,373,391	437	710,985	112	115,599
Missouri	825	810,544	283	384,666	91	54,382
Montana	5,415	1,226,780	1,091	214,136	729	114,641
Nebraska	5,064	661,385	2,339	293,210	1,942	210,998
Nevada	1,464	449,388	477	146,960	196	48,635
New Hampshire	82	117	21	21	21	21
New Jersey	97	3,140	45	182	-	-
New Mexico	7,861	266,460	2,596	94,286	1,184	26,477
New York	236	3,225	23	46	-	-
North Carolina	133	1,534	54	1,296	54	1,296
North Dakota	152	45,395	54	25,482	36	16,482
Ohio	83	817	10	(D)	8	(D)
Oklahoma	239	69,649	99	39,816	76	19,405
Oregon	3,727	514,953	942	105,300	869	87,210
Pennsylvania	108	9,919	26	38,021	5	9,500
Rhode Island	9	44	5	40	-	-
South Carolina	120	2,856	25	75	25	75
South Dakota	318	37,027	46	8,534	41	6,174
Tennessee	99	11,906	50	5,514	22	1,100
Texas	3,092	768,512	736	155,081	417	59,895
Utah	6,953	519,157	1,468	111,864	987	55,020
Vermont	39	121	25	25	25	25
Virginia	35	1,355	22	22	-	-
Washington	1,420	109,225	391	47,743	296	25,440
West Virginia	43	64	-	-	-	-
Wisconsin	59	244	18	18	-	-
Wyoming	4,476	1,140,460	1,147	183,085	809	91,198
Water Resources Regions						
Region 01 New England	502	7,168	58	903	49	(D)
Region 02 Mid-Atlantic	398	15,197	54	38,186	5	(D)
Region 03 South Atlantic-Gulf	1,018	552,869	218	42,484	146	11,243
Region 04 Great Lakes	329	3,739	117	(D)	33	(D)
Region 05 Ohio	222	4,363	22	22	-	-
Region 06 Tennessee	112	1,173	85	522	52	(D)
Region 07 Upper Mississippi	160	17,178	26	5,858	18	18
Region 08 Lower Mississippi	5,017	6,394,647	1,860	2,723,294	819	850,521
Region 09 Souris-Red-Rainy	20	2,812	-	-	-	-
Region 10 Missouri	16,620	2,796,501	5,253	768,213	3,996	466,026
Region 11 Arkansas-White-Red	3,252	977,653	1,061	427,821	635	94,611
Region 12 Texas-Gulf	2,599	648,791	570	135,407	310	44,878
Region 13 Rio Grande	7,010	377,496	2,198	83,218	1,042	30,577
Region 14 Upper Colorado	9,795	1,075,608	2,216	182,997	1,677	151,512
Region 15 Lower Colorado	2,786	893,052	950	620,977	377	145,121
Region 16 Great Basin	6,938	910,097	1,713	232,593	1,069	87,160
Region 17 Pacific Northwest	14,792	1,599,329	3,947	439,252	3,111	263,045
Region 18 California	13,879	3,906,837	5,443	1,572,619	3,380	679,928
Region 19 Alaska	23	89	1	(D)	1	(D)
Region 20 Hawaii	416	2,449	7	42	-	-

See footnote(s) at end of table.

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Table 39. Water Management Practices Used by Producers with Gravity Systems for Acres in the Open: 2018 and 2013 (continued)

[Excludes area under protection and institutional, research, and experimental farms. For meaning of abbreviations and symbols see introductory text.]

Geographic area	Water management practice used ¹ (see text) - con.						
	Surge flow or cablegation, mulch, or other types of row covers (see text)		Precision-leveling or zero-grading		Shorter furrow length, PAM, or special furrow practices		
	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	
United States	2018 2013	1,600 3,227	223,608 506,395	9,070 10,157	3,417,886 3,898,913	3,572 6,435	798,454 1,241,141
2018 DATA							
Alabama		11	33	2	(D)	11	(D)
Alaska		-	-	-	-	-	-
Arizona		34	1,364	604	404,328	91	41,499
Arkansas		43	25,711	641	777,337	156	143,211
California		275	21,400	2,709	730,305	629	168,224
Colorado		156	10,893	278	14,645	285	14,044
Connecticut		-	-	-	-	-	-
Delaware		4	4	-	-	-	-
Florida		9	7,020	50	20,410	-	-
Georgia		11	11	-	-	-	-
Hawaii		1	(D)	-	-	6	(D)
Idaho		84	4,261	305	24,473	872	104,379
Illinois		-	-	-	-	-	-
Indiana		-	-	-	-	-	-
Iowa		-	-	-	-	-	-
Kansas		19	2,528	77	6,784	19	1,525
Kentucky		-	-	-	-	-	-
Louisiana		6	600	348	251,585	31	37,690
Maine		-	-	3	3	3	3
Maryland		-	-	-	-	-	-
Massachusetts		-	-	1	(D)	-	-
Michigan		20	40	-	-	-	-
Minnesota		-	-	-	-	-	-
Mississippi		54	30,022	378	489,721	72	75,643
Missouri		47	29,823	232	269,595	37	30,866
Montana		35	2,246	325	77,575	91	19,674
Nebraska		365	45,565	152	9,336	189	27,311
Nevada		-	-	306	98,098	32	227
New Hampshire		-	-	-	-	-	-
New Jersey		45	68	23	46	45	68
New Mexico		46	4,595	1,401	50,272	212	12,942
New York		23	46	-	-	-	-
North Carolina		-	-	-	-	-	-
North Dakota		-	-	18	9,000	-	-
Ohio		2	(D)	-	-	-	-
Oklahoma		-	-	58	9,034	44	11,377
Oregon		2	(D)	48	(D)	71	4,458
Pennsylvania		26	9,521	5	9,500	5	9,500
Rhode Island		-	-	-	-	5	40
South Carolina		-	-	-	-	-	-
South Dakota		-	-	27	2,360	-	-
Tennessee		27	1,664	23	1,460	5	1,290
Texas		80	5,527	223	81,698	109	7,961
Utah		-	-	624	51,959	164	4,885
Vermont		-	-	-	-	-	-
Virginia		22	22	-	-	-	-
Washington		27	(D)	26	(D)	164	17,525
West Virginia		-	-	-	-	-	-
Wisconsin		18	18	-	-	-	-
Wyoming		108	16,632	183	11,166	224	64,089
Water Resources Regions							
Region 01 New England		-	-	4	(D)	8	43
Region 02 Mid-Atlantic		54	9,572	28	(D)	50	9,568
Region 03 South Atlantic-Gulf		26	7,061	58	24,144	6	36
Region 04 Great Lakes		84	(D)	-	-	-	-
Region 05 Ohio		22	22	-	-	-	-
Region 06 Tennessee		33	407	-	-	11	(D)
Region 07 Upper Mississippi		-	-	8	5,840	-	-
Region 08 Lower Mississippi		134	86,988	1,408	1,534,798	235	250,987
Region 09 Souris-Red-Rainy		-	-	-	-	-	-
Region 10 Missouri		589	70,944	776	114,423	583	116,820
Region 11 Arkansas-White-Red		9	422	425	268,470	248	64,318
Region 12 Texas-Gulf		60	5,507	184	78,501	89	6,521
Region 13 Rio Grande		25	4,370	1,236	46,451	79	1,820
Region 14 Upper Colorado		118	7,125	400	14,527	336	9,833
Region 15 Lower Colorado		34	1,364	651	422,806	96	51,686
Region 16 Great Basin		-	-	782	143,035	92	2,398
Region 17 Pacific Northwest		136	8,255	407	42,550	1,083	125,402
Region 18 California		275	21,400	2,703	712,292	650	158,999
Region 19 Alaska		-	-	-	-	-	-
Region 20 Hawaii		1	(D)	-	-	6	(D)

¹ Multiple systems covering the same acreage are counted each time they cover the acres. This includes multiple systems of the same type.

² More than one technique may have been used on an irrigated acre during the survey year.

Table 40. Irrigated Horticultural Operations: 2018 and 2013

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

Geographic area	Operations	Area in the open			Area under protection		
		Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated
United States	2018 33,848	15,623	699,068	581,936	24,876	1,525,130,873	1,525,130,873
	2013 34,569	16,923	629,548	524,227	24,829	1,407,631,360	1,405,381,805
2018 DATA							
Alabama	400	185	21,371	21,002	313	22,691,124	22,691,124
Alaska	263	85	209	199	208	2,112,835	2,112,835
Arizona	171	87	5,457	5,457	127	11,974,228	11,974,228
Arkansas	224	97	7,082	6,157	157	4,050,788	4,050,788
California	2,857	1,951	74,347	74,259	1,697	328,881,801	328,881,801
Colorado	710	417	13,042	12,869	380	14,421,673	14,421,673
Connecticut	491	146	5,544	3,294	455	37,531,652	37,531,652
Delaware	56	22	1,865	1,665	44	2,339,000	2,339,000
Florida	2,746	2,039	88,800	85,141	1,346	286,871,042	286,871,042
Georgia	575	356	21,298	21,221	334	20,312,514	20,312,514
Hawaii	895	483	1,828	1,582	569	30,119,031	30,119,031
Idaho	667	401	29,750	28,628	336	4,346,935	4,346,935
Illinois	532	217	22,186	10,815	434	50,054,950	50,054,950
Indiana	515	159	9,848	3,469	435	9,841,976	9,841,976
Iowa	410	122	3,019	2,629	379	11,823,816	11,823,816
Kansas	272	120	7,759	3,388	210	8,776,130	8,776,130
Kentucky	780	167	1,259	1,092	686	9,068,660	9,068,660
Louisiana	341	152	3,606	3,446	274	12,058,977	12,058,977
Maine	614	141	3,069	3,069	558	6,785,654	6,785,654
Maryland	458	149	9,885	9,875	383	10,812,493	10,812,493
Massachusetts	564	219	1,986	1,960	434	6,586,132	6,586,132
Michigan	1,456	453	41,503	22,221	1,205	86,902,965	86,902,965
Minnesota	489	197	10,784	4,480	420	18,144,370	18,144,370
Mississippi	249	82	6,018	5,273	203	4,289,424	4,289,424
Missouri	725	217	6,393	3,955	639	10,912,436	10,912,436
Montana	309	77	766	766	265	2,265,336	2,265,336
Nebraska	290	122	2,644	2,476	236	3,026,039	3,026,039
Nevada	67	17	671	671	54	358,536	358,536
New Hampshire	485	212	406	385	431	8,274,578	8,274,578
New Jersey	808	492	19,719	17,831	574	45,713,398	45,713,398
New Mexico	315	159	1,570	1,570	179	4,076,540	4,076,540
New York	1,476	556	11,963	11,653	1,244	52,378,469	52,378,469
North Carolina	1,081	462	22,698	8,611	807	28,491,080	28,491,080
North Dakota	39	6	(D)	(D)	37	526,745	526,745
Ohio	1,058	333	22,190	9,272	905	37,618,396	37,618,396
Oklahoma	367	171	16,994	14,794	234	4,338,472	4,338,472
Oregon	1,778	1,079	54,550	53,291	1,020	64,333,453	64,333,453
Pennsylvania	1,772	542	4,665	1,999	1,568	72,735,326	72,735,326
Rhode Island	151	34	1,512	1,426	134	1,855,229	1,855,229
South Carolina	368	260	19,741	18,039	241	5,365,322	5,365,322
South Dakota	87	40	1,217	893	73	2,325,959	2,325,959
Tennessee	732	207	13,700	8,145	617	10,823,843	10,823,843
Texas	1,059	532	51,818	46,750	686	81,189,374	81,189,374
Utah	340	141	2,678	2,518	226	11,147,052	11,147,052
Vermont	403	60	181	141	389	4,577,962	4,577,962
Virginia	804	325	7,971	3,806	696	24,913,206	24,913,206
Washington	1,235	738	30,174	27,845	856	29,307,707	29,307,707
West Virginia	332	62	192	152	306	2,804,956	2,804,956
Wisconsin	938	322	12,875	11,485	783	13,742,493	13,742,493
Wyoming	94	10	(D)	(D)	89	1,230,796	1,230,796
Water Resources Regions							
Region 01 New England	2,409	769	12,566	10,178	2,110	62,320,465	62,320,465
Region 02 Mid-Atlantic	4,094	1,658	48,804	44,340	3,378	179,232,386	179,232,386
Region 03 South Atlantic-Gulf	5,218	3,337	178,485	155,435	3,119	363,677,616	363,677,616
Region 04 Great Lakes	3,248	974	52,688	31,314	2,801	138,040,985	138,040,985
Region 05 Ohio	2,809	720	38,932	13,490	2,423	50,237,208	50,237,208
Region 06 Tennessee	793	261	7,454	7,454	635	14,692,612	14,692,612
Region 07 Upper Mississippi	2,105	830	47,472	27,924	1,773	81,170,356	81,170,356
Region 08 Lower Mississippi	556	170	6,974	6,675	471	15,576,031	15,576,031
Region 09 Souris-Red-Rainy	55	15	298	92	47	1,004,028	1,004,028
Region 10 Missouri	1,477	554	23,383	16,326	1,220	36,318,201	36,318,201
Region 11 Arkansas-White-Red	916	451	26,084	23,077	594	10,134,679	10,134,679
Region 12 Texas-Gulf	1,011	509	51,273	46,205	649	75,432,738	75,432,738
Region 13 Rio Grande	257	93	1,732	1,732	199	11,098,640	11,098,640
Region 14 Upper Colorado	543	294	3,244	3,230	273	3,879,584	3,879,584
Region 15 Lower Colorado	205	112	5,907	5,907	140	12,175,428	12,175,428
Region 16 Great Basin	278	116	3,390	3,230	186	10,055,408	10,055,408
Region 17 Pacific Northwest	3,864	2,260	114,441	109,730	2,370	97,211,841	97,211,841
Region 18 California	2,852	1,932	73,905	73,817	1,711	330,640,801	330,640,801
Region 19 Alaska	263	85	209	199	208	2,112,835	2,112,835
Region 20 Hawaii	895	483	1,828	1,582	569	30,119,031	30,119,031

Table 41. Irrigated Horticultural Operations by Selected Crops Irrigated: 2018 and 2013

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

Geographic area	Floriculture and bedding crops					
	In the open			Under protection		
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated
United States	2018 5,427	32,703	30,448	12,439	737,445,195	737,445,195
	2013 5,379	31,803	30,719	12,918	748,461,106	746,215,251
2018 DATA						
Alabama	32	136	136	187	9,143,192	9,143,192
Alaska	69	175	165	140	1,084,950	1,084,950
Arizona	11	(D)	(D)	11	970,020	970,020
Arkansas	27	50	50	60	1,980,720	1,980,720
California	743	10,974	10,951	745	149,670,511	149,670,511
Colorado	99	155	154	173	8,610,181	8,610,181
Connecticut	88	984	607	227	27,063,544	27,063,544
Delaware	8	(D)	(D)	34	1,758,640	1,758,640
Florida	544	6,075	6,063	636	151,432,403	151,432,403
Georgia	82	(D)	(D)	157	7,168,434	7,168,434
Hawaii	281	882	705	383	20,738,012	20,738,012
Idaho	74	62	62	122	2,598,343	2,598,343
Illinois	60	1,047	395	236	11,074,720	11,074,720
Indiana	62	(D)	(D)	299	5,047,576	5,047,576
Iowa	69	(D)	(D)	188	9,804,570	9,804,570
Kansas	47	226	36	106	5,990,234	5,990,234
Kentucky	77	95	80	292	4,057,832	4,057,832
Louisiana	12	13	13	102	2,898,365	2,898,365
Maine	63	91	91	279	1,561,990	1,561,990
Maryland	87	379	372	170	5,183,791	5,183,791
Massachusetts	64	345	345	283	3,783,640	3,783,640
Michigan	80	1,166	1,166	727	72,301,820	72,301,820
Minnesota	51	62	50	260	13,919,680	13,919,680
Mississippi	11	14	14	86	1,999,090	1,999,090
Missouri	142	175	175	275	6,916,872	6,916,872
Montana	29	(D)	(D)	156	1,600,262	1,600,262
Nebraska	38	33	24	115	1,557,938	1,557,938
Nevada	4	(Z)	(Z)	14	(D)	(D)
New Hampshire	103	129	129	264	4,661,757	4,661,757
New Jersey	319	1,759	1,451	298	13,395,758	13,395,758
New Mexico	17	(D)	(D)	27	(D)	(D)
New York	338	1,315	1,315	661	31,561,174	31,561,174
North Carolina	154	189	189	372	12,920,764	12,920,764
North Dakota	2	(D)	(D)	22	322,872	322,872
Ohio	127	487	487	511	18,597,169	18,597,169
Oklahoma	47	68	59	120	1,325,270	1,325,270
Oregon	247	1,624	1,274	345	12,050,095	12,050,095
Pennsylvania	246	235	230	783	28,779,066	28,779,066
Rhode Island	14	14	14	55	754,570	754,570
South Carolina	43	162	149	141	5,062,644	5,062,644
South Dakota	10	(D)	(D)	48	1,904,499	1,904,499
Tennessee	55	586	586	330	6,321,642	6,321,642
Texas	95	257	256	428	28,343,192	28,343,192
Utah	21	59	59	76	7,421,360	7,421,360
Vermont	33	35	29	127	1,724,690	1,724,690
Virginia	147	278	278	333	10,173,819	10,173,819
Washington	283	1,243	1,197	403	11,572,689	11,572,689
West Virginia	38	(D)	(D)	139	1,145,584	1,145,584
Wisconsin	131	126	104	473	7,762,741	7,762,741
Wyoming	3	2	2	20	282,486	282,486
Water Resources Regions						
Region 01 New England	345	1,579	1,198	1,129	38,320,101	38,320,101
Region 02 Mid-Atlantic	866	3,605	3,284	1,694	76,449,582	76,449,582
Region 03 South Atlantic-Gulf	893	6,677	6,652	1,527	189,468,417	189,468,417
Region 04 Great Lakes	389	1,948	1,948	1,505	93,648,761	93,648,761
Region 05 Ohio	244	811	796	1,234	28,123,293	28,123,293
Region 06 Tennessee	102	102	102	363	4,637,034	4,637,034
Region 07 Upper Mississippi	311	1,302	604	1,013	34,658,878	34,658,878
Region 08 Lower Mississippi	24	32	32	214	4,525,435	4,525,435
Region 09 Souris-Red-Rainy	2	(D)	(D)	35	(D)	(D)
Region 10 Missouri	256	461	262	638	26,415,555	26,415,555
Region 11 Arkansas-White-Red	115	188	180	271	3,854,581	3,854,581
Region 12 Texas-Gulf	95	257	256	424	28,345,976	28,345,976
Region 13 Rio Grande	17	(D)	(D)	26	(D)	(D)
Region 14 Upper Colorado	24	38	38	42	1,062,120	1,062,120
Region 15 Lower Colorado	25	(D)	(D)	22	1,128,220	1,128,220
Region 16 Great Basin	23	(D)	(D)	59	6,756,440	6,756,440
Region 17 Pacific Northwest	615	2,940	2,544	978	26,910,557	26,910,557
Region 18 California	731	10,650	10,627	742	149,572,711	149,572,711
Region 19 Alaska	69	175	165	140	1,084,950	1,084,950
Region 20 Hawaii	281	882	705	383	20,738,012	20,738,012

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Table 41. Irrigated Horticultural Operations by Selected Crops Irrigated: 2018 and 2013 (continued)

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

Geographic area	Nursery crops					
	In the open			Under protection		
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated
United States	2018 8,333	245,928	198,995	5,262	503,183,006	503,183,006
	2013 9,777	253,173	202,121	5,810	418,306,593	418,303,593
2018 DATA						
Alabama	117	4,393	4,241	121	12,246,118	12,246,118
Alaska	15	(D)	(D)	69	185,990	185,990
Arizona	68	3,013	3,013	61	(D)	(D)
Arkansas	32	107	105	30	470,070	470,070
California	866	19,828	19,764	612	89,962,112	89,962,112
Colorado	184	3,359	3,289	38	861,450	861,450
Connecticut	75	3,737	2,260	47	7,537,200	7,537,200
Delaware	11	713	(D)	6	(D)	(D)
Florida	1,414	29,157	29,156	650	124,921,748	124,921,748
Georgia	216	3,249	3,249	104	9,348,140	9,348,140
Hawaii	245	694	635	127	3,635,920	3,635,920
Idaho	116	4,664	4,074	94	1,128,220	1,128,220
Illinois	121	12,810	5,480	102	35,698,590	35,698,590
Indiana	51	1,185	714	65	462,780	462,780
Iowa	33	447	357	36	825,580	825,580
Kansas	57	1,124	1,043	44	1,502,760	1,502,760
Kentucky	83	899	761	58	463,080	463,080
Louisiana	142	2,265	2,150	93	5,933,412	5,933,412
Maine	35	474	474	29	211,050	211,050
Maryland	59	4,157	4,154	87	2,712,280	2,712,280
Massachusetts	150	1,613	1,587	36	460,996	460,996
Michigan	264	19,887	10,523	169	9,599,994	9,599,994
Minnesota	126	2,217	1,401	57	(D)	(D)
Mississippi	43	654	654	42	830,024	830,024
Missouri	40	1,718	962	71	867,550	867,550
Montana	25	(D)	(D)	53	127,646	127,646
Nebraska	71	1,490	1,341	54	196,780	196,780
Nevada	5	21	21	6	(D)	(D)
New Hampshire	103	240	227	45	575,400	575,400
New Jersey	256	10,691	10,041	126	30,128,776	30,128,776
New Mexico	59	789	789	17	666,332	666,332
New York	255	7,421	7,121	183	9,721,448	9,721,448
North Carolina	315	10,977	3,280	208	10,754,022	10,754,022
North Dakota	6	(D)	(D)	7	(D)	(D)
Ohio	201	9,585	6,986	111	8,930,387	8,930,387
Oklahoma	84	752	690	54	1,045,561	1,045,561
Oregon	654	29,902	29,082	360	40,060,694	40,060,694
Pennsylvania	270	3,355	1,461	196	20,707,560	20,707,560
Rhode Island	17	137	134	31	416,000	416,000
South Carolina	195	10,468	10,159	39	109,520	109,520
South Dakota	19	350	26	16	156,000	156,000
Tennessee	151	6,904	1,349	181	3,007,137	3,007,137
Texas	325	11,587	11,446	251	39,293,616	39,293,616
Utah	82	399	399	22	536,760	536,760
Vermont	37	102	69	40	40,700	40,700
Virginia	165	5,574	2,744	79	7,336,552	7,336,552
Washington	315	9,683	9,101	185	12,669,712	12,669,712
West Virginia	28	93	93	14	218,376	218,376
Wisconsin	125	2,836	1,634	132	2,923,278	2,923,278
Wyoming	7	(D)	(D)	4	9,300	9,300
Water Resources Regions						
Region 01 New England	384	6,231	4,712	188	9,200,646	9,200,646
Region 02 Mid-Atlantic	849	25,610	24,101	530	69,070,324	69,070,324
Region 03 South Atlantic-Gulf	2,251	61,172	50,582	1,082	151,962,268	151,962,268
Region 04 Great Lakes	432	28,062	16,632	387	19,893,572	19,893,572
Region 05 Ohio	429	14,264	5,577	371	7,433,962	7,433,962
Region 06 Tennessee	166	615	615	145	6,176,880	6,176,880
Region 07 Upper Mississippi	423	18,303	8,843	275	36,363,746	36,363,746
Region 08 Lower Mississippi	132	2,227	2,112	100	6,520,356	6,520,356
Region 09 Souris-Red-Rainy	13	(D)	(D)	11	(D)	(D)
Region 10 Missouri	198	4,982	3,885	163	3,247,769	3,247,769
Region 11 Arkansas-White-Red	196	1,618	1,553	148	2,092,811	2,092,811
Region 12 Texas-Gulf	305	11,048	10,907	239	38,770,896	38,770,896
Region 13 Rio Grande	67	1,040	1,040	28	1,184,052	1,184,052
Region 14 Upper Colorado	139	2,199	2,199	17	148,600	148,600
Region 15 Lower Colorado	79	3,139	3,139	65	(D)	(D)
Region 16 Great Basin	53	(D)	(D)	17	402,560	402,560
Region 17 Pacific Northwest	1,098	44,329	42,338	679	52,575,972	52,575,972
Region 18 California	859	19,710	19,646	621	91,348,112	91,348,112
Region 19 Alaska	15	(D)	(D)	69	185,990	185,990
Region 20 Hawaii	245	694	635	127	3,635,920	3,635,920

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Table 41. Irrigated Horticultural Operations by Selected Crops Irrigated: 2018 and 2013 (continued)

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

Geographic area	Propagative materials					
	In the open			Under protection		
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated
United States	2018 1,614	79,509	78,401	4,566	121,086,223	121,086,223
	2013 667	12,235	11,014	2,505	68,709,465	68,709,465
2018 DATA						
Alabama	8	6	6	83	1,003,368	1,003,368
Alaska	1	(D)	(D)	23	31,660	31,660
Arizona	-	-	-	3	(D)	(D)
Arkansas	8	4	4	25	160,150	160,150
California	218	17,450	17,450	284	49,211,958	49,211,958
Colorado	55	178	173	59	235,142	235,142
Connecticut	4	252	240	125	1,438,000	1,438,000
Delaware	1	(D)	(D)	2	(D)	(D)
Florida	200	2,015	2,014	246	10,262,055	10,262,055
Georgia	47	(D)	(D)	107	4,195,326	4,195,326
Hawaii	38	16	16	15	55,654	55,654
Idaho	170	22,048	22,048	24	236,538	236,538
Illinois	33	1,025	1,025	120	1,128,180	1,128,180
Indiana	46	429	232	108	1,370,340	1,370,340
Iowa	24	(D)	(D)	51	1,782,480	1,782,480
Kansas	19	2	2	77	303,000	303,000
Kentucky	11	49	43	112	597,140	597,140
Louisiana	14	18	18	67	2,924,900	2,924,900
Maine	61	1,973	1,973	158	1,341,900	1,341,900
Maryland	7	7	7	66	(D)	(D)
Massachusetts	-	-	-	41	735,840	735,840
Michigan	20	40	40	287	7,621,940	7,621,940
Minnesota	22	27	27	46	(D)	(D)
Mississippi	-	-	-	51	606,670	606,670
Missouri	20	15	12	155	125,896	125,896
Montana	16	12	12	15	(D)	(D)
Nebraska	19	14	4	44	85,076	85,076
Nevada	-	-	-	2	(D)	(D)
New Hampshire	-	-	-	65	376,224	376,224
New Jersey	2	(D)	(D)	80	201,304	201,304
New Mexico	34	(D)	(D)	15	8,024	8,024
New York	5	55	55	299	5,412,280	5,412,280
North Carolina	31	122	122	182	3,148,364	3,148,364
North Dakota	-	-	-	2	(D)	(D)
Ohio	18	(D)	(D)	136	4,867,150	4,867,150
Oklahoma	3	3	3	45	(D)	(D)
Oregon	145	18,273	18,273	199	4,504,796	4,504,796
Pennsylvania	9	1	1	122	236,592	236,592
Rhode Island	-	-	-	38	149,468	149,468
South Carolina	7	21	21	59	172,350	172,350
South Dakota	3	177	177	9	4,300	4,300
Tennessee	36	46	46	83	479,270	479,270
Texas	11	45	45	95	7,218,916	7,218,916
Utah	-	-	-	26	543,760	543,760
Vermont	5	1	1	70	392,750	392,750
Virginia	79	(D)	(D)	186	2,918,631	2,918,631
Washington	143	13,268	12,395	234	1,068,356	1,068,356
West Virginia	1	(D)	(D)	81	712,522	712,522
Wisconsin	20	12	12	140	907,316	907,316
Wyoming	-	-	-	4	8,800	8,800
Water Resources Regions						
Region 01 New England	65	2,225	2,213	429	4,047,432	4,047,432
Region 02 Mid-Atlantic	71	780	780	532	(D)	(D)
Region 03 South Atlantic-Gulf	291	2,697	2,695	743	20,562,593	20,562,593
Region 04 Great Lakes	77	(D)	(D)	605	18,262,762	18,262,762
Region 05 Ohio	36	382	179	330	3,280,696	3,280,696
Region 06 Tennessee	56	43	43	142	403,278	403,278
Region 07 Upper Mississippi	103	1,785	1,785	364	(D)	(D)
Region 08 Lower Mississippi	14	(D)	(D)	106	3,270,160	3,270,160
Region 09 Souris-Red-Rainy	-	-	-	3	(D)	(D)
Region 10 Missouri	94	242	225	218	510,830	510,830
Region 11 Arkansas-White-Red	23	17	17	126	(D)	(D)
Region 12 Texas-Gulf	11	45	45	95	7,218,916	7,218,916
Region 13 Rio Grande	2	(D)	(D)	11	(D)	(D)
Region 14 Upper Colorado	46	(D)	(D)	49	527,140	527,140
Region 15 Lower Colorado	-	-	-	3	(D)	(D)
Region 16 Great Basin	-	-	-	21	(D)	(D)
Region 17 Pacific Northwest	468	53,599	52,725	467	5,839,154	5,839,154
Region 18 California	218	17,450	17,450	284	49,211,958	49,211,958
Region 19 Alaska	1	(D)	(D)	23	31,660	31,660
Region 20 Hawaii	38	16	16	15	55,654	55,654

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Table 41. Irrigated Horticultural Operations by Selected Crops Irrigated: 2018 and 2013 (continued)

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

Geographic area	Food crops grown under protection			Mushroom crops under protection		
	Operations	Square feet	Square feet irrigated	Operations	Square feet	Square feet irrigated
United States	2018 10,423	158,209,476	158,209,476	458	29,599,460	29,599,460
	2013 7,029	136,608,782	136,608,782	410	23,476,222	23,475,522
2018 DATA						
Alabama	49	312,876	312,876	-	-	-
Alaska	124	878,961	878,961	4	1,250	1,250
Arizona	56	6,667,500	6,667,500	-	-	-
Arkansas	77	1,210,848	1,210,848	11	11,200	11,200
California	340	45,966,740	45,966,740	63	5,782,100	5,782,100
Colorado	199	2,312,550	2,312,550	9	2,616,800	2,616,800
Connecticut	135	1,222,908	1,222,908	-	-	-
Delaware	11	308,040	308,040	3	(D)	(D)
Florida	109	959,324	959,324	-	-	-
Georgia	123	601,590	601,590	-	-	-
Hawaii	146	5,689,445	5,689,445	-	-	-
Idaho	211	500,034	500,034	3	600	600
Illinois	206	(D)	(D)	1	(D)	(D)
Indiana	184	3,038,580	3,038,580	-	-	-
Iowa	181	1,268,466	1,268,466	17	85,000	85,000
Kansas	105	992,176	992,176	-	-	-
Kentucky	393	4,328,328	4,328,328	-	-	-
Louisiana	69	302,300	302,300	-	-	-
Maine	361	3,762,344	3,762,344	3	65,340	65,340
Maryland	180	1,306,946	1,306,946	29	1,208,430	1,208,430
Massachusetts	167	1,605,656	1,605,656	-	-	-
Michigan	377	3,366,024	3,366,024	20	12,000	12,000
Minnesota	205	2,433,660	2,433,660	-	-	-
Mississippi	107	678,680	678,680	13	212,460	212,460
Missouri	428	3,249,038	3,249,038	8	680	680
Montana	178	500,192	500,192	1	(D)	(D)
Nebraska	120	1,186,245	1,186,245	-	-	-
Nevada	41	(D)	(D)	2	(D)	(D)
New Hampshire	282	3,099,413	3,099,413	22	440	440
New Jersey	200	1,982,924	1,982,924	21	6,300	6,300
New Mexico	145	2,006,740	2,006,740	19	(D)	(D)
New York	585	4,963,947	4,963,947	44	964,920	964,920
North Carolina	184	1,651,330	1,651,330	37	29,800	29,800
North Dakota	20	203,848	203,848	-	-	-
Ohio	332	5,293,890	5,293,890	-	-	-
Oklahoma	91	765,980	765,980	1	(D)	(D)
Oregon	336	6,544,532	6,544,532	17	916,880	916,880
Pennsylvania	782	7,941,632	7,941,632	81	15,400,640	15,400,640
Rhode Island	88	461,191	461,191	8	96,000	96,000
South Carolina	50	1,194,532	1,194,532	-	-	-
South Dakota	29	265,160	265,160	-	-	-
Tennessee	258	1,245,744	1,245,744	-	-	-
Texas	207	5,958,302	5,958,302	-	-	-
Utah	152	2,838,972	2,838,972	-	-	-
Vermont	282	2,665,842	2,665,842	8	2,600	2,600
Virginia	356	4,484,204	4,484,204	-	-	-
Washington	463	4,364,196	4,364,196	6	120	120
West Virginia	241	789,314	789,314	-	-	-
Wisconsin	385	2,420,006	2,420,006	-	-	-
Wyoming	73	829,410	829,410	7	100,800	100,800
Water Resources Regions						
Region 01 New England	1,115	10,936,032	10,936,032	36	163,880	163,880
Region 02 Mid-Atlantic	1,551	14,262,649	14,262,649	178	17,620,090	17,620,090
Region 03 South Atlantic-Gulf	655	4,386,396	4,386,396	50	242,260	242,260
Region 04 Great Lakes	1,240	12,577,063	12,577,063	25	12,500	12,500
Region 05 Ohio	1,138	11,889,677	11,889,677	-	-	-
Region 06 Tennessee	252	3,705,370	3,705,370	-	-	-
Region 07 Upper Mississippi	870	7,231,312	7,231,312	18	(D)	(D)
Region 08 Lower Mississippi	133	1,250,080	1,250,080	5	10,000	10,000
Region 09 Souris-Red-Rainy	30	89,800	89,800	-	-	-
Region 10 Missouri	673	6,479,517	6,479,517	22	118,280	118,280
Region 11 Arkansas-White-Red	304	2,704,596	2,704,596	7	(D)	(D)
Region 12 Texas-Gulf	174	721,590	721,590	-	-	-
Region 13 Rio Grande	148	6,036,520	6,036,520	11	2,608,100	2,608,100
Region 14 Upper Colorado	212	2,125,424	2,125,424	10	10,000	10,000
Region 15 Lower Colorado	61	6,706,500	6,706,500	-	-	-
Region 16 Great Basin	127	2,871,408	2,871,408	2	(D)	(D)
Region 17 Pacific Northwest	1,125	11,229,596	11,229,596	27	918,600	918,600
Region 18 California	345	46,437,540	46,437,540	63	5,782,100	5,782,100
Region 19 Alaska	124	878,961	878,961	4	1,250	1,250
Region 20 Hawaii	146	5,689,445	5,689,445	-	-	-

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Table 41. Irrigated Horticultural Operations by Selected Crops Irrigated: 2018 and 2013 (continued)

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

Geographic area	Sod in the open			Cultivated Christmas trees and short rotation woody crops in the open		
	Operations	Acres	Acres irrigated	Operations	Acres	Acres irrigated
United States 2018	1,087	312,992	260,974	888	15,794	10,783
..... 2013	976	266,521	234,963	1,177	54,297	38,395
2018 DATA						
Alabama	60	16,699	16,619	-	-	-
Alaska	1	(D)	(D)	-	-	-
Arizona	6	1,791	1,791	-	-	-
Arkansas	32	6,872	5,978	4	46	17
California	61	23,751	23,751	208	2,126	2,126
Colorado	95	8,979	8,919	12	96	96
Connecticut	-	-	-	26	572	188
Delaware	1	(D)	(D)	5	(D)	39
Florida	82	49,733	46,088	26	442	442
Georgia	56	17,127	17,058	24	270	262
Hawaii	28	176	166	4	60	60
Idaho	35	2,296	2,296	39	147	147
Illinois	19	7,137	3,904	6	18	12
Indiana	25	8,090	2,420	1	(D)	(D)
Iowa	12	1,875	1,650	3	6	6
Kansas	20	6,400	2,300	4	8	8
Kentucky	2	(D)	(D)	2	(D)	(D)
Louisiana	4	1,250	1,230	10	60	35
Maine	4	(D)	(D)	3	(D)	(D)
Maryland	16	5,343	5,343	-	-	-
Massachusetts	-	-	-	11	28	28
Michigan	37	9,552	7,239	88	5,106	3,253
Minnesota	13	5,670	2,530	13	2,368	472
Mississippi	33	5,350	4,605	-	-	-
Missouri	18	4,223	2,760	6	263	47
Montana	2	(D)	(D)	16	(D)	(D)
Nebraska	19	1,099	1,099	4	8	8
Nevada	8	650	650	-	-	-
New Hampshire	-	-	-	-	-	-
New Jersey	18	5,823	5,593	15	140	140
New Mexico	1	(D)	(D)	42	192	192
New York	11	3,155	3,155	-	-	-
North Carolina	16	11,411	5,021	-	-	-
North Dakota	-	-	-	-	-	-
Ohio	23	12,107	1,788	1	(D)	(D)
Oklahoma	33	16,077	13,948	10	94	94
Oregon	23	3,860	3,860	112	893	803
Pennsylvania	1	(D)	(D)	24	(D)	(D)
Rhode Island	5	1,321	1,238	5	40	40
South Carolina	22	8,929	7,549	28	161	161
South Dakota	6	687	687	2	(D)	(D)
Tennessee	17	6,165	6,165	-	-	-
Texas	95	39,184	34,693	21	(D)	59
Utah	43	1,746	1,586	11	446	446
Vermont	1	(D)	(D)	4	(D)	(D)
Virginia	2	(D)	(D)	-	-	-
Washington	15	4,160	4,160	81	1,333	993
West Virginia	1	(D)	(D)	-	-	-
Wisconsin	64	9,359	9,233	17	429	419
Wyoming	1	(D)	(D)	-	-	-
Water Resources Regions						
Region 01 New England	9	1,832	1,749	47	660	276
Region 02 Mid-Atlantic	49	17,197	15,964	24	289	187
Region 03 South Atlantic-Gulf	248	105,545	93,256	78	873	865
Region 04 Great Lakes	79	11,599	9,260	90	5,266	3,413
Region 05 Ohio	55	22,870	6,841	25	97	97
Region 06 Tennessee	25	6,694	6,694	-	-	-
Region 07 Upper Mississippi	69	22,646	15,828	34	2,732	780
Region 08 Lower Mississippi	23	4,691	4,507	2	(D)	(D)
Region 09 Souris-Red-Rainy	-	-	-	2	(D)	(D)
Region 10 Missouri	86	17,360	11,857	29	292	76
Region 11 Arkansas-White-Red	65	23,773	20,894	73	482	428
Region 12 Texas-Gulf	95	39,184	34,693	15	65	53
Region 13 Rio Grande	1	(D)	(D)	-	-	-
Region 14 Upper Colorado	70	(D)	(D)	3	(D)	(D)
Region 15 Lower Colorado	6	1,791	1,791	-	-	-
Region 16 Great Basin	45	2,502	2,342	11	446	446
Region 17 Pacific Northwest	72	10,114	10,114	243	2,390	1,959
Region 18 California	61	23,751	23,751	208	2,126	2,126
Region 19 Alaska	1	(D)	(D)	-	-	-
Region 20 Hawaii	28	176	166	4	60	60

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Table 41. Irrigated Horticultural Operations by Selected Crops Irrigated: 2018 and 2013 (continued)

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

Geographic area	Other horticultural crops					
	In the open			Under protection		
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated
United States	2018 363	2,341	2,335	297	3,106,647	3,106,647
	2013 624	7,386	7,015	588	12,405,176	12,405,176
2018 DATA						
Alabama	-	-	-	8	60,000	60,000
Alaska	-	-	-	-	-	-
Arizona	2	(D)	(D)	12	1,293,240	1,293,240
Arkansas	6	3	3	5	217,800	217,800
California	83	216	216	11	52,000	52,000
Colorado	44	244	238	17	5,485	5,485
Connecticut	-	-	-	15	270,000	270,000
Delaware	-	-	-	-	-	-
Florida	78	1,378	1,378	23	53,912	53,912
Georgia	8	(D)	(D)	-	-	-
Hawaii	-	-	-	-	-	-
Idaho	-	-	-	-	-	-
Illinois	-	-	-	-	-	-
Indiana	-	-	-	8	48,400	48,400
Iowa	-	-	-	-	-	-
Kansas	-	-	-	-	-	-
Kentucky	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-
Maine	3	1	1	8	27,330	27,330
Maryland	-	-	-	1	(D)	(D)
Massachusetts	-	-	-	-	-	-
Michigan	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-
Mississippi	-	-	-	-	-	-
Missouri	-	-	-	18	16,200	16,200
Montana	8	(D)	(D)	4	(D)	(D)
Nebraska	-	-	-	-	-	-
Nevada	-	-	-	-	-	-
New Hampshire	11	30	30	-	-	-
New Jersey	3	(D)	(D)	-	-	-
New Mexico	6	(D)	(D)	17	112,400	112,400
New York	19	18	18	-	-	-
North Carolina	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-
Ohio	-	-	-	16	14,400	14,400
Oklahoma	-	-	-	13	93,000	93,000
Oregon	-	-	-	34	290,100	290,100
Pennsylvania	24	2	2	-	-	-
Rhode Island	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-
Texas	16	252	252	37	482,500	482,500
Utah	30	29	29	27	16,200	16,200
Vermont	-	-	-	23	46,000	46,000
Virginia	-	-	-	-	-	-
Washington	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-
Wisconsin	22	84	84	-	-	-
Wyoming	-	-	-	-	-	-
Water Resources Regions						
Region 01 New England	14	30	30	23	297,330	297,330
Region 02 Mid-Atlantic	43	24	24	1	(D)	(D)
Region 03 South Atlantic-Gulf	86	1,384	1,384	31	113,912	113,912
Region 04 Great Lakes	3	(D)	(D)	39	60,400	60,400
Region 05 Ohio	-	-	-	8	48,400	48,400
Region 06 Tennessee	-	-	-	-	-	-
Region 07 Upper Mississippi	22	84	84	-	-	-
Region 08 Lower Mississippi	-	-	-	-	-	-
Region 09 Souris-Red-Rainy	-	-	-	-	-	-
Region 10 Missouri	20	27	21	37	24,225	24,225
Region 11 Arkansas-White-Red	9	6	6	18	310,800	310,800
Region 12 Texas-Gulf	16	252	252	37	482,500	482,500
Region 13 Rio Grande	6	(D)	(D)	17	(D)	(D)
Region 14 Upper Colorado	56	245	245	27	16,200	16,200
Region 15 Lower Colorado	2	(D)	(D)	12	1,293,240	1,293,240
Region 16 Great Basin	-	-	-	-	-	-
Region 17 Pacific Northwest	3	(D)	(D)	36	291,400	291,400
Region 18 California	83	216	216	11	52,000	52,000
Region 19 Alaska	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-

Table 42. Irrigation for Nursery and Other Horticultural Crops Grown in the Open: 2018 and 2013 (continued)

[Excludes institutional, research, and experimental farms. 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		Off-farm water (all suppliers)		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States 2018	3,240	7,681	2,576,043	1,929	1,365,528	435	336,417	1,025	874,098	
..... 2013	4,652	7,107	1,904,879	2,805	748,392	534	219,914	1,631	936,573	
2018 DATA										
Alabama	19	111	7,269	4	1,303	-	-	15	5,966	
Alaska	10	14	5,029	7	(D)	1	(D)	2	(D)	
Arizona	10	(D)	(D)	6	(D)	-	-	4	10,427	
Arkansas	21	31	(D)	19	(D)	-	-	2	(D)	
California	434	1,777	(D)	198	(D)	32	(D)	236	327,323	
Colorado	34	36	7,389	16	(D)	2	(D)	18	(D)	
Connecticut	29	397	27,175	-	-	29	(D)	1	(D)	
Delaware	3	7	(D)	3	(D)	-	-	-	-	
Florida	236	305	44,752	236	44,752	-	-	-	-	
Georgia	38	98	(D)	21	9,721	9	(D)	8	(D)	
Hawaii	135	160	(D)	-	-	-	-	135	(D)	
Idaho	19	209	142,000	13	7,716	-	-	13	134,284	
Illinois	27	115	20,056	18	8,977	5	9,776	4	1,303	
Indiana	21	(D)	(D)	21	(D)	1	(D)	-	-	
Iowa	44	36	6,639	9	3,039	13	2,778	22	822	
Kansas	35	(D)	5,120	15	2,969	10	815	10	1,336	
Kentucky	49	56	(D)	9	(D)	5	(D)	37	(D)	
Louisiana	19	57	(D)	13	8,825	5	(D)	1	(D)	
Maine	63	69	16,926	55	11,090	3	(D)	5	(D)	
Maryland	20	14	3,271	20	3,271	-	-	-	-	
Massachusetts	6	9	1,955	-	-	-	-	6	1,955	
Michigan	16	15	9,966	16	9,966	-	-	-	-	
Minnesota	107	69	15,401	97	14,822	-	-	10	579	
Mississippi	6	10	688	-	-	-	-	6	688	
Missouri	43	38	9,861	32	6,146	12	(D)	7	(D)	
Montana	25	(D)	18,644	18	(D)	-	-	7	(D)	
Nebraska	33	38	11,834	28	11,562	-	-	5	272	
Nevada	2	(D)	(D)	-	-	-	-	2	(D)	
New Hampshire	41	37	1,244	41	1,244	-	-	-	-	
New Jersey	137	554	19,565	115	17,854	25	721	22	990	
New Mexico	56	92	(D)	14	(D)	33	(D)	16	4,236	
New York	178	276	105,612	88	11,737	69	91,673	46	2,202	
North Carolina	133	86	(D)	95	(D)	42	4,345	8	68	
North Dakota	2	(D)	(D)	-	-	-	-	2	(D)	
Ohio	106	97	9,656	59	5,574	9	650	47	3,432	
Oklahoma	10	17	6,757	4	3,910	2	(D)	4	(D)	
Oregon	170	753	220,984	63	34,247	61	16,544	46	170,192	
Pennsylvania	167	107	(D)	149	11,538	-	-	18	(D)	
Rhode Island	15	8	1,626	11	1,587	-	-	4	39	
South Carolina	21	21	1,458	6	1,140	8	(D)	7	(D)	
South Dakota	28	(D)	(D)	18	(D)	4	(D)	6	(D)	
Tennessee	36	23	3,112	14	1,647	-	-	22	1,465	
Texas	85	190	45,205	58	34,148	6	8,554	23	2,503	
Utah	17	71	66,311	8	10,427	-	-	17	55,883	
Vermont	30	29	10,398	13	2,520	9	(D)	13	(D)	
Virginia	125	109	7,827	61	3,920	10	54	54	3,853	
Washington	247	349	(D)	136	49,543	27	(D)	87	(D)	
West Virginia	26	15	(D)	3	(D)	3	30	20	(D)	
Wisconsin	99	127	(D)	99	(D)	-	-	-	-	
Wyoming	7	7	(D)	-	-	-	-	7	(D)	
Water Resources Regions										
Region 01 New England	159	524	51,640	108	14,464	32	24,568	20	12,609	
Region 02 Mid-Atlantic	427	832	(D)	305	(D)	76	(D)	71	(D)	
Region 03 South Atlantic-Gulf	450	591	78,982	345	65,278	45	6,544	60	7,160	
Region 04 Great Lakes	232	258	41,796	183	27,612	30	9,586	49	4,597	
Region 05 Ohio	193	183	20,909	75	(D)	14	(D)	115	11,979	
Region 06 Tennessee	83	77	9,495	49	(D)	24	(D)	22	(D)	
Region 07 Upper Mississippi	260	419	88,092	209	67,679	23	19,207	29	1,206	
Region 08 Lower Mississippi	17	(D)	7,208	10	(D)	-	-	7	(D)	
Region 09 Souris-Red-Rainy	2	(D)	(D)	-	-	-	-	2	(D)	
Region 10 Missouri	164	155	46,245	98	26,164	24	2,351	52	17,731	
Region 11 Arkansas-White-Red	64	101	26,842	42	(D)	7	(D)	15	(D)	
Region 12 Texas-Gulf	85	190	45,205	58	34,148	6	8,554	23	2,503	
Region 13 Rio Grande	56	92	(D)	14	(D)	33	(D)	16	4,236	
Region 14 Upper Colorado	-	-	-	-	-	-	-	-	-	
Region 15 Lower Colorado	10	(D)	(D)	6	(D)	-	-	4	10,427	
Region 16 Great Basin	19	71	(D)	8	(D)	-	-	19	(D)	
Region 17 Pacific Northwest	440	1,315	(D)	214	94,113	88	(D)	148	(D)	
Region 18 California	434	1,777	(D)	198	(D)	32	(D)	236	327,323	
Region 19 Alaska	10	14	5,029	7	(D)	1	(D)	2	(D)	
Region 20 Hawaii	135	160	(D)	-	-	-	-	135	(D)	

See footnote(s) at end of table.

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Table 42. Irrigation for Nursery and Other Horticultural Crops Grown in the Open: 2018 and 2013 (continued)

[Excludes institutional, research, and experimental farms. 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		Off-farm water (all suppliers)		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States	2018 697	41,763	33,243,475	170	5,593,208	111	2,255,028	446	25,395,239	
	2013 601	28,818	13,758,030	215	5,155,314	122	1,495,733	314	7,106,983	
2018 DATA										
Alabama	-	-	-	-	-	-	-	-	-	
Alaska	22	36	(D)	16	(D)	2	(D)	4	(D)	
Arizona	8	(D)	1,402,543	4	(D)	1	(D)	5	(D)	
Arkansas	2	(D)	(D)	2	(D)	-	-	-	-	
California	105	3,844	2,850,822	29	1,559,743	6	(D)	74	(D)	
Colorado	149	2,988	2,507,264	20	(D)	7	(D)	124	1,927,775	
Connecticut	-	-	-	-	-	-	-	-	-	
Delaware	4	6	791	4	791	-	-	-	-	
Florida	12	5,913	2,316,678	6	2,046,752	3	102,765	3	167,162	
Georgia	-	-	-	-	-	-	-	-	-	
Hawaii	9	71	(D)	-	-	1	(D)	9	(D)	
Idaho	150	19,401	19,087,293	6	(D)	3	(D)	144	18,823,017	
Illinois	-	-	-	-	-	-	-	-	-	
Indiana	6	(D)	(D)	6	(D)	-	-	-	-	
Iowa	-	-	-	-	-	-	-	-	-	
Kansas	-	-	-	-	-	-	-	-	-	
Kentucky	2	(D)	(D)	-	-	-	-	2	(D)	
Louisiana	10	674	(D)	10	(D)	-	-	-	-	
Maine	3	6	1,955	3	1,955	-	-	-	-	
Maryland	7	35	1,400	7	1,400	-	-	-	-	
Massachusetts	6	6	1,200	6	1,200	-	-	-	-	
Michigan	-	-	-	-	-	-	-	-	-	
Minnesota	-	-	-	-	-	-	-	-	-	
Mississippi	-	-	-	-	-	-	-	-	-	
Missouri	8	4	2,607	8	1,303	8	1,303	-	-	
Montana	11	22	6,843	6	(D)	-	-	5	(D)	
Nebraska	8	52	6,000	4	5,200	-	-	4	800	
Nevada	-	-	-	-	-	-	-	-	-	
New Hampshire	-	-	-	-	-	-	-	-	-	
New Jersey	-	-	-	-	-	-	-	-	-	
New Mexico	93	956	382,679	18	(D)	66	(D)	19	(D)	
New York	-	-	-	-	-	-	-	-	-	
North Carolina	-	-	-	-	-	-	-	-	-	
North Dakota	2	(D)	(D)	2	(D)	-	-	-	-	
Ohio	-	-	-	-	-	-	-	-	-	
Oklahoma	-	-	-	-	-	-	-	-	-	
Oregon	11	610	342,810	-	-	4	310,210	7	32,599	
Pennsylvania	-	-	-	-	-	-	-	-	-	
Rhode Island	5	40	1,629	5	1,629	-	-	-	-	
South Carolina	-	-	-	-	-	-	-	-	-	
South Dakota	-	-	-	-	-	-	-	-	-	
Tennessee	-	-	-	-	-	-	-	-	-	
Texas	32	3,908	2,162,426	3	14,725	6	639,044	23	1,508,658	
Utah	12	88	108,617	-	-	-	-	12	108,617	
Vermont	-	-	-	-	-	-	-	-	-	
Virginia	-	-	-	-	-	-	-	-	-	
Washington	16	1,793	1,832,409	3	(D)	2	(D)	11	1,830,840	
West Virginia	2	(D)	(D)	-	-	2	(D)	-	-	
Wisconsin	-	-	-	-	-	-	-	-	-	
Wyoming	2	(D)	(D)	2	(D)	-	-	-	-	
Water Resources Regions										
Region 01 New England	14	52	4,784	14	4,784	-	-	-	-	
Region 02 Mid-Atlantic	11	41	(D)	11	(D)	-	-	-	-	
Region 03 South Atlantic-Gulf	12	5,913	2,316,678	6	2,046,752	3	102,765	3	167,162	
Region 04 Great Lakes	-	-	-	-	-	-	-	-	-	
Region 05 Ohio	10	(D)	2,933	6	(D)	2	(D)	2	(D)	
Region 06 Tennessee	-	-	-	-	-	-	-	-	-	
Region 07 Upper Mississippi	-	-	-	-	-	-	-	-	-	
Region 08 Lower Mississippi	12	738	209,491	12	209,491	-	-	-	-	
Region 09 Souris-Red-Rainy	2	(D)	(D)	2	(D)	-	-	-	-	
Region 10 Missouri	49	819	547,590	34	539,355	13	2,062	12	6,174	
Region 11 Arkansas-White-Red	45	195	62,661	-	-	33	(D)	12	(D)	
Region 12 Texas-Gulf	32	3,908	2,162,426	3	14,725	6	639,044	23	1,508,658	
Region 13 Rio Grande	45	816	365,605	10	(D)	35	(D)	10	152,987	
Region 14 Upper Colorado	126	2,184	1,930,580	8	3,389	-	-	118	1,927,191	
Region 15 Lower Colorado	8	(D)	1,402,543	4	(D)	1	(D)	5	(D)	
Region 16 Great Basin	12	88	(D)	-	-	-	-	12	(D)	
Region 17 Pacific Northwest	183	21,816	21,264,466	15	265,254	9	312,756	162	20,686,456	
Region 18 California	105	3,844	2,850,822	29	1,559,743	6	(D)	74	(D)	
Region 19 Alaska	22	36	(D)	16	(D)	2	(D)	4	(D)	
Region 20 Hawaii	9	71	(D)	-	-	1	(D)	9	(D)	

See footnote(s) at end of table.

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Table 42. Irrigation for Nursery and Other Horticultural Crops Grown in the Open: 2018 and 2013 (continued)

[Excludes institutional, research, and experimental farms. 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		Off-farm water (all suppliers)		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States	2018 6,905	114,111	41,804,062	4,794	26,803,114	773	3,485,449	1,649	11,515,498	
.....	2013 6,461	131,006	53,326,941	4,360	21,809,523	966	3,567,399	1,633	27,950,019	
2018 DATA										
Alabama	72	2,610	783,505	39	710,731	11	28,942	22	43,833	
Alaska	47	116	21,460	37	14,644	9	(D)	3	(D)	
Arizona	56	1,537	(D)	46	494,767	-	-	13	(D)	
Arkansas	42	129	18,544	19	12,322	9	(D)	14	(D)	
California	1,129	26,385	17,256,869	689	11,282,266	43	650,346	468	5,324,256	
Colorado	119	365	84,465	43	40,912	22	(D)	56	(D)	
Connecticut	69	432	85,772	65	(D)	21	(D)	2	(D)	
Delaware	9	224	(D)	5	(D)	-	-	4	782	
Florida	600	14,887	2,863,272	595	2,311,756	31	26,866	4	524,650	
Georgia	153	2,671	693,612	128	592,318	18	(D)	12	(D)	
Hawaii	262	773	274,620	7	(D)	31	(D)	224	228,245	
Idaho	151	1,612	787,718	82	(D)	10	(D)	69	403,712	
Illinois	98	4,962	1,370,815	62	1,188,575	36	181,426	5	815	
Indiana	94	431	90,584	72	56,954	9	(D)	13	(D)	
Iowa	55	940	218,038	18	14,685	27	195,332	11	8,021	
Kansas	49	137	7,379	25	4,256	-	-	30	3,124	
Kentucky	102	682	55,733	20	(D)	15	(D)	69	41,250	
Louisiana	37	220	56,653	24	(D)	7	(D)	6	3,519	
Maine	88	840	148,753	82	146,576	1	(D)	5	(D)	
Maryland	67	1,639	110,970	55	96,670	6	(D)	7	(D)	
Massachusetts	142	589	72,292	142	53,858	11	18,434	-	-	
Michigan	271	6,187	1,927,805	270	1,911,513	21	16,293	-	-	
Minnesota	73	825	158,361	66	152,833	2	(D)	5	(D)	
Mississippi	22	344	41,047	22	23,047	5	18,000	-	-	
Missouri	144	900	120,162	86	60,445	39	44,196	24	15,522	
Montana	32	40	13,710	30	(D)	-	-	2	(D)	
Nebraska	72	959	127,201	67	117,330	-	-	21	9,872	
Nevada	7	21	(D)	2	(D)	-	-	5	(D)	
New Hampshire	163	288	44,648	88	20,000	38	12,266	38	12,382	
New Jersey	133	2,192	525,467	120	504,659	14	20,808	-	-	
New Mexico	6	18	5,865	6	5,865	-	-	-	-	
New York	302	3,538	562,048	187	487,735	25	17,669	90	56,644	
North Carolina	118	1,786	(D)	82	(D)	36	10,598	8	9,305	
North Dakota	1	(D)	(D)	-	-	1	(D)	1	(D)	
Ohio	168	2,084	274,664	134	165,317	13	105,897	23	3,450	
Oklahoma	123	573	131,413	67	73,661	19	(D)	40	(D)	
Oregon	384	9,018	3,892,510	284	2,352,183	58	945,020	56	595,307	
Pennsylvania	385	1,072	119,639	267	(D)	45	(D)	80	(D)	
Rhode Island	6	7	701	6	701	-	-	-	-	
South Carolina	94	7,158	1,072,715	64	898,735	13	156,227	20	17,753	
South Dakota	1	(D)	(D)	1	(D)	-	-	-	-	
Tennessee	124	1,550	376,412	52	34,880	58	336,923	15	4,608	
Texas	253	4,771	1,839,763	208	1,360,800	32	340,431	26	138,532	
Utah	19	497	513,932	-	-	-	-	19	513,932	
Vermont	18	28	4,625	16	(D)	7	(D)	2	(D)	
Virginia	147	692	168,103	117	86,404	24	77,921	10	3,778	
Washington	268	6,704	3,358,451	172	(D)	3	(D)	102	3,112,497	
West Virginia	34	120	31,332	30	24,494	3	1,950	24	4,888	
Wisconsin	95	547	(D)	95	(D)	-	-	-	-	
Wyoming	1	(D)	(D)	-	-	-	-	1	(D)	
Water Resources Regions										
Region 01 New England	478	2,174	355,550	393	291,686	71	42,512	47	21,352	
Region 02 Mid-Atlantic	814	8,550	1,368,303	634	1,224,633	89	(D)	126	(D)	
Region 03 South Atlantic-Gulf	1,075	28,163	5,487,844	940	4,543,822	124	334,805	63	609,216	
Region 04 Great Lakes	517	7,667	2,103,880	435	1,953,974	41	97,865	66	52,041	
Region 05 Ohio	384	3,787	736,567	183	(D)	72	434,890	133	(D)	
Region 06 Tennessee	117	1,708	637,127	77	(D)	28	2,327	13	(D)	
Region 07 Upper Mississippi	342	7,317	1,841,907	246	1,422,402	83	402,012	20	17,494	
Region 08 Lower Mississippi	36	168	51,601	30	(D)	2	(D)	4	(D)	
Region 09 Souris-Red-Rainy	4	42	(D)	2	(D)	2	(D)	-	-	
Region 10 Missouri	250	1,807	218,065	187	177,791	20	15,052	66	25,223	
Region 11 Arkansas-White-Red	268	1,490	300,295	120	(D)	48	(D)	109	(D)	
Region 12 Texas-Gulf	228	4,224	1,723,132	186	1,301,193	29	283,407	26	138,532	
Region 13 Rio Grande	22	277	(D)	22	(D)	-	-	-	-	
Region 14 Upper Colorado	31	58	18,335	3	1,955	10	3,770	18	12,610	
Region 15 Lower Colorado	77	1,763	(D)	50	494,897	-	-	30	(D)	
Region 16 Great Basin	21	515	520,449	2	(D)	-	-	19	(D)	
Region 17 Pacific Northwest	822	17,354	8,050,083	555	2,956,969	71	981,110	229	4,112,005	
Region 18 California	1,110	26,159	17,160,274	685	11,282,136	43	650,346	453	5,227,791	
Region 19 Alaska	47	116	21,460	37	14,644	9	(D)	3	(D)	
Region 20 Hawaii	262	773	274,620	7	(D)	31	(D)	224	228,245	

See footnote(s) at end of table.

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Table 42. Irrigation for Nursery and Other Horticultural Crops Grown in the Open: 2018 and 2013 (continued)

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

Geographic area	Subirrigation (including hydroponic)								
	Operations	Acres irrigated	Gallons applied (1,000)	Water source					
				Ground water from wells		On-farm surface water		Off-farm water (all suppliers)	
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)
United States 2018	91	5,125	2,060,216	53	427,490	8	46,054	30	1,586,673
..... 2013	79	2,153	743,605	46	532,244	19	208,905	16	2,456
2018 DATA									
Alabama	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-
Arizona	1	(D)	(D)	1	(D)	-	-	-	-
Arkansas	1	(D)	(D)	1	(D)	-	-	-	-
California	52	4,396	(D)	28	(D)	-	-	24	(D)
Colorado	-	-	-	-	-	-	-	-	-
Connecticut	-	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	-
Florida	-	-	-	-	-	-	-	-	-
Georgia	4	8	(D)	-	-	-	-	4	(D)
Hawaii	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-
Illinois	-	-	-	-	-	-	-	-	-
Indiana	-	-	-	-	-	-	-	-	-
Iowa	5	3	408	5	408	-	-	-	-
Kansas	15	(D)	13,820	15	13,820	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-
Michigan	-	-	-	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-	-
Mississippi	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-
Montana	-	-	-	-	-	-	-	-	-
Nebraska	-	-	-	-	-	-	-	-	-
Nevada	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-	-
New Mexico	-	-	-	-	-	-	-	-	-
New York	3	135	43,990	-	-	3	43,990	-	-
North Carolina	-	-	-	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	-	-	-
Oklahoma	-	-	-	-	-	-	-	-	-
Oregon	-	-	-	-	-	-	-	-	-
Pennsylvania	2	(D)	(D)	-	-	2	(D)	-	-
Rhode Island	-	-	-	-	-	-	-	-	-
South Carolina	3	12	978	3	978	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-
Texas	-	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-
Washington	5	16	(D)	-	-	3	(D)	2	(D)
West Virginia	-	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-
Water Resources Regions									
Region 01 New England	-	-	-	-	-	-	-	-	-
Region 02 Mid-Atlantic	2	(D)	(D)	-	-	2	(D)	-	-
Region 03 South Atlantic-Gulf	7	(D)	1,278	3	978	-	-	4	300
Region 04 Great Lakes	-	-	-	-	-	-	-	-	-
Region 05 Ohio	3	135	43,990	-	-	3	43,990	-	-
Region 06 Tennessee	-	-	-	-	-	-	-	-	-
Region 07 Upper Mississippi	5	3	408	5	408	-	-	-	-
Region 08 Lower Mississippi	-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy	-	-	-	-	-	-	-	-	-
Region 10 Missouri	5	35	12,500	5	12,500	-	-	-	-
Region 11 Arkansas-White-Red	11	43	2,328	11	2,328	-	-	-	-
Region 12 Texas-Gulf	-	-	-	-	-	-	-	-	-
Region 13 Rio Grande	-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado	1	(D)	(D)	1	(D)	-	-	-	-
Region 16 Great Basin	-	-	-	-	-	-	-	-	-
Region 17 Pacific Northwest	5	16	(D)	-	-	3	(D)	2	(D)
Region 18 California	52	4,396	(D)	28	(D)	-	-	24	(D)
Region 19 Alaska	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	-	-	-	-	-

¹ The same area can be irrigated by more than one method. Overlapped irrigation is not counted twice.

Table 43. Irrigation for Nursery, Greenhouse, and Other Horticultural Crops Grown Under Protection: 2018 and 2013 (continued)

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

Geographic area	Operations	Square feet irrigated	Gallons applied (1,000)	Hand watered						
				Water source						
				Ground water from wells		On-farm surface water		Off-farm water (all suppliers)		
Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)					
United States	2018 13,757	363,119,112	2,573,838	8,851	1,514,171	1,694	227,700	3,828	831,966	
	2013 15,343	313,362,469	3,215,983	8,646	1,715,730	1,451	269,693	5,867	1,230,560	
2018 DATA										
Alabama	183	11,719,294	50,283	109	11,141	30	3,884	63	35,259	
Alaska	110	932,094	3,233	78	2,620	29	(D)	18	(D)	
Arizona	45	3,044,708	20,001	28	(D)	-	-	20	(D)	
Arkansas	90	1,825,804	13,906	39	(D)	10	(D)	46	10,307	
California	944	68,020,132	639,616	478	376,448	54	40,284	502	222,884	
Colorado	239	7,677,575	50,325	98	(D)	9	(D)	136	26,136	
Connecticut	352	8,731,420	71,211	263	48,495	62	(D)	27	(D)	
Delaware	29	1,619,920	3,540	25	3,524	-	-	4	16	
Florida	199	3,172,364	(D)	196	(D)	3	(D)	-	-	
Georgia	152	3,524,468	13,982	104	4,716	-	-	48	9,266	
Hawaii	185	3,189,159	10,478	-	-	32	(D)	153	(D)	
Idaho	172	1,261,122	7,950	94	7,305	26	112	59	532	
Illinois	291	5,314,350	77,922	216	63,284	72	13,969	33	670	
Indiana	218	3,703,784	25,810	165	(D)	11	(D)	51	7,187	
Iowa	254	5,793,588	43,883	136	16,470	49	16,091	92	11,322	
Kansas	114	2,290,930	23,752	44	2,449	24	1,052	60	20,251	
Kentucky	263	3,342,520	16,597	70	4,344	32	2,632	169	9,622	
Louisiana	133	1,194,665	3,451	98	2,852	5	(D)	38	(D)	
Maine	301	1,924,528	9,547	237	7,500	52	1,260	15	787	
Maryland	160	3,578,318	28,170	144	27,374	13	(D)	16	(D)	
Massachusetts	219	2,224,240	21,669	118	(D)	40	(D)	91	6,086	
Michigan	745	48,525,966	236,744	553	153,850	57	(D)	151	(D)	
Minnesota	296	5,067,948	56,694	218	(D)	41	912	42	(D)	
Mississippi	69	1,223,520	(D)	56	3,100	-	-	13	(D)	
Missouri	271	3,806,295	18,175	179	11,037	40	(D)	72	(D)	
Montana	200	978,730	10,616	176	6,907	14	(D)	18	(D)	
Nebraska	162	1,422,199	15,420	134	(D)	-	-	37	(D)	
Nevada	31	268,736	1,024	22	944	-	-	9	80	
New Hampshire	230	3,734,600	37,414	153	26,680	6	(D)	78	(D)	
New Jersey	291	4,149,252	8,331	211	5,540	53	616	53	2,174	
New Mexico	32	587,580	17,091	21	(D)	-	-	18	(D)	
New York	899	19,838,579	93,503	581	54,972	197	3,547	167	34,984	
North Carolina	524	8,714,995	78,947	357	24,803	106	(D)	69	(D)	
North Dakota	33	350,745	2,397	11	512	3	(D)	20	(D)	
Ohio	685	11,618,035	86,729	450	47,760	101	(D)	176	(D)	
Oklahoma	135	533,870	3,822	60	1,805	14	(D)	72	(D)	
Oregon	505	10,334,762	85,795	334	60,274	53	1,784	127	23,737	
Pennsylvania	900	34,547,794	108,300	743	85,401	82	1,398	79	21,501	
Rhode Island	108	651,896	4,708	81	(D)	7	(D)	20	(D)	
South Carolina	158	2,431,082	8,183	115	5,473	22	2,385	42	324	
South Dakota	52	1,551,399	25,049	21	(D)	4	(D)	27	17,862	
Tennessee	358	6,140,643	70,851	59	6,441	99	9,669	201	54,741	
Texas	419	19,995,076	162,788	245	126,386	75	7,706	156	28,695	
Utah	128	4,095,000	56,535	2	(D)	-	-	127	(D)	
Vermont	150	900,808	4,645	80	3,194	10	(D)	71	(D)	
Virginia	333	6,540,399	41,344	216	33,148	65	7,000	54	1,196	
Washington	561	10,821,673	82,763	386	40,070	33	3,887	165	38,806	
West Virginia	158	538,786	6,361	49	2,371	55	1,691	54	2,299	
Wisconsin	641	9,092,435	76,539	587	76,103	-	-	54	436	
Wyoming	30	571,326	7,956	11	(D)	4	(D)	15	4,844	
Water Resources Regions										
Region 01 New England	1,247	17,496,508	148,369	885	102,716	167	(D)	236	(D)	
Region 02 Mid-Atlantic	1,943	50,710,518	193,934	1,543	160,983	265	9,650	199	23,301	
Region 03 South Atlantic-Gulf	1,112	30,782,453	(D)	758	81,472	152	55,188	251	(D)	
Region 04 Great Lakes	1,750	68,621,087	336,245	1,223	215,417	212	30,025	395	90,803	
Region 05 Ohio	1,320	19,806,020	145,664	675	62,650	223	(D)	453	(D)	
Region 06 Tennessee	439	6,139,332	53,806	207	14,417	103	3,390	130	35,999	
Region 07 Upper Mississippi	1,276	23,842,260	226,350	976	158,529	126	29,109	233	38,713	
Region 08 Lower Mississippi	229	3,045,695	(D)	145	5,845	5	(D)	105	21,331	
Region 09 Souris-Red-Rainy	47	603,508	(D)	10	(D)	22	27	15	1,746	
Region 10 Missouri	710	13,068,659	127,953	436	53,606	58	2,363	231	71,984	
Region 11 Arkansas-White-Red	338	3,301,748	23,190	185	(D)	38	(D)	145	12,932	
Region 12 Texas-Gulf	384	19,727,000	158,363	202	121,951	75	7,706	164	28,706	
Region 13 Rio Grande	64	3,382,760	21,366	54	8,182	-	-	17	13,184	
Region 14 Upper Colorado	129	1,095,820	23,274	-	-	7	94	122	23,180	
Region 15 Lower Colorado	54	3,205,908	22,806	31	(D)	-	-	26	(D)	
Region 16 Great Basin	99	3,446,256	(D)	24	(D)	-	-	76	29,874	
Region 17 Pacific Northwest	1,372	22,672,555	180,102	944	111,206	126	6,155	349	62,741	
Region 18 California	949	68,049,772	638,670	475	373,856	54	40,284	510	224,531	
Region 19 Alaska	110	932,094	3,233	78	2,620	29	(D)	18	(D)	
Region 20 Hawaii	185	3,189,159	10,478	-	-	32	(D)	153	(D)	

See footnote(s) at end of table.

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Table 43. Irrigation for Nursery, Greenhouse, and Other Horticultural Crops Grown Under Protection: 2018 and 2013 (continued)

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

Geographic area	Operations	Square feet irrigated	Gallons applied (1,000)	Gravity irrigation						
				Water source						
				Ground water from wells		On-farm surface water		Off-farm water (all suppliers)		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States	2018 2013	657 294	7,041,997 4,783,177	43,954 49,201	288 119	21,421 17,680	240 120	9,423 7,026	145 89	13,110 24,495
2018 DATA										
Alabama		11	4,400	16	-	-	11	16	-	-
Alaska		1	(D)	(D)	-	-	1	(D)	-	-
Arizona		32	512,000	(D)	-	-	-	-	32	(D)
Arkansas		-	-	-	-	-	-	-	-	-
California		36	229,820	2,661	24	2,202	3	389	16	69
Colorado		2	(D)	(D)	2	(D)	2	(D)	-	-
Connecticut		1	(D)	(D)	1	(D)	-	-	-	-
Delaware		-	-	-	-	-	-	-	-	-
Florida		-	-	-	-	-	-	-	-	-
Georgia		23	40,250	69	-	-	23	69	-	-
Hawaii		39	352,440	(D)	-	-	-	-	39	(D)
Idaho		-	-	-	-	-	-	-	-	-
Illinois		5	4,500	60	-	-	5	60	-	-
Indiana		-	-	-	-	-	-	-	-	-
Iowa		18	720,000	360	-	-	-	-	18	360
Kansas		-	-	-	-	-	-	-	-	-
Kentucky		65	1,273,080	1,052	2	(D)	63	(D)	-	-
Louisiana		-	-	-	-	-	-	-	-	-
Maine		9	227,448	(D)	6	(D)	6	1,220	-	-
Maryland		26	98,280	(D)	26	(D)	-	-	-	-
Massachusetts		-	-	-	-	-	-	-	-	-
Michigan		2	(D)	(D)	2	(D)	-	-	-	-
Minnesota		-	-	-	-	-	-	-	-	-
Mississippi		-	-	-	-	-	-	-	-	-
Missouri		10	48,000	1,035	8	(D)	2	(D)	2	(D)
Montana		2	(D)	(D)	2	(D)	-	-	2	(D)
Nebraska		-	-	-	-	-	-	-	-	-
Nevada		-	-	-	-	-	-	-	-	-
New Hampshire		33	59,400	398	-	-	33	398	-	-
New Jersey		-	-	-	-	-	-	-	-	-
New Mexico		-	-	-	-	-	-	-	-	-
New York		38	157,888	656	22	496	16	160	-	-
North Carolina		9	4,050	32	9	32	-	-	-	-
North Dakota		-	-	-	-	-	-	-	-	-
Ohio		-	-	-	-	-	-	-	-	-
Oklahoma		-	-	-	-	-	-	-	-	-
Oregon		14	23,100	20	7	(D)	7	(D)	-	-
Pennsylvania		45	195,240	5,857	24	369	21	5,489	-	-
Rhode Island		4	(D)	(D)	4	(D)	-	-	-	-
South Carolina		7	4,550	182	-	-	-	-	7	182
South Dakota		-	-	-	-	-	-	-	-	-
Tennessee		93	404,064	2,634	64	2,376	29	258	-	-
Texas		19	152,000	475	19	475	-	-	-	-
Utah		1	(D)	(D)	-	-	-	-	1	(D)
Vermont		30	108,560	(D)	25	528	5	(D)	-	-
Virginia		10	15,000	(D)	-	-	10	(D)	-	-
Washington		7	3,500	21	-	-	-	-	7	21
West Virginia		6	17,250	167	3	(D)	3	(D)	-	-
Wisconsin		38	66,500	294	38	294	-	-	-	-
Wyoming		21	457,380	(D)	-	-	-	-	21	(D)
Water Resources Regions										
Region 01 New England		69	1,956,808	15,255	33	(D)	39	(D)	-	-
Region 02 Mid-Atlantic		73	348,520	5,774	26	(D)	47	(D)	-	-
Region 03 South Atlantic-Gulf		50	53,250	300	9	(D)	34	85	7	(D)
Region 04 Great Lakes		56	161,488	1,308	51	1,301	5	6	-	-
Region 05 Ohio		121	1,441,394	1,831	48	(D)	73	(D)	-	-
Region 06 Tennessee		43	253,000	2,022	21	(D)	22	(D)	-	-
Region 07 Upper Mississippi		69	827,000	1,514	46	1,094	5	(D)	18	(D)
Region 08 Lower Mississippi		-	-	-	-	-	-	-	-	-
Region 09 Souris-Red-Rainy		-	-	-	-	-	-	-	-	-
Region 10 Missouri		4	13,934	299	2	(D)	4	(D)	2	(D)
Region 11 Arkansas-White-Red		-	-	-	-	-	-	-	-	-
Region 12 Texas-Gulf		19	152,000	475	19	475	-	-	-	-
Region 13 Rio Grande		-	-	-	-	-	-	-	-	-
Region 14 Upper Colorado		21	457,380	1,711	-	-	-	-	21	1,711
Region 15 Lower Colorado		32	512,000	(D)	-	-	-	-	32	(D)
Region 16 Great Basin		1	(D)	(D)	-	-	-	-	1	(D)
Region 17 Pacific Northwest		23	31,400	59	9	(D)	7	(D)	9	35
Region 18 California		36	229,820	2,661	24	2,202	3	389	16	69
Region 19 Alaska		1	(D)	(D)	-	-	1	(D)	-	-
Region 20 Hawaii		39	352,440	(D)	-	-	-	-	39	(D)

See footnote(s) at end of table.

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Table 43. Irrigation for Nursery, Greenhouse, and Other Horticultural Crops Grown Under Protection: 2018 and 2013 (continued)

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

Geographic area	Operations	Square feet irrigated	Gallons applied (1,000)	Sprinkler						
				Ground water from wells		On-farm surface water		Off-farm water (all suppliers)		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States	2018 5,767	700,588,139	6,941,578	4,101	4,663,549	705	1,165,342	1,340	1,112,687	
	2013 6,296	765,106,427	9,856,896	3,773	5,621,632	1,094	2,652,278	1,975	1,582,985	
2018 DATA										
Alabama	147	14,180,158	43,795	112	27,214	28	9,800	35	6,781	
Alaska	44	277,540	2,470	26	2,342	16	(D)	2	(D)	
Arizona	37	1,739,770	17,660	12	(D)	(D)	(D)	25	(D)	
Arkansas	37	591,106	4,541	18	(D)	6	(D)	15	3,151	
California	393	79,179,960	923,271	253	618,204	9	98,991	194	206,076	
Colorado	65	4,689,807	53,877	21	18,649	5	1,499	42	33,729	
Connecticut	101	14,825,064	217,781	39	57,168	62	(D)	18	(D)	
Delaware	4	159,120	(D)	4	(D)	(D)	(D)	(D)	(D)	
Florida	908	248,565,422	2,039,502	848	1,854,580	77	(D)	29	(D)	
Georgia	99	10,987,500	124,821	86	47,441	15	77,290	4	90	
Hawaii	167	7,521,465	80,044	4	(D)	2	(D)	163	61,620	
Idaho	48	980,320	13,500	45	11,580	(D)	(D)	23	1,920	
Illinois	118	33,652,240	168,884	87	25,259	32	141,825	18	1,800	
Indiana	74	2,598,340	34,696	58	13,833	8	(D)	15	(D)	
Iowa	55	3,315,885	21,844	20	545	(D)	(D)	35	21,299	
Kansas	16	1,219,760	6,965	(D)	(D)	3	4,200	13	2,765	
Kentucky	38	945,332	6,290	4	(D)	3	(D)	31	(D)	
Louisiana	154	9,765,412	38,222	103	(D)	31	24,682	40	(D)	
Maine	56	(D)	(D)	46	(D)	12	(D)	1	(D)	
Maryland	119	7,706,581	70,394	119	(D)	3	(D)	(D)	(D)	
Massachusetts	1	(D)	(D)	(D)	(D)	1	(D)	(D)	(D)	
Michigan	338	40,608,251	658,040	269	538,499	(D)	(D)	83	119,541	
Minnesota	81	5,609,692	63,888	80	59,212	4	(D)	1	(D)	
Mississippi	72	1,779,844	3,694	57	3,448	4	(D)	11	(D)	
Missouri	58	3,017,408	28,376	19	405	19	2,968	20	25,003	
Montana	68	601,008	3,701	54	(D)	10	1,665	12	(D)	
Nebraska	24	383,000	7,041	24	7,041	(D)	(D)	(D)	(D)	
Nevada	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
New Hampshire	46	1,592,684	10,671	46	(D)	1	(D)	(D)	(D)	
New Jersey	159	20,678,726	288,890	159	236,626	4	52,263	(D)	(D)	
New Mexico	22	(D)	(D)	2	(D)	(D)	(D)	20	(D)	
New York	260	25,926,158	154,414	189	34,451	22	291	49	119,671	
North Carolina	305	13,350,232	201,305	230	49,217	45	130,472	39	21,616	
North Dakota	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
Ohio	120	20,866,875	213,895	97	(D)	32	126,437	2	(D)	
Oklahoma	82	(D)	(D)	54	(D)	12	(D)	17	(D)	
Oregon	330	45,468,234	726,886	227	434,065	59	92,409	67	200,412	
Pennsylvania	172	7,361,172	78,126	146	71,524	5	6,474	21	128	
Rhode Island	29	391,981	2,466	26	(D)	(D)	(D)	3	(D)	
South Carolina	66	2,058,308	10,218	66	10,218	(D)	(D)	(D)	(D)	
South Dakota	19	467,983	4,337	10	3,626	2	(D)	7	(D)	
Tennessee	168	5,416,200	106,219	25	14,379	72	58,068	100	33,772	
Texas	173	35,916,434	283,486	64	190,365	68	52,600	62	40,521	
Utah	36	3,477,376	47,233	3	(D)	(D)	(D)	34	(D)	
Vermont	15	602,560	(D)	11	122	1	(D)	3	(D)	
Virginia	133	8,576,012	68,268	99	(D)	14	45,490	22	(D)	
Washington	160	5,012,514	52,434	102	37,277	7	3,317	58	11,839	
West Virginia	13	(D)	7,289	3	2,775	6	(D)	4	(D)	
Wisconsin	129	4,248,367	33,184	129	32,748	4	435	(D)	(D)	
Wyoming	8	93,556	992	5	(D)	1	(D)	2	(D)	
Water Resources Regions										
Region 01 New England	234	17,251,849	234,085	157	70,887	77	(D)	22	(D)	
Region 02 Mid-Atlantic	647	58,371,869	520,733	587	406,339	23	(D)	46	(D)	
Region 03 South Atlantic-Gulf	1,508	284,568,108	2,407,227	1,340	1,984,102	150	276,946	96	146,179	
Region 04 Great Lakes	570	71,915,389	999,507	443	640,586	40	125,599	114	233,322	
Region 05 Ohio	319	13,697,773	175,657	164	56,539	89	64,588	104	54,530	
Region 06 Tennessee	182	7,407,092	34,935	98	(D)	40	17,753	55	(D)	
Region 07 Upper Mississippi	335	43,131,529	269,414	255	90,049	36	141,927	67	37,437	
Region 08 Lower Mississippi	179	10,499,136	42,832	109	11,864	29	25,043	63	5,925	
Region 09 Souris-Red-Rainy	4	96,000	(D)	4	(D)	(D)	(D)	(D)	(D)	
Region 10 Missouri	158	9,933,948	85,867	82	(D)	30	(D)	49	47,757	
Region 11 Arkansas-White-Red	148	2,553,502	(D)	76	(D)	22	6,202	51	(D)	
Region 12 Texas-Gulf	161	35,655,074	275,666	52	182,545	68	52,600	62	40,521	
Region 13 Rio Grande	28	1,151,960	12,739	18	12,618	(D)	(D)	10	121	
Region 14 Upper Colorado	25	226,943	4,864	(D)	(D)	(D)	(D)	25	4,864	
Region 15 Lower Colorado	41	1,779,770	18,140	12	(D)	(D)	(D)	29	(D)	
Region 16 Great Basin	32	3,437,376	46,753	3	(D)	(D)	(D)	30	(D)	
Region 17 Pacific Northwest	583	50,545,856	791,517	418	483,944	74	97,338	149	210,235	
Region 18 California	402	80,565,960	927,579	253	618,204	9	98,991	203	210,384	
Region 19 Alaska	44	277,540	2,470	26	2,342	16	(D)	2	(D)	
Region 20 Hawaii	167	7,521,465	80,044	4	(D)	2	(D)	163	61,620	

See footnote(s) at end of table.

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Table 43. Irrigation for Nursery, Greenhouse, and Other Horticultural Crops Grown Under Protection: 2018 and 2013 (continued)

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

Geographic area	Operations	Square feet irrigated	Gallons applied (1,000)	Drip, trickle, or low-flow micro irrigation						
				Water source						
				Ground water from wells		On-farm surface water		Off-farm water (all suppliers)		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States	2018 11,244	607,028,935	5,585,522	7,487	3,504,316	1,702	309,073	2,583	1,772,133	
	2013 7,772	391,127,621	4,217,443	5,266	2,860,055	1,082	372,360	1,972	985,028	
2018 DATA										
Alabama	93	4,993,332	9,024	70	5,708	8	444	23	2,872	
Alaska	93	979,977	(D)	57	7,938	35	634	17	(D)	
Arizona	38	6,840,740	191,435	28	186,798	-	-	10	4,638	
Arkansas	74	2,294,978	(D)	32	2,875	4	(D)	38	3,298	
California	730	223,385,752	2,917,986	388	1,847,430	89	102,314	326	968,242	
Colorado	132	4,098,859	68,290	52	32,346	32	2,171	64	33,773	
Connecticut	156	15,915,768	96,123	151	82,767	6	(D)	2	(D)	
Delaware	21	559,960	(D)	17	(D)	-	-	4	16	
Florida	389	41,640,705	155,054	385	(D)	-	-	4	(D)	
Georgia	185	4,534,346	26,123	133	15,926	24	8,040	29	2,157	
Hawaii	215	19,900,642	219,195	6	(D)	33	(D)	176	206,849	
Idaho	142	2,548,771	40,544	78	25,870	12	579	60	14,095	
Illinois	242	12,744,000	33,705	192	25,254	20	3,904	30	4,547	
Indiana	265	4,558,532	(D)	209	25,663	23	13,390	35	(D)	
Iowa	165	3,979,623	9,622	116	(D)	1	(D)	49	6,307	
Kansas	112	5,270,280	28,226	49	18,296	14	3,022	60	6,909	
Kentucky	420	4,614,572	26,267	132	6,956	121	8,882	206	10,429	
Louisiana	76	507,100	(D)	51	(D)	5	(D)	20	3,228	
Maine	306	3,000,985	11,195	246	9,398	59	1,641	12	156	
Maryland	188	3,459,394	(D)	168	8,766	40	(D)	7	(D)	
Massachusetts	296	4,362,652	42,342	258	40,770	39	(D)	10	(D)	
Michigan	512	29,281,657	165,270	379	(D)	24	(D)	112	102,942	
Minnesota	121	5,898,026	70,779	98	69,607	18	(D)	6	(D)	
Mississippi	108	1,552,220	3,649	62	1,910	-	-	46	1,739	
Missouri	500	8,085,249	58,077	347	40,500	113	7,178	92	10,399	
Montana	89	709,876	(D)	57	5,759	4	(D)	30	565	
Nebraska	102	349,640	(D)	102	(D)	-	-	-	-	
Nevada	29	219,880	848	11	692	-	-	18	156	
New Hampshire	232	5,560,242	36,638	162	31,476	59	(D)	11	(D)	
New Jersey	248	20,893,820	137,744	226	114,479	36	23,265	-	-	
New Mexico	134	2,141,400	4,864	66	(D)	34	(D)	34	3,048	
New York	654	25,276,800	94,448	431	23,647	127	2,828	139	67,972	
North Carolina	244	4,995,797	(D)	169	8,472	64	6,718	19	(D)	
North Dakota	5	216,000	495	5	495	-	-	-	-	
Ohio	400	9,031,806	107,479	167	(D)	138	(D)	118	69,179	
Oklahoma	156	3,022,416	(D)	111	(D)	26	(D)	45	(D)	
Oregon	412	12,623,687	117,816	267	53,002	32	1,410	113	63,405	
Pennsylvania	889	31,256,270	88,737	642	50,416	176	13,074	142	25,247	
Rhode Island	91	887,112	6,798	70	4,261	20	240	12	2,296	
South Carolina	35	877,890	1,014	25	946	-	-	10	68	
South Dakota	37	508,760	3,456	19	(D)	11	(D)	7	(D)	
Tennessee	123	574,800	2,048	71	904	29	298	30	846	
Texas	219	36,366,684	327,797	160	301,132	12	17	60	26,649	
Utah	93	3,592,519	(D)	10	(D)	-	-	83	10,558	
Vermont	288	3,403,938	26,328	180	9,961	60	13,040	59	3,328	
Virginia	303	10,404,907	65,111	220	(D)	52	41,932	34	(D)	
Washington	371	14,537,164	151,091	245	67,762	32	2,324	104	81,004	
West Virginia	155	853,710	1,527	57	505	29	(D)	72	(D)	
Wisconsin	321	3,573,963	44,933	302	43,757	19	1,175	-	-	
Wyoming	35	141,734	(D)	8	235	22	155	5	(D)	
Water Resources Regions										
Region 01 New England	1,169	30,776,155	197,250	948	171,742	185	10,257	73	15,252	
Region 02 Mid-Atlantic	1,712	74,043,785	283,219	1,397	198,875	290	54,899	179	29,445	
Region 03 South Atlantic-Gulf	1,090	59,204,836	(D)	867	187,640	96	(D)	145	11,661	
Region 04 Great Lakes	1,307	48,837,564	334,299	866	(D)	204	(D)	275	215,250	
Region 05 Ohio	1,287	23,243,675	163,013	564	63,907	315	47,853	460	51,253	
Region 06 Tennessee	120	3,212,718	12,075	67	3,347	45	(D)	8	(D)	
Region 07 Upper Mississippi	811	20,707,103	151,123	660	132,103	50	(D)	112	(D)	
Region 08 Lower Mississippi	176	1,697,480	10,280	122	4,919	4	470	68	4,891	
Region 09 Souris-Red-Rainy	22	131,720	(D)	2	(D)	20	93	-	-	
Region 10 Missouri	644	15,846,397	122,436	453	73,594	118	10,218	98	38,625	
Region 11 Arkansas-White-Red	312	5,583,459	28,815	189	12,981	44	6,455	118	9,380	
Region 12 Texas-Gulf	217	31,139,484	144,845	158	118,180	12	17	60	26,649	
Region 13 Rio Grande	117	6,104,160	184,841	61	183,890	34	867	22	84	
Region 14 Upper Colorado	135	2,106,441	16,903	15	1,632	52	2,269	82	13,003	
Region 15 Lower Colorado	38	6,840,740	191,435	28	186,798	-	-	10	4,638	
Region 16 Great Basin	85	3,319,699	71,645	21	69,086	-	-	64	2,559	
Region 17 Pacific Northwest	956	29,609,068	309,226	618	149,768	76	4,312	282	155,146	
Region 18 California	738	223,743,832	2,921,567	388	1,847,430	89	102,314	334	971,823	
Region 19 Alaska	93	979,977	(D)	57	7,938	35	634	17	(D)	
Region 20 Hawaii	215	19,900,642	219,195	6	(D)	33	(D)	176	206,849	

See footnote(s) at end of table.

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Table 43. Irrigation for Nursery, Greenhouse, and Other Horticultural Crops Grown Under Protection: 2018 and 2013 (continued)

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

Geographic area	Operations	Square feet irrigated	Gallons applied (1,000)	Subirrigation (including hydroponic)						
				Water source						
				Ground water from wells		On-farm surface water		Off-farm water (all suppliers)		
				Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	Operations	Gallons applied (1,000)	
United States	2018 2013	1,000 533	43,140,022 54,515,132	559,429 531,010	657 331	209,485 259,085	149 102	197,937 192,102	272 147	152,008 79,824
2018 DATA										
Alabama	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-
Arizona	3	30,000	(D)	-	-	-	-	-	3	(D)
Arkansas	2	(D)	(D)	-	-	-	-	(D)	-	-
California	54	13,015,288	220,325	47	130,575	7	2	905	19	88,845
Colorado	17	318,000	(D)	10	(D)	-	-	-	9	2,473
Connecticut	29	1,975,000	(D)	29	(D)	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	-	-
Florida	54	149,850	(D)	54	(D)	-	-	-	-	-
Georgia	22	1,474,000	4,200	22	4,200	-	-	-	-	-
Hawaii	64	803,410	(D)	-	-	-	-	-	64	(D)
Idaho	22	70,800	815	13	564	-	-	-	9	251
Illinois	5	70,000	50	5	50	-	-	-	-	-
Indiana	4	(D)	(D)	3	(D)	-	-	(D)	-	-
Iowa	45	274,000	7,549	20	(D)	1	20	(D)	25	7,400
Kansas	-	-	-	-	-	-	-	-	-	-
Kentucky	42	439,680	3,743	2	(D)	-	-	-	40	(D)
Louisiana	2	(D)	(D)	-	-	2	(D)	(D)	-	-
Maine	35	(D)	(D)	35	(D)	-	-	-	-	-
Maryland	1	(D)	(D)	1	(D)	1	(D)	(D)	-	-
Massachusetts	11	110,000	(D)	11	(D)	-	-	-	-	-
Michigan	21	573,511	(D)	19	(D)	-	-	-	2	(D)
Minnesota	39	3,520,712	94,765	23	(D)	19	32,836	-	1	(D)
Mississippi	-	-	-	-	-	-	-	-	-	-
Missouri	6	32,000	110	4	(D)	-	-	-	2	(D)
Montana	2	(D)	(D)	-	-	-	-	-	2	(D)
Nebraska	1	(D)	(D)	1	(D)	-	-	-	-	-
Nevada	3	1,500	2	-	-	-	-	-	3	2
New Hampshire	69	783,300	5,663	36	(D)	-	-	-	33	(D)
New Jersey	13	27,300	25	13	25	-	-	-	-	-
New Mexico	11	459,760	(D)	11	(D)	-	-	-	-	-
New York	88	5,569,260	14,618	87	7,187	23	7,432	-	-	-
North Carolina	43	4,556,500	(D)	19	2,304	12	(D)	-	12	473
North Dakota	-	-	-	-	-	-	-	-	-	-
Ohio	48	830,200	2,132	-	-	16	(D)	-	32	(D)
Oklahoma	-	-	-	-	-	-	-	-	-	-
Oregon	10	97,600	1,343	10	(D)	2	(D)	-	-	-
Pennsylvania	55	989,380	194	50	113	-	-	-	5	81
Rhode Island	8	(D)	(D)	8	9	8	(D)	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-	-
Texas	22	94,000	1,774	12	120	-	-	-	10	1,654
Utah	-	-	-	-	-	-	-	-	-	-
Vermont	23	131,100	2,519	23	2,519	-	-	-	-	-
Virginia	45	861,300	(D)	44	(D)	1	(D)	-	-	-
Washington	7	210,000	210	7	-	7	210	-	-	-
West Virginia	52	224,604	174	24	(D)	27	7	-	1	(D)
Wisconsin	21	722,300	495	21	495	-	-	-	-	-
Wyoming	1	(D)	(D)	-	-	1	(D)	-	-	-
Water Resources Regions										
Region 01 New England	152	4,869,643	20,817	119	(D)	8	(D)	-	33	(D)
Region 02 Mid-Atlantic	155	4,735,538	22,317	152	(D)	24	14,107	-	2	(D)
Region 03 South Atlantic-Gulf	151	6,381,170	(D)	127	(D)	12	(D)	-	12	473
Region 04 Great Lakes	100	4,011,053	9,984	65	(D)	2	(D)	-	33	2,756
Region 05 Ohio	91	1,202,488	8,094	3	(D)	43	(D)	-	45	(D)
Region 06 Tennessee	12	312,000	2,220	12	2,220	-	-	-	-	-
Region 07 Upper Mississippi	106	4,330,572	94,100	70	21,858	39	32,911	-	21	39,331
Region 08 Lower Mississippi	2	(D)	(D)	-	-	2	(D)	-	-	-
Region 09 Souris-Red-Rainy	1	(D)	(D)	1	(D)	-	-	-	-	-
Region 10 Missouri	22	1,221,200	6,271	7	(D)	1	(D)	-	16	(D)
Region 11 Arkansas-White-Red	12	94,000	(D)	8	(D)	2	(D)	-	2	(D)
Region 12 Texas-Gulf	22	94,000	1,774	12	120	-	-	-	10	1,654
Region 13 Rio Grande	11	459,760	1,135	11	1,135	-	-	-	-	-
Region 14 Upper Colorado	-	-	-	-	-	-	-	-	-	-
Region 15 Lower Colorado	3	30,000	(D)	-	-	-	-	-	3	(D)
Region 16 Great Basin	3	1,500	(D)	-	-	-	-	-	3	(D)
Region 17 Pacific Northwest	39	378,400	2,368	23	(D)	9	(D)	-	9	251
Region 18 California	54	13,015,288	220,325	47	130,575	7	905	-	19	88,845
Region 19 Alaska	-	-	-	-	-	-	-	-	-	-
Region 20 Hawaii	64	803,410	(D)	-	-	-	-	-	64	(D)

¹ The same area can be irrigated by more than one method. Overlapped irrigation is not counted twice.

Table 44. Reasons for Discontinuing Irrigation on Horticultural Operations: 2018 and 2013

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

Geographic area	Discontinued irrigation since previous census year			Reason for discontinuance ¹			
	Operations	Square feet under protection in previous census year ²	Operations reporting discontinuance to be permanent	Sufficient soil moisture	Shortage of surface water	Shortage of ground water	Irrigation is uneconomical
United States	2,565	10,726,594	694	1,804	104	60	140
2013	4,393	11,759,756	623	1,178	114	53	237
2018 DATA							
Alabama	8	163,200	1	8	-	-	-
Alaska	2	(D)	1	2	-	-	-
Arizona	-	-	-	-	-	-	-
Arkansas	26	19,160	-	9	-	1	-
California	81	62,052	16	34	12	-	-
Colorado	47	273,320	2	2	23	25	-
Connecticut	20	-	-	20	-	-	-
Delaware	8	3,870	-	3	-	-	-
Florida	84	66,000	-	68	-	-	-
Georgia	82	166,730	-	56	-	-	4
Hawaii	50	711,280	16	34	-	-	16
Idaho	24	34,416	7	2	8	2	-
Illinois	41	77,400	19	23	-	-	-
Indiana	35	36,864	16	35	-	-	-
Iowa	23	14,100	5	23	-	-	-
Kansas	-	-	-	-	-	-	-
Kentucky	100	821,384	46	53	6	-	18
Louisiana	39	51,070	10	39	-	-	-
Maine	11	137,530	-	8	-	-	-
Maryland	27	23,296	13	27	-	-	-
Massachusetts	70	168,000	-	70	-	-	-
Michigan	116	1,185,760	19	97	-	-	-
Minnesota	45	61,140	31	12	-	-	-
Mississippi	10	29,000	-	10	-	-	-
Missouri	25	41,728	19	20	4	-	-
Montana	5	50,360	-	-	-	-	-
Nebraska	13	2,160	4	4	-	-	-
Nevada	6	600	3	-	3	-	-
New Hampshire	7	2,400	3	7	-	-	-
New Jersey	69	-	-	69	-	-	-
New Mexico	24	1,200	18	-	6	-	-
New York	162	1,146,600	38	140	-	-	22
North Carolina	170	684,462	-	129	-	-	9
North Dakota	4	12,000	-	-	-	-	-
Ohio	202	871,220	54	137	-	-	-
Oklahoma	3	360	-	-	-	-	-
Oregon	106	90,200	8	45	9	-	17
Pennsylvania	281	1,641,136	123	235	-	-	-
Rhode Island	20	197,800	-	20	20	20	20
South Carolina	28	1,380,960	28	28	-	-	-
South Dakota	-	-	-	-	-	-	-
Tennessee	64	82,380	28	64	-	-	-
Texas	75	38,640	18	56	3	3	-
Utah	7	(D)	-	7	7	-	-
Vermont	6	3,200	6	6	-	-	2
Virginia	106	89,584	64	64	-	-	32
Washington	97	96,155	32	50	3	9	-
West Virginia	55	66,780	27	7	-	-	-
Wisconsin	81	94,200	19	81	-	-	-
Wyoming	-	-	-	-	-	-	-
Water Resources Regions							
Region 01 New England	128	505,730	3	125	20	20	20
Region 02 Mid-Atlantic	446	2,713,886	143	410	-	-	-
Region 03 South Atlantic-Gulf	378	2,207,562	61	263	-	-	45
Region 04 Great Lakes	303	1,413,760	66	268	-	-	24
Region 05 Ohio	443	2,152,184	158	252	6	-	18
Region 06 Tennessee	60	(D)	21	60	-	-	-
Region 07 Upper Mississippi	153	147,504	67	116	-	-	-
Region 08 Lower Mississippi	41	47,490	17	35	-	-	-
Region 09 Souris-Red-Rainy	14	42,000	14	-	-	-	-
Region 10 Missouri	80	351,568	25	25	14	16	-
Region 11 Arkansas-White-Red	56	82,800	-	25	17	8	-
Region 12 Texas-Gulf	70	18,640	18	51	3	3	-
Region 13 Rio Grande	18	-	18	-	-	-	-
Region 14 Upper Colorado	2	-	-	-	2	2	-
Region 15 Lower Colorado	-	-	-	-	-	-	-
Region 16 Great Basin	16	3,007	6	7	13	-	-
Region 17 Pacific Northwest	224	218,371	44	97	17	11	17
Region 18 California	81	62,052	16	34	12	-	-
Region 19 Alaska	2	(D)	1	2	-	-	-
Region 20 Hawaii	50	711,280	16	34	-	-	16

See footnote(s) at end of table.

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Table 44. Reasons for Discontinuing Irrigation on Horticultural Operations: 2018 and 2013 (continued)

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

Geographic area	Reason for discontinuance ¹ - con.							
	Loss of water rights	Sold or leased water rights or annual water allocation	Sold or leased irrigated land or irrigated area under protection	Restrictions on water use	Converted to non-agricultural use	Converted to agricultural enterprise not requiring irrigation	Available surface water too salty	Other or unspecified
United States2018	23	22	45	51	112	209	25	481
.....2013	9	31	48	110	63	204	27	3,005
2018 DATA								
Alabama	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-
Arkansas	-	-	-	-	-	-	-	16
California	-	-	-	4	4	23	-	27
Colorado	3	-	-	8	-	7	-	7
Connecticut	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	5
Florida	-	-	-	-	-	-	-	42
Georgia	-	-	-	-	4	-	-	22
Hawaii	-	-	-	-	16	-	-	-
Idaho	-	2	2	-	6	5	-	3
Illinois	-	-	-	-	-	3	-	15
Indiana	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-
Kansas	-	-	-	-	-	-	-	-
Kentucky	-	-	-	-	12	18	-	30
Louisiana	-	-	-	-	-	-	-	11
Maine	-	-	-	-	-	-	-	3
Maryland	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-
Michigan	-	-	-	-	-	-	-	19
Minnesota	-	-	-	-	2	29	-	2
Mississippi	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	1	-	-
Montana	-	-	-	-	-	-	5	-
Nebraska	-	-	-	-	-	-	-	9
Nevada	-	-	-	-	-	-	-	3
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	22
New Mexico	-	-	-	-	18	9	-	-
New York	-	-	-	-	-	-	-	22
North Carolina	-	-	-	-	-	20	-	32
North Dakota	-	-	-	-	-	-	-	4
Ohio	-	-	15	-	-	41	-	9
Oklahoma	-	-	-	-	-	-	-	3
Oregon	-	-	8	9	-	16	-	20
Pennsylvania	-	-	-	-	21	-	-	49
Rhode Island	20	20	20	20	20	20	20	-
South Carolina	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	7
Texas	-	-	-	-	-	-	-	16
Utah	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	2
Virginia	-	-	-	-	-	-	-	10
Washington	-	-	-	10	6	17	-	20
West Virginia	-	-	-	-	3	-	-	51
Wisconsin	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-
Water Resources Regions								
Region 01 New England	20	20	20	20	20	20	20	3
Region 02 Mid-Atlantic	-	-	-	-	21	-	-	61
Region 03 South Atlantic-Gulf	-	-	-	-	4	20	-	96
Region 04 Great Lakes	-	-	-	-	-	16	-	21
Region 05 Ohio	-	-	15	-	15	43	-	137
Region 06 Tennessee	-	-	-	-	-	-	-	7
Region 07 Upper Mississippi	-	-	-	-	2	18	-	17
Region 08 Lower Mississippi	-	-	-	-	-	-	-	17
Region 09 Souris-Red-Rainy	-	-	-	-	-	14	-	-
Region 10 Missouri	3	-	-	8	-	8	5	20
Region 11 Arkansas-White-Red	-	-	-	-	-	-	-	13
Region 12 Texas-Gulf	-	-	-	-	-	-	-	16
Region 13 Rio Grande	-	-	-	-	18	9	-	-
Region 14 Upper Colorado	-	-	-	-	-	-	-	-
Region 15 Lower Colorado	-	-	-	-	-	-	-	-
Region 16 Great Basin	-	-	-	-	-	-	-	3
Region 17 Pacific Northwest	-	2	10	19	12	38	-	43
Region 18 California	-	-	-	4	4	23	-	27
Region 19 Alaska	-	-	-	-	-	-	-	-
Region 20 Hawaii	-	-	-	-	16	-	-	-

¹ Respondents could choose more than one reason for not irrigating.

² Square feet irrigated are totals for all irrigation on these operations. Data were acquired from the 2017 and 2012 Censuses of Agriculture results.

Table 45. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2018 and 2013

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

Geographic area	All operations with irrigated horticulture					
	In the open			Under protection		
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated
United States 2018	15,623	699,068	581,936	24,876	1,525,130,873	1,525,130,873
..... 2013	16,923	629,548	524,227	24,829	1,407,631,360	1,405,381,805
2018 DATA						
Alabama	185	21,371	21,002	313	22,691,124	22,691,124
Alaska	85	209	199	208	2,112,835	2,112,835
Arizona	87	5,457	5,457	127	11,974,228	11,974,228
Arkansas	97	7,082	6,157	157	4,050,788	4,050,788
California	1,951	74,347	74,259	1,697	328,881,801	328,881,801
Colorado	417	13,042	12,869	380	14,421,673	14,421,673
Connecticut	146	5,544	3,294	455	37,531,652	37,531,652
Delaware	22	1,865	1,665	44	2,339,000	2,339,000
Florida	2,039	88,800	85,141	1,346	286,871,042	286,871,042
Georgia	356	21,298	21,221	334	20,312,514	20,312,514
Hawaii	483	1,828	1,582	569	30,119,031	30,119,031
Idaho	401	29,750	28,628	336	4,346,935	4,346,935
Illinois	217	22,186	10,815	434	50,054,950	50,054,950
Indiana	159	9,848	3,469	435	9,841,976	9,841,976
Iowa	122	3,019	2,692	379	11,823,816	11,823,816
Kansas	120	7,759	3,388	210	8,776,130	8,776,130
Kentucky	167	1,259	1,092	686	9,068,660	9,068,660
Louisiana	152	3,606	3,446	274	12,058,977	12,058,977
Maine	141	3,069	3,069	558	6,785,654	6,785,654
Maryland	149	9,885	9,875	383	10,812,493	10,812,493
Massachusetts	219	1,986	1,960	434	6,586,132	6,586,132
Michigan	453	41,503	22,221	1,205	86,902,965	86,902,965
Minnesota	197	10,784	4,480	420	18,144,370	18,144,370
Mississippi	82	6,018	5,273	203	4,289,424	4,289,424
Missouri	217	6,393	3,955	639	10,912,436	10,912,436
Montana	77	766	766	265	2,265,336	2,265,336
Nebraska	122	2,644	2,476	236	3,026,039	3,026,039
Nevada	17	671	671	54	358,536	358,536
New Hampshire	212	406	385	431	8,274,578	8,274,578
New Jersey	492	19,719	17,831	574	45,713,398	45,713,398
New Mexico	159	1,570	1,570	179	4,076,540	4,076,540
New York	556	11,963	11,663	1,244	52,378,469	52,378,469
North Carolina	462	22,698	8,611	807	28,491,080	28,491,080
North Dakota	6	(D)	(D)	37	526,745	526,745
Ohio	333	22,190	9,272	905	37,618,396	37,618,396
Oklahoma	171	16,994	14,794	234	4,338,472	4,338,472
Oregon	1,079	54,550	53,291	1,020	64,333,453	64,333,453
Pennsylvania	542	4,665	1,999	1,568	72,735,326	72,735,326
Rhode Island	34	1,512	1,426	134	1,855,229	1,855,229
South Carolina	260	19,741	18,039	241	5,365,322	5,365,322
South Dakota	40	1,217	893	73	2,325,959	2,325,959
Tennessee	207	13,700	8,145	617	10,823,843	10,823,843
Texas	532	51,818	46,750	686	81,189,374	81,189,374
Utah	141	2,678	2,518	226	11,147,052	11,147,052
Vermont	60	181	141	389	4,577,962	4,577,962
Virginia	325	7,971	3,806	696	24,913,206	24,913,206
Washington	738	30,174	27,845	856	29,307,707	29,307,707
West Virginia	62	192	152	306	2,804,956	2,804,956
Wisconsin	322	12,875	11,485	783	13,742,493	13,742,493
Wyoming	10	(D)	(D)	89	1,230,796	1,230,796
Water Resources Regions						
Region 01 New England	769	12,566	10,178	2,110	62,320,465	62,320,465
Region 02 Mid-Atlantic	1,658	48,804	44,340	3,378	179,232,386	179,232,386
Region 03 South Atlantic-Gulf	3,337	178,485	155,435	3,119	363,677,616	363,677,616
Region 04 Great Lakes	974	52,688	31,314	2,801	138,040,985	138,040,985
Region 05 Ohio	720	38,932	13,490	2,423	50,237,208	50,237,208
Region 06 Tennessee	261	7,454	7,454	635	14,692,612	14,692,612
Region 07 Upper Mississippi	830	47,472	27,924	1,773	81,170,356	81,170,356
Region 08 Lower Mississippi	170	6,974	6,675	471	15,576,031	15,576,031
Region 09 Souris-Red-Rainy	15	298	92	47	1,004,028	1,004,028
Region 10 Missouri	554	23,383	16,326	1,220	36,318,201	36,318,201
Region 11 Arkansas-White-Red	451	26,084	23,077	594	10,134,679	10,134,679
Region 12 Texas-Gulf	509	51,273	46,205	649	75,432,738	75,432,738
Region 13 Rio Grande	93	1,732	1,732	199	11,098,640	11,098,640
Region 14 Upper Colorado	294	3,244	3,230	273	3,879,584	3,879,584
Region 15 Lower Colorado	112	5,907	5,907	140	12,175,428	12,175,428
Region 16 Great Basin	116	3,390	3,230	186	10,055,408	10,055,408
Region 17 Pacific Northwest	2,260	114,441	109,730	2,370	97,211,841	97,211,841
Region 18 California	1,932	73,905	73,817	1,711	330,640,801	330,640,801
Region 19 Alaska	85	209	199	208	2,112,835	2,112,835
Region 20 Hawaii	483	1,828	1,582	569	30,119,031	30,119,031

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Table 45. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2018 and 2013 (continued)

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

Geographic area	\$0 - \$9,999						
	In the open			Under protection			
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated	
United States2018	4,432	19,446	12,864	6,715	54,660,696	54,660,696	
.....2013	4,259	10,197	8,763	6,333	16,206,155	16,195,555	
2018 DATA							
Alabama	19	104	104	85	2,888,836	2,888,836	
Alaska	52	72	72	88	356,840	356,840	
Arizona	20	458	458	30	715,988	715,988	
Arkansas	22	(D)	(D)	57	988,148	988,148	
California	489	903	903	374	8,215,980	8,215,980	
Colorado	158	622	529	154	925,360	925,360	
Connecticut	25	6	6	81	889,960	889,960	
Delaware	7	(D)	(D)	6	97,120	97,120	
Florida	572	2,268	2,257	219	3,141,518	3,141,518	
Georgia	132	291	291	83	497,216	497,216	
Hawaii	180	312	298	236	1,902,079	1,902,079	
Idaho	138	623	623	139	365,999	365,999	
Illinois	59	104	44	28	83,000	83,000	
Indiana	24	6,576	906	79	235,256	235,256	
Iowa	17	(D)	(D)	92	919,316	919,316	
Kansas	43	225	35	37	58,050	58,050	
Kentucky	22	(D)	(D)	174	613,910	613,910	
Louisiana	43	82	82	72	1,094,600	1,094,600	
Maine	27	42	42	230	399,401	399,401	
Maryland	13	34	(D)	58	153,260	153,260	
Massachusetts	76	285	285	94	775,736	775,736	
Michigan	60	100	100	228	668,196	668,196	
Minnesota	50	(D)	42	123	193,990	193,990	
Mississippi	13	10	10	75	879,970	879,970	
Missouri	79	102	99	173	587,532	587,532	
Montana	44	83	83	155	513,940	513,940	
Nebraska	42	122	93	41	170,240	170,240	
Nevada	5	21	21	37	165,056	165,056	
New Hampshire	99	115	115	156	1,933,074	1,933,074	
New Jersey	88	99	99	129	922,216	922,216	
New Mexico	100	130	130	68	572,200	572,200	
New York	106	115	115	194	456,389	456,389	
North Carolina	98	57	57	175	1,653,328	1,653,328	
North Dakota	-	-	-	14	26,512	26,512	
Ohio	26	44	40	172	895,360	895,360	
Oklahoma	101	292	229	149	1,254,136	1,254,136	
Oregon	373	633	612	265	4,037,283	4,037,283	
Pennsylvania	158	185	185	442	3,241,416	3,241,416	
Rhode Island	-	-	-	25	304,285	304,285	
South Carolina	74	152	152	100	393,796	393,796	
South Dakota	10	(D)	(D)	26	62,235	62,235	
Tennessee	56	81	81	167	241,952	241,952	
Texas	156	1,524	1,524	218	1,631,585	1,631,585	
Utah	43	349	349	64	1,259,940	1,259,940	
Vermont	14	14	14	112	256,800	256,800	
Virginia	75	(D)	(D)	288	3,741,310	3,741,310	
Washington	314	1,672	1,270	370	2,223,329	2,223,329	
West Virginia	25	21	21	164	420,738	420,738	
Wisconsin	81	126	126	133	137,955	137,955	
Wyoming	4	6	6	36	498,360	498,360	
Water Resources Regions							
Region 01 New England	234	457	457	613	4,392,456	4,392,456	
Region 02 Mid-Atlantic	339	527	524	812	5,910,211	5,910,211	
Region 03 South Atlantic-Gulf	888	2,854	2,843	707	9,196,600	9,196,600	
Region 04 Great Lakes	107	136	132	632	2,166,295	2,166,295	
Region 05 Ohio	164	6,810	1,140	657	1,742,552	1,742,552	
Region 06 Tennessee	92	103	103	153	2,082,256	2,082,256	
Region 07 Upper Mississippi	219	297	225	305	1,333,954	1,333,954	
Region 08 Lower Mississippi	40	67	67	149	1,571,020	1,571,020	
Region 09 Souris-Red-Rainy	4	14	8	10	24,600	24,600	
Region 10 Missouri	171	555	240	294	1,071,539	1,071,539	
Region 11 Arkansas-White-Red	176	503	439	265	2,554,676	2,554,676	
Region 12 Texas-Gulf	158	1,526	1,526	195	1,624,869	1,624,869	
Region 13 Rio Grande	49	78	78	80	576,660	576,660	
Region 14 Upper Colorado	180	481	481	149	826,824	826,824	
Region 15 Lower Colorado	20	458	458	32	717,788	717,788	
Region 16 Great Basin	21	316	316	69	1,354,376	1,354,376	
Region 17 Pacific Northwest	849	2,976	2,554	895	7,039,121	7,039,121	
Region 18 California	489	903	903	374	8,215,980	8,215,980	
Region 19 Alaska	52	72	72	88	356,840	356,840	
Region 20 Hawaii	180	312	298	236	1,902,079	1,902,079	

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Table 45. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2018 and 2013 (continued)

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

Geographic area	\$10,000 - \$24,999						
	In the open			Under protection			
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated	
United States	1,817	9,454	8,009	3,285	31,177,977	31,177,977	
2018							
2013	1,933	6,891	5,934	3,396	23,832,056	23,829,181	
2018 DATA							
Alabama	7	19	19	41	381,780	381,780	
Alaska	12	40	40	32	268,268	268,268	
Arizona	8	(D)	(D)	23	(D)	(D)	
Arkansas	5	(D)	(D)	22	214,576	214,576	
California	172	1,287	1,264	83	1,254,700	1,254,700	
Colorado	68	313	307	49	152,980	152,980	
Connecticut	-	-	-	98	148,288	148,288	
Delaware	2	(D)	(D)	5	149,800	149,800	
Florida	256	997	997	168	4,354,270	4,354,270	
Georgia	28	1,108	1,060	39	1,442,170	1,442,170	
Hawaii	124	176	176	128	1,774,260	1,774,260	
Idaho	54	144	144	67	139,878	139,878	
Illinois	3	6	6	39	304,020	304,020	
Indiana	48	130	75	77	886,448	886,448	
Iowa	-	-	-	82	441,600	441,600	
Kansas	15	61	61	43	250,360	250,360	
Kentucky	34	216	86	66	549,986	549,986	
Louisiana	18	128	103	57	388,665	388,665	
Maine	38	44	44	160	589,032	589,032	
Maryland	39	127	127	47	155,869	155,869	
Massachusetts	51	169	169	10	(D)	(D)	
Michigan	72	401	148	179	1,755,540	1,755,540	
Minnesota	9	908	(D)	50	157,200	157,200	
Mississippi	-	-	-	16	183,860	183,860	
Missouri	39	(D)	(D)	99	265,752	265,752	
Montana	12	12	12	22	144,840	144,840	
Nebraska	9	17	17	27	83,160	83,160	
Nevada	2	(D)	(D)	7	(D)	(D)	
New Hampshire	-	-	-	62	452,800	452,800	
New Jersey	13	13	13	79	2,015,988	2,015,988	
New Mexico	-	-	-	63	169,100	169,100	
New York	123	274	274	217	395,020	395,020	
North Carolina	25	61	61	138	1,264,400	1,264,400	
North Dakota	2	(D)	(D)	2	(D)	(D)	
Ohio	77	383	383	93	446,500	446,500	
Oklahoma	4	84	84	25	(D)	(D)	
Oregon	107	781	781	118	1,528,820	1,528,820	
Pennsylvania	18	(D)	(D)	96	4,122,820	4,122,820	
Rhode Island	-	-	-	27	35,810	35,810	
South Carolina	17	37	37	28	273,000	273,000	
South Dakota	5	9	3	2	(D)	(D)	
Tennessee	35	609	609	106	215,244	215,244	
Texas	46	249	249	62	582,849	582,849	
Utah	17	134	134	27	58,320	58,320	
Vermont	-	-	-	39	(D)	(D)	
Virginia	64	128	128	138	715,616	715,616	
Washington	104	209	187	90	1,174,980	1,174,980	
West Virginia	26	25	25	78	359,188	359,188	
Wisconsin	9	(D)	(D)	56	390,380	390,380	
Wyoming	-	-	-	3	4,416	4,416	
Water Resources Regions							
Region 01 New England	89	213	213	357	1,273,930	1,273,930	
Region 02 Mid-Atlantic	164	364	360	477	7,490,021	7,490,021	
Region 03 South Atlantic-Gulf	351	2,228	2,180	437	7,630,172	7,630,172	
Region 04 Great Lakes	233	950	697	463	2,628,880	2,628,880	
Region 05 Ohio	101	326	196	181	1,671,018	1,671,018	
Region 06 Tennessee	39	625	625	123	(D)	(D)	
Region 07 Upper Mississippi	17	974	47	149	1,000,420	1,000,420	
Region 08 Lower Mississippi	-	-	-	61	636,185	636,185	
Region 09 Souris-Red-Rainy	2	(D)	(D)	20	78,000	78,000	
Region 10 Missouri	74	88	76	218	698,228	698,228	
Region 11 Arkansas-White-Red	65	435	410	88	497,256	497,256	
Region 12 Texas-Gulf	40	228	228	62	582,849	582,849	
Region 13 Rio Grande	3	9	9	63	169,100	169,100	
Region 14 Upper Colorado	32	(D)	(D)	7	23,800	23,800	
Region 15 Lower Colorado	8	(D)	(D)	23	(D)	(D)	
Region 16 Great Basin	19	134	134	31	(D)	(D)	
Region 17 Pacific Northwest	272	1,140	1,118	282	2,875,118	2,875,118	
Region 18 California	172	1,287	1,264	83	1,254,700	1,254,700	
Region 19 Alaska	12	40	40	32	268,268	268,268	
Region 20 Hawaii	124	176	176	128	1,774,260	1,774,260	

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Table 45. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2018 and 2013 (continued)

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

Geographic area	\$25,000 - \$49,999						
	In the open			Under protection			
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated	
United States2018	1,298	8,977	6,634	2,659	29,658,532	29,658,532	
.....2013	1,831	11,457	8,967	2,733	28,811,959	28,811,959	
2018 DATA							
Alabama	4	160	80	-	-	-	
Alaska	13	(D)	(D)	20	98,886	98,886	
Arizona	-	-	-	16	192,000	192,000	
Arkansas	9	326	326	11	105,500	105,500	
California	171	437	435	152	1,595,440	1,595,440	
Colorado	65	732	732	17	91,156	91,156	
Connecticut	-	-	-	28	4,200	4,200	
Delaware	4	8	8	16	100,240	100,240	
Florida	121	1,084	1,084	157	4,740,892	4,740,892	
Georgia	40	69	61	11	165,000	165,000	
Hawaii	47	70	68	14	332,000	332,000	
Idaho	18	182	182	7	22,950	22,950	
Illinois	5	2	2	40	161,200	161,200	
Indiana	25	59	59	50	201,472	201,472	
Iowa	26	36	(D)	61	275,420	275,420	
Kansas	21	71	71	26	682,000	682,000	
Kentucky	32	74	51	118	1,179,956	1,179,956	
Louisiana	13	23	23	48	462,900	462,900	
Maine	9	(D)	(D)	32	127,462	127,462	
Maryland	3	(D)	(D)	54	340,600	340,600	
Massachusetts	39	67	67	28	16,800	16,800	
Michigan	39	78	78	188	1,687,640	1,687,640	
Minnesota	2	(D)	(D)	9	44,000	44,000	
Mississippi	6	101	101	38	299,120	299,120	
Missouri	23	(D)	(D)	127	1,234,512	1,234,512	
Montana	2	(D)	(D)	21	83,792	83,792	
Nebraska	9	5	5	27	69,948	69,948	
Nevada	4	(D)	(D)	2	(D)	(D)	
New Hampshire	13	13	13	9	37,500	37,500	
New Jersey	3	600	600	22	958,320	958,320	
New Mexico	-	-	-	-	-	-	
New York	22	22	22	156	1,169,180	1,169,180	
North Carolina	65	78	78	113	1,035,492	1,035,492	
North Dakota	-	-	-	2	(D)	(D)	
Ohio	48	1,460	195	188	1,265,208	1,265,208	
Oklahoma	8	114	114	2	(D)	(D)	
Oregon	65	945	945	121	1,390,860	1,390,860	
Pennsylvania	60	23	23	166	1,570,744	1,570,744	
Rhode Island	12	(D)	(D)	10	183,226	183,226	
South Carolina	19	79	79	7	(D)	(D)	
South Dakota	-	-	-	-	-	-	
Tennessee	28	49	49	105	682,850	682,850	
Texas	23	175	175	44	436,000	436,000	
Utah	27	331	331	37	127,500	127,500	
Vermont	18	(D)	(D)	47	1,124,950	1,124,950	
Virginia	52	561	81	31	223,488	223,488	
Washington	39	323	263	117	3,370,696	3,370,696	
West Virginia	3	12	12	54	393,510	393,510	
Wisconsin	43	324	51	102	1,254,852	1,254,852	
Wyoming	-	-	-	8	106,320	106,320	
Water Resources Regions							
Region 01 New England	75	139	136	108	376,688	376,688	
Region 02 Mid-Atlantic	92	1,188	708	305	3,668,784	3,668,784	
Region 03 South Atlantic-Gulf	230	1,532	1,444	272	5,602,430	5,602,430	
Region 04 Great Lakes	128	248	248	378	3,626,914	3,626,914	
Region 05 Ohio	80	1,478	190	408	2,922,122	2,922,122	
Region 06 Tennessee	61	92	92	144	1,067,342	1,067,342	
Region 07 Upper Mississippi	75	371	83	255	1,984,104	1,984,104	
Region 08 Lower Mississippi	16	30	30	55	720,720	720,720	
Region 09 Souris-Red-Rainy	-	-	-	2	(D)	(D)	
Region 10 Missouri	66	290	158	129	1,537,504	1,537,504	
Region 11 Arkansas-White-Red	31	470	470	58	535,800	535,800	
Region 12 Texas-Gulf	23	175	175	44	436,000	436,000	
Region 13 Rio Grande	-	-	-	-	-	-	
Region 14 Upper Colorado	46	909	909	32	104,700	104,700	
Region 15 Lower Colorado	6	4	4	16	192,000	192,000	
Region 16 Great Basin	18	(D)	(D)	9	(D)	(D)	
Region 17 Pacific Northwest	124	1,454	1,394	258	4,828,198	4,828,198	
Region 18 California	167	433	431	152	1,595,440	1,595,440	
Region 19 Alaska	13	(D)	(D)	20	98,886	98,886	
Region 20 Hawaii	47	70	68	14	332,000	332,000	

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Table 45. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2018 and 2013 (continued)

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

Geographic area	\$50,000 - \$99,999						
	In the open			Under protection			
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated	
United States 2018	1,341	19,960	14,102	2,822	64,646,232	64,646,232	
..... 2013	1,522	13,904	9,500	2,999	55,510,219	55,510,219	
2018 DATA							
Alabama	19	372	372	66	746,624	746,624	
Alaska	3	30	30	8	81,135	81,135	
Arizona	9	17	17	6	498,240	498,240	
Arkansas	19	1,041	282	24	261,840	261,840	
California	212	6,360	6,351	172	22,545,940	22,545,940	
Colorado	5	195	195	28	503,300	503,300	
Connecticut	15	150	120	58	147,000	147,000	
Delaware	1	(D)	(D)	4	480,000	480,000	
Florida	234	1,835	1,835	86	4,222,640	4,222,640	
Georgia	28	225	225	86	2,412,970	2,412,970	
Hawaii	39	108	75	28	1,282,780	1,282,780	
Idaho	14	114	114	30	163,000	163,000	
Illinois	28	348	96	89	553,450	553,450	
Indiana	6	43	28	75	745,284	745,284	
Iowa	15	98	98	26	112,560	112,560	
Kansas	15	85	85	34	456,200	456,200	
Kentucky	22	44	36	120	801,512	801,512	
Louisiana	5	75	75	16	135,000	135,000	
Maine	11	83	83	24	268,700	268,700	
Maryland	20	(D)	(D)	86	971,936	971,936	
Massachusetts	5	50	50	74	446,720	446,720	
Michigan	33	33	33	145	5,597,400	5,597,400	
Minnesota	6	380	92	22	104,184	104,184	
Mississippi	5	70	50	14	205,440	205,440	
Missouri	16	153	153	81	883,408	883,408	
Montana	9	7	7	18	123,664	123,664	
Nebraska	13	30	30	18	83,160	83,160	
Nevada	-	-	-	3	600	600	
New Hampshire	-	-	-	70	1,525,000	1,525,000	
New Jersey	64	982	332	85	1,494,960	1,494,960	
New Mexico	-	-	-	10	81,000	81,000	
New York	22	22	22	89	1,153,160	1,153,160	
North Carolina	40	50	50	86	2,190,960	2,190,960	
North Dakota	3	(D)	(D)	5	64,625	64,625	
Ohio	48	130	90	171	2,531,163	2,531,163	
Oklahoma	5	9	9	14	35,880	35,880	
Oregon	84	738	663	72	1,815,390	1,815,390	
Pennsylvania	89	210	210	339	4,898,308	4,898,308	
Rhode Island	8	7	7	12	146,688	146,688	
South Carolina	8	4	4	8	19,136	19,136	
South Dakota	7	7	7	16	261,800	261,800	
Tennessee	14	14	14	49	541,625	541,625	
Texas	38	4,996	1,399	73	977,660	977,660	
Utah	12	42	42	10	60,300	60,300	
Vermont	9	17	9	55	222,400	222,400	
Virginia	-	-	-	18	144,000	144,000	
Washington	52	239	228	80	776,166	776,166	
West Virginia	5	(D)	(D)	6	106,920	106,920	
Wisconsin	26	431	431	113	764,404	764,404	
Wyoming	-	-	-	-	-	-	
Water Resources Regions							
Region 01 New England	43	298	264	242	2,538,908	2,538,908	
Region 02 Mid-Atlantic	180	1,153	499	469	6,029,988	6,029,988	
Region 03 South Atlantic-Gulf	313	2,446	2,446	315	9,345,770	9,345,770	
Region 04 Great Lakes	74	442	442	344	7,035,164	7,035,164	
Region 05 Ohio	90	315	252	488	6,841,546	6,841,546	
Region 06 Tennessee	23	47	47	52	683,000	683,000	
Region 07 Upper Mississippi	64	1,009	469	181	1,359,936	1,359,936	
Region 08 Lower Mississippi	15	150	130	39	235,500	235,500	
Region 09 Souris-Red-Rainy	2	(D)	(D)	4	64,000	64,000	
Region 10 Missouri	33	123	60	132	1,549,425	1,549,425	
Region 11 Arkansas-White-Red	29	1,125	366	47	557,420	557,420	
Region 12 Texas-Gulf	38	4,996	1,399	73	977,660	977,660	
Region 13 Rio Grande	-	-	-	10	81,000	81,000	
Region 14 Upper Colorado	5	195	195	7	52,500	52,500	
Region 15 Lower Colorado	21	341	341	6	498,240	498,240	
Region 16 Great Basin	12	(D)	(D)	13	60,900	60,900	
Region 17 Pacific Northwest	157	1,097	1,011	192	2,825,420	2,825,420	
Region 18 California	200	6,036	6,027	172	22,545,940	22,545,940	
Region 19 Alaska	3	30	30	8	81,135	81,135	
Region 20 Hawaii	39	108	75	28	1,282,780	1,282,780	

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Table 45. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2018 and 2013 (continued)

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

Geographic area	\$100,000 - \$249,999						
	In the open			Under protection			
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated	
United States2018	1,877	28,574	24,369	3,534	98,619,405	98,619,405	
.....2013	2,531	51,276	39,189	3,515	158,899,889	158,899,889	
2018 DATA							
Alabama	19	357	205	24	794,304	794,304	
Alaska	4	43	33	38	314,456	314,456	
Arizona	7	105	105	24	1,428,920	1,428,920	
Arkansas	3	60	(D)	8	58,000	58,000	
California	246	3,518	3,518	190	11,461,656	11,461,656	
Colorado	47	1,431	1,431	63	1,550,097	1,550,097	
Connecticut	9	27	14	-	-	-	
Delaware	-	-	-	1	(D)	(D)	
Florida	133	1,252	1,252	120	7,499,000	7,499,000	
Georgia	31	1,643	1,622	50	2,894,688	2,894,688	
Hawaii	44	355	355	53	9,703,400	9,703,400	
Idaho	21	709	687	47	719,160	719,160	
Illinois	26	1,835	1,598	20	1,135,900	1,135,900	
Indiana	37	277	177	76	594,620	594,620	
Iowa	3	75	75	22	329,750	329,750	
Kansas	5	5	5	16	472,800	472,800	
Kentucky	10	48	42	147	2,873,844	2,873,844	
Louisiana	23	405	355	32	(D)	(D)	
Maine	12	177	177	46	920,947	920,947	
Maryland	18	46	39	27	230,228	230,228	
Massachusetts	17	29	29	201	4,310,000	4,310,000	
Michigan	80	1,491	855	136	4,873,400	4,873,400	
Minnesota	18	186	74	67	1,275,320	1,275,320	
Mississippi	14	17	17	28	521,940	521,940	
Missouri	26	291	87	110	1,447,008	1,447,008	
Montana	2	(D)	(D)	18	183,000	183,000	
Nebraska	30	930	930	67	358,311	358,311	
Nevada	4	220	220	-	-	-	
New Hampshire	47	(D)	(D)	48	502,240	502,240	
New Jersey	56	118	118	87	12,307,170	12,307,170	
New Mexico	7	(D)	(D)	27	1,351,760	1,351,760	
New York	89	163	163	217	2,170,890	2,170,890	
North Carolina	99	1,101	192	80	1,469,300	1,469,300	
North Dakota	-	-	-	12	267,208	267,208	
Ohio	48	277	277	143	2,826,780	2,826,780	
Oklahoma	16	1,458	1,458	26	(D)	(D)	
Oregon	93	2,247	1,434	151	2,778,270	2,778,270	
Pennsylvania	107	116	116	202	3,886,076	3,886,076	
Rhode Island	4	10	10	34	597,600	597,600	
South Carolina	81	2,845	2,832	82	1,913,180	1,913,180	
South Dakota	2	(D)	(D)	2	(D)	(D)	
Tennessee	29	218	113	134	3,257,128	3,257,128	
Texas	107	3,270	2,661	108	2,599,300	2,599,300	
Utah	16	120	120	33	733,080	733,080	
Vermont	11	(D)	(D)	75	1,147,696	1,147,696	
Virginia	42	(D)	(D)	108	1,185,220	1,185,220	
Washington	61	427	415	102	1,024,000	1,024,000	
West Virginia	1	(D)	(D)	-	-	-	
Wisconsin	68	395	330	225	2,065,924	2,065,924	
Wyoming	4	(D)	(D)	7	152,700	152,700	
Water Resources Regions							
Region 01 New England	91	352	326	381	7,098,587	7,098,587	
Region 02 Mid-Atlantic	238	421	414	436	17,628,374	17,628,374	
Region 03 South Atlantic-Gulf	383	7,035	5,940	414	15,570,442	15,570,442	
Region 04 Great Lakes	151	1,637	968	366	7,356,130	7,356,130	
Region 05 Ohio	108	726	575	347	6,941,280	6,941,280	
Region 06 Tennessee	11	174	174	83	1,945,662	1,945,662	
Region 07 Upper Mississippi	123	2,771	2,137	307	3,465,378	3,465,378	
Region 08 Lower Mississippi	28	415	365	97	1,062,900	1,062,900	
Region 09 Souris-Red-Rainy	-	-	-	5	(D)	(D)	
Region 10 Missouri	90	2,305	2,221	205	3,242,515	3,242,515	
Region 11 Arkansas-White-Red	33	1,543	1,521	96	1,463,027	1,463,027	
Region 12 Texas-Gulf	95	3,030	2,421	96	2,076,580	2,076,580	
Region 13 Rio Grande	21	374	374	29	674,480	674,480	
Region 14 Upper Colorado	9	46	46	34	1,519,080	1,519,080	
Region 15 Lower Colorado	14	227	227	32	1,493,320	1,493,320	
Region 16 Great Basin	16	332	332	11	(D)	(D)	
Region 17 Pacific Northwest	175	3,383	2,536	314	4,620,430	4,620,430	
Region 18 California	243	3,404	3,404	190	11,461,656	11,461,656	
Region 19 Alaska	4	43	33	38	314,456	314,456	
Region 20 Hawaii	44	355	355	53	9,703,400	9,703,400	

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Table 45. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2018 and 2013 (continued)

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

Geographic area	\$250,000 - \$499,999					
	In the open			Under protection		
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated
United States	1,292	43,072	37,773	1,971	84,981,611	84,981,611
2018						
2013	1,615	51,028	39,878	2,180	131,388,617	131,388,617
2018 DATA						
Alabama	24	687	582	17	865,380	865,380
Alaska	-	-	-	3	110,250	110,250
Arizona	-	-	-	-	-	-
Arkansas	18	1,298	1,298	18	801,674	801,674
California	142	2,737	2,737	141	10,775,492	10,775,492
Colorado	9	1,264	1,204	9	289,800	289,800
Connecticut	19	297	285	63	2,195,200	2,195,200
Delaware	2	(D)	(D)	7	1,052,000	1,052,000
Florida	150	2,073	2,070	193	15,926,265	15,926,265
Georgia	24	800	800	23	1,044,900	1,044,900
Hawaii	20	253	225	17	1,697,882	1,697,882
Idaho	13	1,176	1,176	11	470,000	470,000
Illinois	34	4,045	3,311	101	2,438,640	2,438,640
Indiana	6	160	159	23	189,700	189,700
Iowa	23	(D)	23	39	289,360	289,360
Kansas	3	2	2	28	1,192,960	1,192,960
Kentucky	12	222	222	46	1,259,860	1,259,860
Louisiana	23	256	256	18	2,214,432	2,214,432
Maine	33	2,218	2,218	47	1,750,092	1,750,092
Maryland	10	412	412	14	75,460	75,460
Massachusetts	11	330	330	22	267,916	267,916
Michigan	37	1,962	1,962	87	5,987,920	5,987,920
Minnesota	37	894	614	54	1,270,520	1,270,520
Mississippi	21	1,107	1,107	13	271,250	271,250
Missouri	9	72	72	23	421,424	421,424
Montana	2	(D)	(D)	10	289,000	289,000
Nebraska	4	168	168	10	500,000	500,000
Nevada	-	-	-	-	-	-
New Hampshire	4	16	8	26	122,000	122,000
New Jersey	145	3,371	3,371	65	5,432,060	5,432,060
New Mexico	42	795	795	-	-	-
New York	69	1,781	1,781	142	1,728,640	1,728,640
North Carolina	34	266	266	119	3,394,040	3,394,040
North Dakota	-	-	-	-	-	-
Ohio	9	123	123	50	1,981,184	1,981,184
Oklahoma	8	1,938	1,584	-	-	-
Oregon	58	2,520	2,520	67	2,768,900	2,768,900
Pennsylvania	60	691	491	89	6,355,818	6,355,818
Rhode Island	2	(D)	(D)	20	421,620	421,620
South Carolina	3	180	180	7	301,000	301,000
South Dakota	9	919	601	9	(D)	(D)
Tennessee	8	18	18	15	1,009,584	1,009,584
Texas	13	1,642	1,642	53	1,139,400	1,139,400
Utah	8	(D)	(D)	7	77,000	77,000
Vermont	3	(D)	(D)	43	697,592	697,592
Virginia	41	2,576	146	41	1,590,000	1,590,000
Washington	41	1,330	1,064	34	903,720	903,720
West Virginia	1	(D)	(D)	1	(D)	(D)
Wisconsin	48	1,852	1,704	122	2,893,996	2,893,996
Wyoming	-	-	-	24	114,000	114,000
Water Resources Regions						
Region 01 New England	69	2,932	2,912	187	5,073,948	5,073,948
Region 02 Mid-Atlantic	313	6,596	6,056	227	14,234,668	14,234,668
Region 03 South Atlantic-Gulf	262	7,061	4,523	355	21,230,835	21,230,835
Region 04 Great Lakes	62	2,496	2,470	261	8,428,792	8,428,792
Region 05 Ohio	29	559	559	147	5,081,114	5,081,114
Region 06 Tennessee	5	516	516	27	972,000	972,000
Region 07 Upper Mississippi	136	6,295	5,346	293	5,938,744	5,938,744
Region 08 Lower Mississippi	32	1,018	1,018	31	2,903,702	2,903,702
Region 09 Scouris-Red-Rainy	2	(D)	(D)	-	-	-
Region 10 Missouri	21	1,553	1,175	78	2,923,760	2,923,760
Region 11 Arkansas-White-Red	55	3,439	3,085	5	112,404	112,404
Region 12 Texas-Gulf	13	1,642	1,642	53	1,139,400	1,139,400
Region 13 Rio Grande	9	630	630	-	-	-
Region 14 Upper Colorado	2	(D)	(D)	23	94,000	94,000
Region 15 Lower Colorado	-	-	-	-	-	-
Region 16 Great Basin	8	(D)	(D)	7	(D)	(D)
Region 17 Pacific Northwest	112	5,026	4,760	108	3,679,620	3,679,620
Region 18 California	142	2,737	2,737	149	11,283,492	11,283,492
Region 19 Alaska	-	-	-	3	110,250	110,250
Region 20 Hawaii	20	253	225	17	1,697,882	1,697,882

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Table 45. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2018 and 2013 (continued)

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

Geographic area	\$500,000 - \$999,999						
	In the open			Under protection			
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated	
United States2018	1,174	93,078	81,449	1,233	98,080,974	98,080,974	
.....2013	1,296	84,533	68,448	1,577	154,899,992	154,899,992	
2018 DATA							
Alabama	34	2,508	2,476	38	5,890,600	5,890,600	
Alaska	1	(D)	(D)	16	427,000	427,000	
Arizona	2	(D)	(D)	2	(D)	(D)	
Arkansas	17	3,583	3,439	9	446,680	446,680	
California	141	5,865	5,865	127	22,380,820	22,380,820	
Colorado	22	2,992	2,979	7	21,000	21,000	
Connecticut	9	155	155	13	802,500	802,500	
Delaware	1	(D)	(D)	1	(D)	(D)	
Florida	166	4,162	4,162	77	12,726,896	12,726,896	
Georgia	31	2,639	2,639	9	387,000	387,000	
Hawaii	14	70	70	43	1,299,510	1,299,510	
Idaho	90	16,031	15,131	21	137,920	137,920	
Illinois	13	1,270	565	51	1,096,760	1,096,760	
Indiana	-	-	-	-	-	-	
Iowa	10	41	41	10	115,000	115,000	
Kansas	4	200	200	12	534,240	534,240	
Kentucky	33	614	614	10	472,592	472,592	
Louisiana	5	1,255	1,235	1	(D)	(D)	
Maine	4	(D)	(D)	10	551,120	551,120	
Maryland	13	2,853	2,853	35	530,120	530,120	
Massachusetts	16	328	328	2	(D)	(D)	
Michigan	81	8,739	6,876	81	6,176,120	6,176,120	
Minnesota	38	3,608	1,354	45	2,317,620	2,317,620	
Mississippi	12	1,695	970	11	1,091,524	1,091,524	
Missouri	6	370	370	-	-	-	
Montana	3	648	648	6	435,240	435,240	
Nebraska	-	-	-	33	225,740	225,740	
Nevada	1	(D)	(D)	-	-	-	
New Hampshire	34	35	35	41	1,668,100	1,668,100	
New Jersey	61	1,198	1,198	70	2,991,104	2,991,104	
New Mexico	-	-	-	-	-	-	
New York	12	2,589	2,289	36	2,668,300	2,668,300	
North Carolina	40	2,797	1,229	78	4,282,360	4,282,360	
North Dakota	1	(D)	(D)	2	(D)	(D)	
Ohio	43	1,262	870	47	3,262,520	3,262,520	
Oklahoma	17	3,202	2,304	11	272,000	272,000	
Oregon	57	5,523	5,523	38	2,326,800	2,326,800	
Pennsylvania	30	(D)	(D)	84	12,608,024	12,608,024	
Rhode Island	7	848	791	6	166,000	166,000	
South Carolina	15	3,780	2,400	-	-	-	
South Dakota	-	-	-	15	675,500	675,500	
Tennessee	7	350	350	21	1,365,000	1,365,000	
Texas	39	7,636	7,636	17	2,889,000	2,889,000	
Utah	1	(D)	(D)	29	2,703,040	2,703,040	
Vermont	3	(D)	(D)	15	(D)	(D)	
Virginia	1	(D)	(D)	23	156,500	156,500	
Washington	35	2,817	2,760	21	985,804	985,804	
West Virginia	-	-	-	1	(D)	(D)	
Wisconsin	2	(D)	(D)	3	31,200	31,200	
Wyoming	2	(D)	(D)	5	167,000	167,000	
Water Resources Regions							
Region 01 New England	71	1,655	1,598	75	3,271,720	3,271,720	
Region 02 Mid-Atlantic	114	7,076	6,456	239	18,614,080	18,614,080	
Region 03 South Atlantic-Gulf	278	15,775	12,070	173	18,515,856	18,515,856	
Region 04 Great Lakes	87	8,766	6,903	105	7,076,920	7,076,920	
Region 05 Ohio	76	1,946	1,554	67	3,730,800	3,730,800	
Region 06 Tennessee	26	2,126	2,126	52	6,708,600	6,708,600	
Region 07 Upper Mississippi	64	5,295	2,336	106	3,529,380	3,529,380	
Region 08 Lower Mississippi	14	3,251	3,087	7	738,604	738,604	
Region 09 Souris-Red-Rainy	1	(D)	(D)	2	(D)	(D)	
Region 10 Missouri	13	2,211	2,211	63	1,542,480	1,542,480	
Region 11 Arkansas-White-Red	35	5,574	4,676	19	760,000	760,000	
Region 12 Texas-Gulf	35	7,416	7,416	17	2,889,000	2,889,000	
Region 13 Rio Grande	1	(D)	(D)	-	-	-	
Region 14 Upper Colorado	15	1,213	1,200	14	935,760	935,760	
Region 15 Lower Colorado	2	(D)	(D)	5	(D)	(D)	
Region 16 Great Basin	4	488	488	22	1,788,280	1,788,280	
Region 17 Pacific Northwest	182	24,269	23,312	75	2,319,764	2,319,764	
Region 18 California	141	5,865	5,865	133	23,631,820	23,631,820	
Region 19 Alaska	1	(D)	(D)	16	427,000	427,000	
Region 20 Hawaii	14	70	70	43	1,299,510	1,299,510	

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Table 45. Irrigated Horticultural Operations by Market Value of All Agricultural Products Sold: 2018 and 2013 (continued)

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

Geographic area	\$1,000,000 or more					
	In the open			Under protection		
	Operations	Acres	Acres irrigated	Operations	Square feet	Square feet irrigated
United States 2018	2,392	476,508	396,737	2,657	1,063,305,446	1,063,305,446
..... 2013	1,936	400,264	343,547	2,096	838,082,473	835,846,393
2018 DATA						
Alabama	59	17,163	17,163	42	11,123,600	11,123,600
Alaska	-	-	-	3	456,000	456,000
Arizona	41	4,750	4,750	26	9,035,780	9,035,780
Arkansas	4	(D)	(D)	8	1,174,370	1,174,370
California	378	53,240	53,185	458	250,651,773	250,651,773
Colorado	43	5,492	5,492	53	10,887,980	10,887,980
Connecticut	69	4,909	2,714	114	33,344,504	33,344,504
Delaware	5	1,379	1,379	4	438,840	438,840
Florida	407	75,129	71,484	326	234,259,561	234,259,561
Georgia	42	14,524	14,524	33	11,468,570	11,468,570
Hawaii	15	483	315	50	12,127,120	12,127,120
Idaho	53	10,771	10,571	14	2,328,028	2,328,028
Illinois	49	14,577	5,194	66	44,281,980	44,281,980
Indiana	13	2,603	2,065	55	6,989,196	6,989,196
Iowa	28	2,722	2,422	47	9,340,810	9,340,810
Kansas	14	7,111	2,930	14	5,129,520	5,129,520
Kentucky	2	(D)	(D)	5	1,317,000	1,317,000
Louisiana	22	1,382	1,317	30	7,390,080	7,390,080
Maine	7	210	210	9	2,178,900	2,178,900
Maryland	33	6,391	6,391	62	8,355,020	8,355,020
Massachusetts	4	728	702	3	(D)	(D)
Michigan	51	28,699	12,169	161	60,156,749	60,156,749
Minnesota	37	4,742	2,262	50	12,781,536	12,781,536
Mississippi	11	3,018	3,018	8	836,320	836,320
Missouri	19	5,218	3,119	26	6,072,800	6,072,800
Montana	3	6	6	15	491,860	491,860
Nebraska	15	1,374	1,235	13	1,535,480	1,535,480
Nevada	1	(D)	(D)	5	148,680	148,680
New Hampshire	15	(D)	(D)	19	2,033,864	2,033,864
New Jersey	62	13,198	12,100	37	19,591,580	19,591,580
New Mexico	10	(D)	(D)	11	1,902,480	1,902,480
New York	113	6,997	6,997	193	42,636,890	42,636,890
North Carolina	61	18,288	6,678	18	13,201,200	13,201,200
North Dakota	-	-	-	-	-	-
Ohio	34	18,511	7,294	41	24,409,681	24,409,681
Oklahoma	12	9,897	9,012	7	2,477,046	2,477,046
Oregon	242	41,163	40,813	188	47,687,130	47,687,130
Pennsylvania	20	3,323	861	150	36,052,120	36,052,120
Rhode Island	1	(D)	(D)	-	-	-
South Carolina	43	12,664	12,355	9	(D)	(D)
South Dakota	7	275	275	3	(D)	(D)
Tennessee	30	12,361	6,911	20	3,510,460	3,510,460
Texas	110	32,326	31,464	111	70,933,580	70,933,580
Utah	17	1,678	1,518	19	6,127,872	6,127,872
Vermont	2	(D)	(D)	3	(D)	(D)
Virginia	50	4,206	3,271	49	17,157,072	17,157,072
Washington	92	23,158	21,658	42	18,849,012	18,849,012
West Virginia	1	(D)	(D)	2	(D)	(D)
Wisconsin	45	9,507	8,603	29	6,203,782	6,203,782
Wyoming	-	-	-	6	188,000	188,000
Water Resources Regions						
Region 01 New England	97	6,520	4,273	147	38,294,228	38,294,228
Region 02 Mid-Atlantic	218	31,480	29,324	413	105,656,260	105,656,260
Region 03 South Atlantic-Gulf	632	139,553	123,989	446	276,585,511	276,585,511
Region 04 Great Lakes	132	38,014	19,454	252	99,721,890	99,721,890
Region 05 Ohio	72	26,772	9,024	128	21,306,776	21,306,776
Region 06 Tennessee	4	3,770	3,770	1	(D)	(D)
Region 07 Upper Mississippi	132	30,459	17,281	177	62,558,440	62,558,440
Region 08 Lower Mississippi	25	2,043	1,978	32	7,707,400	7,707,400
Region 09 Souris-Red-Rainy	4	(D)	(D)	4	(D)	(D)
Region 10 Missouri	86	16,259	10,186	101	23,752,750	23,752,750
Region 11 Arkansas-White-Red	27	12,995	12,110	16	3,654,096	3,654,096
Region 12 Texas-Gulf	107	32,260	31,398	109	65,706,380	65,706,380
Region 13 Rio Grande	10	(D)	(D)	17	9,597,400	9,597,400
Region 14 Upper Colorado	5	168	168	7	322,920	322,920
Region 15 Lower Colorado	41	4,750	4,750	26	9,035,780	9,035,780
Region 16 Great Basin	18	1,992	1,832	24	6,276,552	6,276,552
Region 17 Pacific Northwest	389	75,096	73,046	246	69,024,170	69,024,170
Region 18 California	378	53,240	53,185	458	250,651,773	250,651,773
Region 19 Alaska	-	-	-	3	456,000	456,000
Region 20 Hawaii	15	483	315	50	12,127,120	12,127,120

Appendix A.

Statistical Methodology

THE SURVEY POPULATION

Sample Design

The target population for the 2018 Irrigation and Water Management Survey was composed of all farms irrigating in the reference year of 2018. From the 2017 Census of Agriculture, 198,368 records were identified as belonging to the general U.S. irrigation population on the basis of having irrigation activity on their farm or ranch. The target population was expanded to include any operations that had irrigated land in the past five years. Institutional, research, and experimental farms were excluded from the total number of irrigators that reported in the 2017 census.

The sample was drawn at a State level for all 50 States. This sample design targeted a U.S. level sample size of 35,000. A certainty stratum, with farms selected with probability one, was included for each State to ensure that the major irrigators in each State were sampled. The remaining strata were sampled systematically by irrigated acreage. The stratification boundaries varied among the States and were dependent on the distribution of total acres irrigated within the State. The stratified design ensured that the sample was reflective of the survey population and achieved the appropriate coefficients of variation (CV) levels at both the U.S. and State levels.

The final national sample size was 34,783 farms; 1,340 of these farms were selected from the certainty strata and the remaining 33,443 farms were systematically selected from the noncertainty strata. Table A provides the State sample counts for the survey, including acres associated with those counts, final reports processed and tabulated both unexpanded and expanded, and 2017 census counts.

DATA COLLECTION

Method of Enumeration

The 2018 Irrigation and Water Management Survey was conducted using multiple data collection strategies. Data were collected by mail, Computer-Assisted Web Interviewing (CAWI) via the Internet, telephone enumeration, and personal enumeration. Enumeration methods used in the 2018 survey were similar to those used in the 2013 survey.

Report Form

A single 20-page report form was used for the survey, similar to the 2013 report form. The report form was mailed to all the producers in the sample that reported irrigation in the 2017 Census of Agriculture. See Appendix B for copies of the report form and instruction booklet and information regarding changes between the 2013 and 2018 report forms.

Report Form Mailings and Respondent Follow-up

The initial mailout took place in February 2019. Mail packets were mailed to 34,783 irrigators. The initial mail packets included a labeled report form, an instruction booklet, an instruction letter, and a return envelope. Mailout packet preparation, initial mailout, and one follow-up mailing to nonrespondents were handled by the U.S. Census Bureau's National Processing Center (NPC) in Jeffersonville, IN. Telephone follow-up from a NASS Data Collection Center began April 2019 to nonrespondents who were mailed a report form from NPC.

Data were collected for a select group of operations by the NASS regional 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 regional field offices in November 2018. Regional field office staff collected data by personal enumeration or by phone from February 2019 through May 2019. 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 removed from follow-up mailings. All report forms were reviewed prior to data keying to identify inconsistencies and to 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 missing or inconsistent entries. Each report with a flagged entry was reviewed by regional field office and/or headquarters statisticians. Action was required for any record with reported data that were clearly incorrect, for example, 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. These items were tagged for machine imputation. 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 by the computer edit process were reviewed and verified by analysts. Instances where imputed data failed edit checks were referred to statisticians for corrective action. The computer edit ensured the data on a report form were internally consistent.

Prior to publication, tabulated totals were reviewed to identify and resolve remaining irregularities. Comparisons were made with 2017 census data, 2013 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

- Many data items in the 2018 Irrigation and Water Management Survey used nearest neighbor hot-deck imputation. Records were sorted by State and strata to increase likelihood that the nearest neighbor donor record was within the same State and stratum as the recipient record. Some exceptions are described below.
- Imputation for items related to Ground water from wells used a combination of techniques to maintain relationships between other items in the record. Based on available data, imputation techniques were prioritized as listed directly below:
 - Other data in the record that referenced the same well.
 - Other wells on the same farm.
 - Nearest neighbor hot-deck imputation.
- Imputation for items related to Acres harvested in the open and pastureland was based on ratios created at the State by stratum level, State level, and U.S. level using good donor records.
 - Priority was given to the ratio based on the most similar contributors when there was a sufficient number of donors (i.e., first same State by stratum).
- Imputation for sections that required categorical or yes/no responses was based on the distributions of farms that responded to the item.

Items that were imputed:

- Quantity of water applied;
- Well and pump characteristics;
- Energy costs of well pumps;
- Individual crop yields and quantity of water used;
- Horticulture water sources and methods; and
- Acres associated with expenditures, maintenance, and repair costs.

ESTIMATION

Data were summarized 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 a detailed description). The estimation methodology consisted of two weighting components that made up the total survey weight. The first component was the fully adjusted weight pulled in from the 2017 Census of Agriculture. This weight accounted for any list incompleteness and undercoverage from the 2017 census. The second component was the sampling rate used for the 2018 Irrigation and Water Management Survey. 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 2018 Irrigation and Water Management Survey 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 report form for the 2018 Irrigation and Water

Management Survey was very similar to the report form for the 2013 Farm and Ranch Irrigation Survey. Only a small number of questions were either split, dropped, or reworded. The data are mostly comparable between 2013 and 2018. There are slight differences due to the target population now including those who irrigated in the past five years instead of just those who had irrigated the prior year. However, the population they represent is still the same, which is all active irrigators in 2018 in the U.S.

The differences between the 2018 Irrigation and Water Management Survey and the 2013 Farm and Ranch Irrigation Survey are as follows:

- Number of hours pumps were operational during the survey year was removed from 2018.
- Horticulture in the open was recorded under Other cropland during 2013 while it was recorded as its own commodity during 2018. Therefore, Other cropland is not comparable between 2018 and 2013.

Differences exist between the expanded results of the 2018 Irrigation and Water Management Survey and the published data from the 2017 Census of Agriculture. Some of these are as follows:

1. The survey includes data only for operations that irrigated sometime between 2013 and 2017 and 2018. Operations in some areas, especially the eastern States, may irrigate only when moisture is needed. 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 2017 but discontinued irrigation in 2018 is tabulated in Table 27 for all farms and in Table 44 for horticultural operations by reason of discontinuance.
2. Some producers reported that they had been misclassified as irrigators and did not irrigate in either 2017 or 2018. Operations which indicated they had not irrigated in 2017 but had in the past five years were not counted as misclassified. An estimated 30,690 operations with 1,391,699 acres irrigated were misclassified as irrigated in the 2017 Census of Agriculture. In addition to errors in processing census data, some producers misreported or misinterpreted the questions. Most of the producers misreporting irrigation in the 2017 census reported irrigation of small acreages

of vegetables, fruits and nuts, tobacco, field crops, or berries. See table E for details about misclassified producers and acres.

3. Some respondents indicated they had retired, moved, sold or rented the land, etc., since 2017. After analytical review of the 2018 receipts, an estimated 20,571 operations accounting for 2,816,772 acres irrigated in 2017, 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. See table E for details about out-of-business producers and acres.
4. New irrigators in 2018 (not included in the 2017 census) did not have a chance for selection 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 2012 and 2017 Censuses of Agriculture irrigation data which show little change in irrigated acres.

Table B shows acres irrigated in the 2018 survey (expanded) compared with U.S. totals from the 2017 Census of Agriculture. The expanded survey accounts for 96.4 percent of all land reported as irrigated in the 2017 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 errors are caused by observing only a piece of the population instead of the entire population. These errors are subject to sample-to-sample variation. Nonsampling errors include all other errors and can arise from many different sources. These sources may include respondent error, 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 irrigated farms that either erroneously reported they were not irrigating on the 2017 census, started irrigating in 2018, or had succeeding irrigators in 2018 (i.e., a producer who, since 2017, took control of an existing irrigating farm through sale, rental, or other arrangement).

Overcoverage also existed in the frame because some operations were misclassified as irrigators and did not irrigate in 2017 or had either stopped farming or irrigating in 2018. Farms in the sample that fell into these groups were identified during the survey and estimates are provided covering their number and acres irrigated in the Data Comparability section, items 2 and 3.

Survey Response Rate

The response rate is an indicator of the quality of data collection. It is generally assumed that if a response rate was close to 100 percent, the potential for nonresponse bias is small. Because this survey contains both farm and nonfarm records, the response rate is an indicator of replying to the survey data collection effort, but does not reflect whether those responding met the farm definition or had the items of interest for the survey. The response rate for the 2018 Irrigation and Water Management Survey is 64.4 percent. This compares to 69.8 percent for the 2013 Farm and Ranch Irrigation Survey.

MEASURES OF PRECISION

Under the guidance of the Statistical Policy Office of the Office of Management and Budget (OMB), the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) provides data users with quality metrics for its published data series. The accuracy of data products may be evaluated through sampling and nonsampling error. The measurement of error due to sampling in the current period is evaluated by the coefficient of variation (CV) for each estimated item. Nonsampling error is evaluated by response rates and the percent of the estimate from respondents.

Coefficient of variation is a measure of the relative amount of error associated with a sample estimate. Specifically, it is the standard error of a point estimate divided by that estimate, generally multiplied times

100 so that it can be reported as a percentage. This relative measure allows the reliability of a range of estimates to be compared. For example, the standard error is often larger for large population estimates than for small population estimates, but the large population estimates may have a smaller CV, indicating a more reliable estimate. Every estimate for the 2018 Irrigation and Water Management Survey has a corresponding CV published with it. NASS has identified the following index to use when evaluating coefficient of variation for the 2018 Irrigation and Water Management Survey. The coefficient of variation 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.

- **Low Reliability Estimate.** Coefficient of Variation (CV) 30 percent or higher. Caution should be used when using this estimate in any form. Please consult NASS for more information or guidance.
- **Medium Reliability Estimate.** Coefficient of Variation (CV) between 15 percent and 29.9 percent
- **High Reliability Estimate.** Coefficient of Variation (CV) less than 15 percent.

Table A. Irrigated Farms: 2018 Irrigation and Water Management Survey and the 2017 Census of Agriculture

Geographic area	2018 Irrigation and Water Management Survey						2017 Census of Agriculture			
	Sample count		Final reports processed and tabulated				Published totals		Sample universe ¹	
			Unexpanded		Expanded					
	Farms	2017 census irrigated acres	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated	Farms	Acres irrigated
United States	34,783	21,955,328	17,177	13,126,383	231,474	55,938,795	294,235	58,013,907	198,368	43,988,618
Alabama	254	65,832	119	54,611	1,069	163,338	1,891	142,001	1,372	121,835
Alaska	155	1,676	86	1,285	308	1,721	377	2,400	417	1,923
Arizona	560	435,419	262	324,665	3,054	945,570	4,808	910,883	2,517	758,535
Arkansas	1,838	2,665,768	777	1,483,354	3,173	4,246,491	4,475	4,855,143	3,500	3,858,092
California	4,661	3,400,265	2,583	1,986,818	42,093	8,408,282	52,362	7,833,593	31,307	6,199,928
Colorado	1,587	771,802	858	420,440	14,529	2,458,742	17,162	2,761,173	10,969	1,986,872
Connecticut	137	4,503	54	2,916	669	6,104	998	7,376	656	6,144
Delaware	129	76,545	74	53,139	521	201,305	612	163,255	432	125,185
Florida	954	958,264	433	719,122	7,615	1,331,739	11,228	1,519,379	7,240	1,385,135
Georgia	691	361,308	273	223,742	3,861	1,163,038	6,191	1,287,541	4,608	928,480
Hawaii	298	35,783	152	14,753	1,863	26,700	2,250	45,452	1,482	46,616
Idaho	1,821	1,594,524	1,077	924,795	14,867	3,393,063	15,597	3,398,266	9,353	2,609,651
Illinois	329	176,359	177	138,682	1,807	566,024	2,541	612,459	2,156	518,603
Indiana	359	128,509	210	106,079	2,039	582,661	2,836	555,443	2,268	449,277
Iowa	207	59,199	106	41,334	1,061	166,193	1,707	221,986	1,409	173,060
Kansas	781	781,207	393	500,357	4,249	2,386,816	5,141	2,503,386	3,904	1,887,854
Kentucky	355	55,601	150	34,914	1,188	58,234	2,030	83,859	1,834	78,189
Louisiana	542	350,475	185	188,810	1,862	1,072,033	3,102	1,235,752	2,371	899,045
Maine	254	27,174	138	23,136	990	35,695	1,420	32,312	877	30,154
Maryland	208	52,377	117	43,011	959	125,024	1,318	124,831	1,108	103,414
Massachusetts	183	9,311	85	6,747	1,335	19,311	1,696	23,928	1,193	18,705
Michigan	541	270,615	286	207,528	3,886	827,010	5,153	670,212	4,007	567,014
Minnesota	412	191,907	219	118,184	2,367	554,605	3,220	611,621	2,364	475,393
Mississippi	825	933,666	305	506,650	1,621	1,667,023	2,561	1,814,548	1,776	1,477,133
Missouri	805	596,492	375	272,957	2,705	1,429,074	3,523	1,529,155	2,922	1,178,685
Montana	1,020	617,118	570	329,705	8,887	2,140,162	9,941	2,061,236	6,564	1,434,050
Nebraska	2,391	2,312,733	1,064	1,087,187	13,013	7,666,152	16,112	8,588,389	10,871	5,711,548
Nevada	294	336,827	184	218,825	1,857	693,520	2,217	790,425	1,293	597,082
New Hampshire	110	953	61	923	731	3,218	618	2,207	407	1,573
New Jersey	273	51,621	142	36,452	1,585	89,941	1,980	86,819	1,619	78,259
New Mexico	682	220,119	374	175,993	10,093	675,330	10,745	626,034	5,652	483,785
New York	351	22,509	153	17,213	2,148	47,974	3,285	53,257	2,548	43,213
North Carolina	461	44,220	181	24,784	2,451	132,870	3,708	143,444	3,085	121,274
North Dakota	119	81,205	57	57,552	720	297,001	764	263,885	581	196,328
Ohio	382	29,036	168	17,361	1,601	39,258	2,935	50,665	2,412	44,666
Oklahoma	370	219,387	163	169,011	1,835	601,492	2,668	573,776	2,144	432,749
Oregon	1,667	654,725	875	371,957	13,794	1,579,108	16,291	1,664,921	11,417	1,378,226
Pennsylvania	469	11,612	216	9,087	2,766	40,596	3,904	32,139	3,026	24,177
Rhode Island	107	2,215	48	1,945	227	3,231	234	2,956	169	2,618
South Carolina	274	74,563	129	73,298	1,489	252,720	2,167	210,437	1,597	161,606
South Dakota	191	109,871	95	63,391	1,219	378,413	1,798	492,452	1,221	314,483
Tennessee	279	82,970	125	57,030	1,452	190,746	2,011	184,899	1,930	156,912
Texas	2,334	1,347,636	917	804,535	11,997	4,085,754	17,932	4,363,345	13,366	3,068,226
Utah	924	212,392	562	136,503	12,575	1,181,700	13,159	1,097,219	7,787	780,765
Vermont	153	1,950	87	1,041	573	3,022	672	3,017	439	2,412
Virginia	251	28,050	101	16,090	1,377	48,248	2,053	63,433	1,751	54,113
Washington	1,646	761,415	798	600,521	11,259	1,866,110	14,887	1,689,377	9,314	1,423,352
West Virginia	106	529	43	1,326	482	6,525	581	1,660	541	1,140
Wisconsin	403	186,494	205	190,679	2,127	518,312	3,284	454,362	2,686	418,657
Wyoming	640	540,597	365	265,945	5,525	1,561,596	6,090	1,567,599	3,906	1,172,482

¹ Excludes institutional, research, and experimental farms.

Table B. Farms with Irrigation by Acres Irrigated: 2018 Irrigation and Water Management Survey compared with 2017 Census of Agriculture

Item	2017 Census of Agriculture United States totals	2018 Irrigation and Water Management Survey		Item	2017 Census of Agriculture United States totals	2018 Irrigation and Water Management Survey	
		United States totals (expanded)	Percent of 2017 Census of Agriculture totals			United States totals (expanded)	Percent of 2017 Census of Agriculture totals
Farms number	294,235	231,474	78.7	200 to 499 acres farms	26,787	24,749	92.4
acres	58,013,907	55,938,795	96.4	acres	8,390,366	7,669,292	91.4
1 to 49 acres farms	191,649	136,429	71.2	500 to 999 acres farms	15,172	13,790	90.9
acres	1,777,418	1,535,201	86.4	acres	10,507,125	9,503,359	90.4
50 to 99 acres farms	22,629	19,825	87.6	1,000 to 1,999 acres farms	9,285	9,170	98.8
acres	1,568,582	1,383,478	88.2	acres	12,575,750	12,245,392	97.4
100 to 199 acres farms	23,452	22,259	94.9	2,000 acres or more farms	5,261	5,252	99.8
acres	3,208,908	3,026,351	94.3	acres	19,985,758	20,575,722	103.0

Table C. Coefficient of Variation (percent) for Selected General Irrigation Data: 2018

[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 applied	Energy expense for pumps	Expenditure expenses	Pumps, all types	Well pumps
			Total	Cropland harvested in the open					
United States	1.1	7.6	12.0	12.4	14.3	11.2	7.1	6.5	6.4
Alabama	8.5	22.9	42.2	42.3	44.0	51.4	46.5	20.9	(D)
Alaska	7.2	33.4	71.2	81.1	80.3	52.7	38.3	15.4	20.1
Arizona	3.1	24.8	33.4	34.3	31.3	30.1	50.7	24.6	22.7
Arkansas	2.8	5.0	5.2	5.2	6.4	4.9	29.6	4.3	5.1
California	1.1	16.4	17.4	17.3	17.2	12.5	10.3	7.0	7.1
Colorado	2.3	15.6	8.2	8.3	8.5	14.0	22.6	10.6	12.4
Connecticut	13.0	31.9	38.6	42.8	39.4	64.2	39.6	33.9	35.0
Delaware	11.0	26.9	27.1	27.1	32.3	60.0	54.8	20.5	20.5
Florida	4.3	46.9	66.6	68.9	65.7	34.2	35.1	15.3	11.3
Georgia	4.6	14.1	16.7	17.2	19.3	16.1	33.2	12.7	12.6
Hawaii	5.0	50.6	34.5	37.3	43.6	42.9	47.7	47.0	(D)
Idaho	2.2	13.7	13.5	15.1	14.3	14.4	28.8	8.0	14.7
Illinois	6.0	15.0	14.1	14.2	15.6	18.2	35.8	10.2	10.5
Indiana	5.9	11.5	13.7	13.7	13.7	12.6	30.0	10.2	10.6
Iowa	10.6	22.2	27.8	27.8	29.1	28.9	53.5	21.2	22.0
Kansas	2.4	7.6	2.7	2.7	4.0	7.6	14.6	4.4	4.4
Kentucky	10.4	29.4	42.0	42.5	40.1	49.2	34.2	20.6	30.5
Louisiana	6.7	10.1	14.0	14.7	17.0	18.3	30.5	13.5	13.5
Maine	11.1	(H)	(H)	(H)	99.8	98.4	41.5	18.3	11.9
Maryland	9.9	25.2	35.3	35.4	26.8	30.6	32.8	20.8	23.0
Massachusetts	6.5	24.5	23.8	25.1	52.3	36.9	45.2	10.8	15.5
Michigan	4.4	9.2	8.8	8.9	10.9	9.2	26.0	7.7	(D)
Minnesota	6.2	12.1	16.3	16.3	20.4	18.8	36.7	12.5	12.9
Mississippi	4.9	6.6	9.0	9.1	11.0	12.4	20.4	8.3	8.0
Missouri	4.5	9.9	11.9	12.2	12.3	16.0	20.6	8.9	9.6
Montana	3.1	15.6	9.3	7.5	11.3	11.2	31.4	9.9	17.8
Nebraska	2.0	5.0	2.9	2.9	2.9	3.9	13.8	3.2	3.6
Nevada	5.5	24.3	12.7	12.6	12.9	17.8	23.1	12.5	13.3
New Hampshire	10.1	26.0	27.4	28.1	29.1	37.6	28.3	17.0	19.7
New Jersey	11.6	31.7	42.7	43.1	38.4	29.3	50.6	16.9	(D)
New Mexico	2.6	42.1	14.1	16.1	22.2	19.6	17.4	12.8	13.0
New York	11.1	32.0	28.7	29.1	21.0	33.4	31.7	10.7	9.7
North Carolina	10.6	38.8	48.5	50.5	50.4	39.4	45.4	19.3	20.8
North Dakota	11.1	20.4	17.0	17.0	18.6	12.4	45.5	17.5	21.7
Ohio	11.1	15.2	37.1	36.9	55.0	28.4	45.2	18.6	19.4
Oklahoma	8.0	21.9	22.2	23.7	25.8	22.7	36.8	20.0	20.5
Oregon	2.4	16.6	14.0	16.2	17.8	19.8	13.6	5.2	5.0
Pennsylvania	7.1	20.4	41.5	44.7	44.7	24.3	67.2	11.4	10.0
Rhode Island	13.4	71.6	69.9	73.5	42.9	49.2	74.5	22.6	22.3
South Carolina	6.5	18.5	33.6	34.3	36.7	33.0	47.5	25.7	26.3
South Dakota	10.1	25.0	16.6	16.0	28.0	26.6	28.0	13.7	16.0
Tennessee	10.8	22.7	34.5	34.6	41.8	28.9	53.1	22.6	23.2
Texas	3.1	7.8	10.0	10.1	10.4	12.7	13.9	10.5	10.8
Utah	2.5	17.7	8.0	9.8	9.0	19.3	19.0	8.2	13.0
Vermont	15.4	33.4	28.4	31.9	52.6	29.1	40.5	24.7	16.2
Virginia	8.8	26.0	42.4	42.9	56.4	28.5	53.3	14.2	13.6
Washington	3.0	20.1	25.3	26.9	27.1	19.4	15.3	11.1	13.8
West Virginia	15.8	51.1	84.7	89.9	76.9	37.5	57.3	26.8	29.7
Wisconsin	4.8	19.7	35.8	35.6	46.3	34.5	33.9	27.1	32.5
Wyoming	3.6	16.7	7.3	7.2	7.4	13.3	32.6	11.5	24.8
Water Resources Regions									
Region 01 New England	6.7	56.2	71.1	65.7	61.8	42.9	31.7	12.2	12.2
Region 02 Mid-Atlantic	6.1	21.5	31.6	31.8	30.5	30.1	30.2	14.1	13.7
Region 03 South Atlantic-Gulf	2.8	27.1	40.6	41.8	45.2	25.4	22.9	13.9	12.0
Region 04 Great Lakes	4.1	9.7	10.8	10.8	12.7	9.8	24.8	7.5	8.1
Region 05 Ohio	5.4	13.6	16.4	16.7	18.1	19.0	22.7	9.3	11.2
Region 06 Tennessee	10.5	19.4	34.2	34.7	33.7	21.8	37.2	13.1	16.3
Region 07 Upper Mississippi	5.2	11.8	20.5	20.4	25.9	24.2	23.7	16.6	17.4
Region 08 Lower Mississippi	4.5	7.7	8.2	8.2	8.6	6.9	14.4	5.7	5.9
Region 09 Souris-Red-Rainy	20.2	23.0	24.4	24.4	25.2	24.3	42.0	25.0	(D)
Region 10 Missouri	1.6	7.0	4.4	4.1	5.1	5.2	14.6	3.8	3.4
Region 11 Arkansas-White-Red	3.6	11.5	10.5	10.5	12.2	13.4	12.3	10.3	10.7
Region 12 Texas-Gulf	3.2	12.2	7.5	7.1	10.0	9.0	17.2	10.4	10.6
Region 13 Rio Grande	5.1	34.2	16.2	14.6	14.5	16.0	15.8	8.7	8.5
Region 14 Upper Colorado	2.2	21.1	7.3	8.4	9.1	30.8	25.2	17.6	(D)
Region 15 Lower Colorado	4.8	20.0	30.8	31.8	29.7	27.4	46.0	22.5	21.0
Region 16 Great Basin	3.5	16.1	8.4	8.3	8.7	14.2	26.5	7.5	9.2
Region 17 Pacific Northwest	1.6	9.9	16.5	18.1	18.8	16.1	13.1	7.8	8.5
Region 18 California	1.1	15.9	17.1	17.3	17.1	12.6	10.3	7.0	7.2
Region 19 Alaska	7.2	33.4	71.2	81.1	80.3	52.7	38.3	15.4	20.1
Region 20 Hawaii	5.0	50.6	34.5	37.3	43.6	42.9	47.7	47.0	(D)

Table D. Coefficient of Variation (percent) for Selected Horticultural Irrigation Data: 2018

Geographic area	Irrigated horticultural operations	Irrigated area	
		Acres in the open	Square feet under protection
United States	3.6	51.8	53.2
Alabama	9.2	65.2	38.5
Alaska	8.0	20.5	38.3
Arizona	29.6	91.3	(H)
Arkansas	18.4	(H)	67.6
California	4.9	46.9	42.8
Colorado	7.8	46.6	(H)
Connecticut	21.4	44.7	43.0
Delaware	31.1	(H)	58.4
Florida	6.3	59.0	71.5
Georgia	17.5	68.6	79.9
Hawaii	11.2	26.6	48.6
Idaho	11.8	26.7	(H)
Illinois	9.2	29.5	78.5
Indiana	9.8	68.7	57.8
Iowa	12.7	(H)	65.2
Kansas	15.3	43.1	39.9
Kentucky	13.1	73.8	36.3
Louisiana	16.3	(H)	66.9
Maine	14.2	67.9	37.2
Maryland	12.5	(H)	62.9
Massachusetts	19.4	83.3	37.1
Michigan	12.1	32.9	26.9
Minnesota	10.5	(H)	54.3
Mississippi	12.3	52.4	59.3
Missouri	4.9	(H)	58.2
Montana	21.6	(H)	58.2
Nebraska	13.0	82.5	(H)
Nevada	31.1	(H)	50.9
New Hampshire	14.5	38.7	34.2
New Jersey	16.9	67.8	44.7
New Mexico	20.4	(H)	(H)
New York	13.2	41.7	48.4
North Carolina	4.9	88.5	75.4
North Dakota	29.3	(D)	77.0
Ohio	11.9	73.3	81.9
Oklahoma	15.9	98.3	(H)
Oregon	8.4	25.6	59.7
Pennsylvania	7.3	63.5	33.6
Rhode Island	19.7	67.6	31.6
South Carolina	20.1	73.8	85.9
South Dakota	14.3	(H)	50.7
Tennessee	14.7	95.4	55.0
Texas	6.3	61.6	(H)
Utah	21.2	45.1	61.0
Vermont	16.9	42.5	31.1
Virginia	7.7	74.8	51.4
Washington	10.4	51.3	62.4
West Virginia	21.9	64.2	57.1
Wisconsin	7.0	55.4	57.3
Wyoming	32.3	(D)	41.6
Water Resources Regions			
Region 01 New England	10.4	43.4	33.0
Region 02 Mid-Atlantic	7.8	73.5	40.3
Region 03 South Atlantic-Gulf	4.6	62.3	69.7
Region 04 Great Lakes	10.2	40.6	33.6
Region 05 Ohio	7.6	45.3	44.8
Region 06 Tennessee	14.0	90.8	36.1
Region 07 Upper Mississippi	4.3	52.3	55.9
Region 08 Lower Mississippi	19.7	94.8	60.0
Region 09 Souris-Red-Rainy	41.8	51.2	(H)
Region 10 Missouri	7.5	64.1	68.3
Region 11 Arkansas-White-Red	11.0	99.4	75.1
Region 12 Texas-Gulf	5.9	62.2	(H)
Region 13 Rio Grande	23.7	87.4	(H)
Region 14 Upper Colorado	16.8	39.1	57.2
Region 15 Lower Colorado	24.9	84.7	(H)
Region 16 Great Basin	10.5	57.0	67.4
Region 17 Pacific Northwest	5.4	26.3	62.6
Region 18 California	4.7	47.2	42.6
Region 19 Alaska	8.0	20.5	38.3
Region 20 Hawaii	11.2	26.6	48.6

Appendix B.

General Explanation and Report Form

DEVELOPMENT OF THE REPORT FORM

Planning for the 2018 Irrigation and Water Management Survey (IWMS) started in 2014 with the closeout of the 2013 Farm and Ranch Irrigation Survey (FRIS). Extensive correspondence, discussions, and meetings took place with representatives of the Economic Research Service (ERS) regarding 2013 FRIS content. Evaluations from NASS staff of the 2013 FRIS were reviewed. The decision was made to continue with the single report form design to collect irrigation data from both farm and ranch producers alongside horticultural producers.

Under the leadership of the Methodology Division at NASS, a complete review of the 2013 FRIS was provided and cognitive testing was conducted. As a result, the findings and recommendations led to the following notable changes for the 2018 Irrigation and Water Management Survey.

Major Changes

The only major change was the report form title. Other changes included combining the water practices sections.

Other Changes

Sections 1 and 2: Include and exclude items were listed to gain the same improvements as the census of agriculture report forms. The horticultural area question was split to collect open acres separately from under protection areas.

Section 3: Items 4a to 4c were reordered to separate them from Number of wells. The reference text of “artesian wells” was removed to capture wells as “flowing wells that did not require a pump.” Removed the Total Hours Operated column in items 5 and 5a.

Section 6: Removed Average Hours Operated column.

Section 9: The non-irrigated crop questions were removed. This change was made for multiple reasons. With the improved data collected in Section 2, too many operations did not report their non-irrigated land properly in later sections, resulting in inconsistencies between cropland harvested in the open acreage and the sum of both acres irrigated and non-irrigated. The source of this inconsistency was incomplete data in the non-irrigated crop columns. Analysts were required to update a large number of records manually to synchronize the items. The data user was also confused as to what this data meant. Many data users mistook the non-irrigated yield in FRIS as being equivalent to the state’s non-irrigated yield when it was just the non-irrigated yields on irrigated farms only.

Sections 9 and 10: The All other crops grown in the open category was split to collect Horticulture in the open acres and All other non-horticulture crops grown separately.

DATA CHANGES

Some history concerning the data changes from 2003, 2008, 2013, and 2018 are described here.

Publication Changes

2003: Data were published for irrigating farms and ranches and included data for horticultural operations that reported less than \$10,000 in sales in the 2002 Census of Agriculture. The 2003 FRIS table structure is similar to 2008 FRIS Chapter 1 tables.

2008: Two report forms were used – one for farm and ranch operations and another for horticultural operations with any sales in 2008. Data for farm and ranch operations were published in Chapter 1, Tables

1 through 43 (General Data). Horticultural operations data were published in Chapter 2, Tables 1 through 9 (Horticultural Operations Data). To bridge the 2003 tables with the 2008 Chapter 1 tables, the 2003 U.S. data were adjusted in the 2008 publication by removing data for horticultural operations with less than \$10,000 in sales.

2013: A single report form was used to collect data from irrigating farm and ranch operations and from horticultural operations with any level of sales. Data published in Tables 2 through 39 (Entire Farm Data) are for all irrigating operations – farms and ranches and horticultural operations combined. Data are not comparable between the 2013 and 2008 surveys because horticultural operations’ data were reported separately in 2008 (Chapter 2). The 2013 horticultural operations data in Tables 40 through 45 are comparable with their corresponding 2008 Chapter 2 tables. To provide a measure of comparability in the 2013 tables, the 2008 U.S. data were adjusted, where possible, to include the 2008 horticultural operations data. In many of the first 27 tables, 2008 U.S. data were omitted.

Several tables were affected by changes to the report form sections. Some tables that appeared in the 2008 FRIS were not published in the 2013 FRIS, including Chapter 1 tables 13, 24, 31, and 40 and Chapter 2 tables 5, 6, and 7. Table 3 was updated to reflect changes that were made to the land use categories in Section 2 of the FRIS report form; specifically the types of pasture – permanent, woodland pastured, and other pasture. The change was made to align FRIS with the 2012 census.

The subirrigation method of water distribution for acres in the open was not included on the 2013 FRIS report form. This change affected Tables 28, 31, 32, and 39. The data for this method are now reported in the Other gravity item. In 2008 data were collected for five categories of Uncontrolled flooding and Other gravity methods and were published in Table 7. Only data for the total acres of each of these conveyance systems were collected and published in 2013.

Wells capable of being used, irrigation water transfers, and other uses of irrigation water are no longer published. Crops with small acreages have high variability because of the sample size.

Sugarbeets, barley, and tobacco were removed as individual items in the field crops sections. Respondents reported these in the Other small grains or Other crops categories on the report form.

Water management practices for gravity irrigation were combined into four categories in Table 39.

2018: The title of the survey was changed from Farm and Ranch Irrigation Survey (FRIS) to Irrigation Water Management Survey (IWMS). The name of the survey changed because the name did not specify horticulture operations while the report form was designed to include all irrigators. Only a small number of changes were made to the combined report form to separate mixed values.

Horticulture in the open acreage was recorded under Other cropland on the 2013 report form and was recorded separately from Other cropland in 2018. This change affected tables 35, 36, and 38. Farm counts, acreage values, water application rates, and distribution methods for Other cropland are not comparable between 2013 and 2018.

DEFINITIONS AND EXPLANATIONS

This section provides definitions and explanations of specific terms and phrases used on the report form or in the publication 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 affected by irrigation interruption. Acres or area irrigated that had stopped irrigating for a period of time which resulted in a detrimental effect on crop yields. Reasons for stopping irrigation included water shortages, equipment failure, energy costs and shortages, water salinity levels, water costs, and changes in water access rights.

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

could exceed 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, 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. Table 1 provides a comparison with the 2018 Irrigation and Water Management Survey data and the 2017 Census of Agriculture data.

Acres irrigated affected by expenditure. This is the number of acres which were affected by the reported cost of the expenditures. It is not comparable with Acres irrigated in the expenditure tables in the 2008 and earlier FRIS publications.

Acres irrigated on farms with any hired or contract labor. This is the total acres irrigated on the operation. On some operations hired labor or contract labor were paid for work on all the acres in the operation. On other operations hired labor or contract labor were paid for work on only part of the total acres irrigated in the operation.

All other crops. Data relate to any non-vegetable crops not having a specified code on the 2018 report form. Crops such as grass seed, sunflower seed, sugarcane, etc. were included in other field crops. Data are not comparable to 2013. Horticulture acres in the open had its own category in 2018.

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.

Any water management practice used. See Water management practices used.

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.

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

Area under protection - square feet irrigated. The total area used to grow horticultural crops under protection, whether harvested or not.

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 2014 to 2018. 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, cultivated 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 harvested in the open. Acres that included harvested field crops and hay along with land used for vegetables, orchards, citrus groves, vineyards, berries, nuts, cultivated Christmas trees, short-rotation woody crops, nursery and other horticultural crops grown in the open. Does not include land used for growing horticultural crops under protection nor cropland reported as failed or used for cover crops.

Cropland not harvested or grazed. This category includes acreage which could have been used for crops without any additional improvement and which was not reported as cropland harvested or other pasture or grazing land that could have been used for crops without additional improvements. This category includes:

1. Land used for cover crops or soil improvement but not harvested or grazed.
2. Land in Federal or State conservation programs that was not hayed or grazed in 2018.
3. Land occupied with growing crops for harvest in 2019 or later years (except fruit or nuts in an orchard, grove, or vineyard or berries being maintained for production). Example is acreage planted in winter wheat for harvest in 2019 and no crop was harvested from these acres in 2018.
4. Land in summer fallow in 2018.
5. Land with crops that failed and no crop was harvested on the acreage in 2018.

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 facilities and equipment. There are six categories of expenditures. The expenditures purposes include; new expansion, water conservation, energy conservation, and scheduled replacement or maintenance. The expenditures are also grouped by primary source of funding.

Farms using off-farm water. Respondents were asked to report the amount (none, some, or all) 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 the U.S. Bureau of Reclamation, other federal agencies, and all other suppliers may be understated.

Flowing wells used. Flowing or artesian 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.

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

Horticultural crops. The horticultural data are published in the following categories:

Cultivated Christmas trees and short rotation woody crops in the open. Includes all trees to be cut in 2018 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 under protection. Includes all mushroom species that were irrigated in 2018. 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 trees and 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 in the open. Includes all irrigated sod, sprigs, or plugs.

Other horticultural crops. This category includes all crops that are primarily considered ornamental or horticultural and are not listed on the report form. Fruit, nut, and vegetable crops grown in the open are not considered horticultural crops.

Institutional, research, and experimental farms. In prior censuses of agriculture, data for these farms were combined with American Indian reservation farms into one category. However, in the 2018 Irrigation and Water Management Survey and the 2013 Farm and Ranch Irrigation Survey, 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 include well pumps and pumps other than well pumps used for irrigation on the operation.

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 producer’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. Land under the exclusive use of a grazing association was reported by the grazing association and included as land in farms. All land in American Indian reservations used for growing crops or grazing livestock, or with the potential of grazing livestock, was included as land in farms. Land in reservations not reported by reservations, 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 producers 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.

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 2017 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.

Nursery and other horticultural crops. Nursery and horticultural crops grown in the open, such as floriculture, bedding crops, nursery crops, sod, propagative materials, cultivated Christmas trees, and short rotation woody crops.

Nursery, greenhouse, and other horticulture under protection. Includes crops grown under glass, rigid plastic, plastic film, shade cloth, fiberglass, "tunnel" protection, and hoop houses. Crops that are covered only temporarily, such as for frost protection, are not considered as crops under protection. Includes

floriculture, bedding crops, nursery crops, propagative materials, food crops under protection, and mushrooms.

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. It includes reclaimed water from off-farm livestock facilities, municipal, industrial, and other reclaimed water sources

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 drip, trickle, or low-flow micro systems. This category is for any drip, trickle, or low-flow micro systems that were not included in the other three specific descriptions.

Other or unspecified discontinuance. This category is for any discontinuance reason that was not specified on the report form.

Other pasture and grazing land that could have been used for crops without additional improvements. 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.

Other small grains (barley, oats, rye, etc.). This category is not comparable with 2008 or earlier FRIS publications. In previous report forms, barley had its own specific code. In both 2013 and 2018 it did not have a specific code and is included with Other small grains.

Other sprinkler systems. Includes any sprinkler system that was not listed on the report form.

Permanent pasture and rangeland. This land use category encompasses grazing land that does not qualify as woodland pasture or 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 able to be grazed and is only marginally better than wasteland.

Poly pipe (or other single-year use, lay-flat tubing). Includes all short term surface tubing and pipes, such as poly pipe. Does not include permanent above ground or underground pipes

Primary source of funding assistance. Respondents were instructed to only report the primary source of funding assistance for expenditures. Nonresponses to this item were summarized as “No funding assistance.”

Pumps by average discharge operating pressure. This category is the average pressure of pumps, other than well pumps, used on the operation.

Pumps by average operating pressure. See Average operating pressure.

Reason for discontinuance of irrigation since 2017. These data reflect the expanded number of operations that irrigated in 2017 but not in 2018 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.

Reclaimed water. Reclaimed water is wastewater that has been treated for non-potable reuse purposes. Sources include municipal, industrial, off-farm livestock operations, and other reclaimed water sources. Water from off-farm livestock facilities, municipal, industrial, and other reclaimed water sources were reported as off-farm supplies. While reclaimed water from on-farm livestock facilities were reported as on-farm surface water.

Recycled water. Recycled water is the reuse of surface or ground water that has already been used to irrigate a crop on the operation. Recycled water use was reported as on-farm surface water.

Scheduled by water supplier. Producer’s decision to irrigate was determined by a third party, subject to delivery and availability conditions. Examples include water delivered by trucks or canals not controlled by the producer.

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. Center pivot systems are published 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. Linear move tower and solid set or permanent systems are published as medium to high pressure at 30 psi or more or low pressure, less than 30 psi. The mechanical-move systems are further 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.

Hand move systems include any distribution systems which are moved without mechanical assistance.

Other sprinkler systems include any other system not listed on the report form.

Surge flow or cablegation, mulch, or other types of row covers. In 2013 this was referred to as Surge flow or cablegation; the data are comparable. See Water management practices.

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.

USDA programs for water conservation and environmental improvements (CTA, EQIP, RCPP, WHIP, CIG). These technical and financial resources include Conservation Technical Assistance, Environmental Quality Incentives Program, Regional Conservation Partnership Program, Wildlife Habitat Incentive Program, and Conservation Innovation Grants.

Water management practices. These practices refer to gravity irrigation systems only. The respondent reported whether they used any of the techniques listed on the report form and the number of acres on which they applied this technique. Some respondents answered “Yes” to the screening question, item 3 in Section 14, 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 effects 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 effect of the Mississippi River, the Red River above the point of highest backwater effect of the Mississippi River, and the White River above the point of highest backwater effect 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 not pastured. These acres were included in All other land. 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 planted for Christmas tree production and short rotation woody crops was reported in Cropland harvested.

Woodland pastured. This category includes all woodland used for pasture or grazing during the survey year. Woodland or forest land pastured under a per-head grazing permit was not counted as land in farms and, therefore, was not included in woodland pastured.

2018 IRRIGATION AND WATER MANAGEMENT SURVEY

Form Number: 18-A621
(09/05/2018)



National Agricultural
Statistics Service

Return your
completed report to:

Census of Agriculture
1201 East 10th Street
Jeffersonville, IN 47132

18-A621

OFFICE USE ONLY

0010

Make corrections to name, address, and ZIP Code if necessary.

- **February 15, 2019** – Everyone, including nursery, greenhouse, and other horticultural crop producers, must return this form by this date.
- **www.agcounts.usda.gov** – Use this website to report via the Internet.
- Use **blue or black ballpoint pen** to complete this form.
- **Questions** – Call us toll-free at 1-888-424-7828. Thank you for your cooperation.

SECTION 1 ACREAGE IN 2018

- Report land owned, rented, or used by you, your spouse, or the partnership, corporation, or organization printed above.
- Round to whole acres.
- Include ALL LAND, regardless of location or use – cropland, pastureland, rangeland, woodland, idle land, **greenhouses or other area under protection**, farmsteads, Conservation Reserve Program (CRP) land, etc.

		None		Number of Acres
1. All land owned	0025	<input type="checkbox"/>		<input style="width: 100%;" type="text"/>
2. All land rented or leased from others , 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 leased land (e.g., private, Federal, state, railroad) used on a per-head or animal unit month (AUM) basis under a grazing permit	0026	<input type="checkbox"/>	+	<input style="width: 100%;" type="text"/>
3. All land rented or leased to others , including land worked on shares by others and land subleased	0027	<input type="checkbox"/>	-	<input style="width: 100%;" type="text"/>
4. TOTAL ACRES in this operation (Items 1 + 2 - 3 = BOX A)	0028	=		<div style="border: 1px solid black; padding: 2px; text-align: center;">BOX A</div> <input style="width: 100%;" type="text"/>

The information you provide will be used for statistical purposes only. Your responses will be kept confidential and any person who willfully discloses ANY identifiable information about you or your operation is subject to a jail term, a fine, or both. This survey is conducted in accordance with the Confidential Information Protection provisions of Title V, Subtitle A, Public Law 107-347 and other applicable Federal laws. For more information on how we protect your information please visit: www.nass.usda.gov/confidentiality. Response to this survey is required by law under Title 7 USC 2204(g) Public Law 105-113.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB number is 0535-0234. The time required to complete this information collection is estimated to average 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

21308010

SECTION 2 LAND IN 2018

- Of the acres reported in **BOX A** on the previous page, report how all the land was used in column 1 below.
- If the same land had more than one use in 2018, report that land only one time in items 1 through 3.
- **Include area under protection.** Under protection includes crops grown under glass, rigid plastic, plastic film, shade cloth, fiberglass, “tunnel” protection and hoop houses. Crops covered only temporarily, such as for frost protection, to be further grown in the open should not be included for area under protection.
- In column 2, include as irrigated any land to which partial, supplemental, or preplant irrigation water was applied.
- Irrigation is the application of water by any artificial or controlled means such as sprinklers, furrows and ditches, spreader dikes, flooding, hand watering, or subirrigation pipes. Include the area where lagoon waste water from livestock operations was distributed by a sprinkler or flood system.

1. Cropland – Exclude cropland used only for pasture.

	None	Column 1 Number of Acres	None	Column 2 Acres Reported in Column 1 that are Irrigated
a. Cropland harvested in the open – Include harvested field crops and hay; and land in vegetables, orchards, citrus groves, vineyards, berries, nuts, Christmas trees, short-rotation woody crops, nursery and other horticultural crops	<input type="checkbox"/>	0029 <input type="text"/>	<input type="checkbox"/>	0030 <input type="text"/>
b. Nursery, greenhouse, and other horticulture under protection – Include all area under protection. Round to the nearest whole acre	<input type="checkbox"/>	0077 <input type="text"/>	<input type="checkbox"/>	0078 <input type="text"/>
c. Cropland not harvested or grazed – Include cropland on which all crops failed, cropland idle, cropland used for cover crops or CRP, and cropland in summer fallow	<input type="checkbox"/>	0033 <input type="text"/>	<input type="checkbox"/>	0034 <input type="text"/>

2. Pasture

a. Permanent pasture and rangeland	<input type="checkbox"/>	0135 <input type="text"/>	<input type="checkbox"/>	0136 <input type="text"/>
b. Woodland pastured	<input type="checkbox"/>	0137 <input type="text"/>		
c. Other pasture and grazing land (including rotational pasture) that could have been used for crops without additional improvements.	<input type="checkbox"/>	0107 <input type="text"/>	<input type="checkbox"/>	0108 <input type="text"/>

3. All other land – Include land not reported above. Include woodland not pastured, farmsteads, home, buildings, livestock facilities, ponds, roads, wasteland, etc.

0039

Total Acres
on this Operation

Total Acres
Irrigated

4. TOTAL ACRES – Add acres in each column and enter the totals.

BOX B		BOX C	
0041	<input type="text"/>	0042	<input type="text"/>

(**BOX B** above should be the same as **BOX A** on page 1.)

5. Was any area irrigated on this operation in 2018?

- Include all irrigated land in the open and all area under protection.
- Irrigation is the application of water by any artificial or controlled means such as sprinklers, furrows and ditches, spreader dikes, flooding, hand watering, or subirrigation pipes. Include the area where lagoon waste water from livestock operations was distributed by a sprinkler or flood system.

0003 1 **Yes - Continue** 3 **No - Go to Section 16 on page 20**

6. What State had the majority of irrigated acres on this operation in 2018?

0951

State
<input type="text"/>

SECTION 3 GROUND WATER FROM WELLS

1. Did this operation irrigate with ground water from wells on this operation in 2018?

0760

1 **Yes - Continue**

3 **No - Go to Section 4**

If exact amounts are not available, provide your best estimate for quantity of water applied. If total area irrigated in the open is less than one acre, report as one acre in item 2. If the wells are not on the operation, such as a municipal or rural water system, report this as off-farm water in Section 5.

2. Report acres in the open irrigated with ground water and amount of water applied in 2018. Include all irrigated crops, including nursery, greenhouse, floriculture, sod, mushrooms, vegetable seeds, and propagative materials grown in the open and irrigated pastureland

Acres in the Open Irrigated by Ground Water		Quantity of Ground Water Applied		Enter Code for Unit of Measure 1 = Total Acre-Feet 2 = Total Gallons 3 = Inches/Acre	
0444		0446		0447	

3. Report the area under protection irrigated with ground water in 2018. Under protection includes nursery, greenhouse, floriculture, sod, mushrooms, vegetable seeds, and propagative materials grown under glass, rigid plastic, plastic film, shade cloth, fiberglass, "tunnel" protection and hoop houses

None

Square Feet Under Protection Irrigated with Ground Water	
0455	

4. How many wells on this operation were used for irrigation in 2018?

Number of Wells	
0460	

a. Of the (item 4) wells, how many used backflow prevention devices (check valves) and how many acres and/or square feet under protection were irrigated with these wells in 2018?

None

Number of Wells		Acres in the Open		Square Feet Under Protection	
0770		0771		0679	

b. Of the (item 4) wells, how many had flow meters or other flow measurement devices and how many acres and/or square feet under protection were irrigated with these wells in 2018?

0683		0772		0680	
------	--	------	--	------	--

c. Of the (item 4) wells, how many were free flowing wells that did not require a pump?

0486	
------	--

5. Report for the first three primary wells pumped in 2018.

	Depth of Well (Feet)	Depth to Bowls or Impellers (Feet)	Depth to Water at Start of Irrigation Season (Feet)	Pump Capacity – Discharge From Well (GPM)	Operating Pressure at Well Head (PSI)	Horsepower of Engines or Motors, Including Electric (HP)
Well #1	0461	0463	0462	0464	0676	0761
Well #2	0465	0467	0466	0468	0677	0763
Well #3	0469	0471	0470	0472	0678	0765

a. Report averages for all other wells pumped in 2018.

	Average Depth of Well(s) (Feet)	Average Depth to Bowls or Impellers (Feet)	Average Depth to Water at Start of Irrigation Season (Feet)	Average Pump Capacity – Discharge From Well (GPM)	Average Operating Pressure at Well Head (PSI)	Average Horsepower of Engines or Motors, Including Electric (HP)
	0481	0483	0482	0484	0681	0767

6. For the wells used on this operation, what is the best description for the depth to water over the last five years? Mark (X) one.

0487

1 Depth to water did not change

2 Depth to water increased

3 Depth to water decreased

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SECTION 4 ON-FARM SURFACE WATER

1. Did this operation irrigate with on-farm surface water, including recycled water and on-farm reclaimed water, in 2018?

Recycled water is reused surface or groundwater that was previously used to irrigate a crop (e.g. water from a tailwater reuse pit used for irrigation).

On-farm reclaimed water is on-farm livestock wastewater that has been treated for non-potable reuse purposes. (For the purposes of this irrigation survey, to be considered an irrigation application of reclaimed water, at least 0.5 inches of reclaimed water must be applied on the area during the growing season.)

0438 1 **Yes** - Continue 3 **No** - Go to Section 5

If exact amounts are not available, provide your best estimate for quantity of water applied. If total area irrigated in the open is less than one acre, report as one acre in item 2.

2. Report acres in the open irrigated with on-farm surface water and amount of water applied in 2018. Include irrigated nursery, greenhouse, floriculture, sod, mushrooms, vegetable seeds, and propagative materials grown in the open and irrigated pastureland

Acres in the Open Irrigated by On-Farm Surface Water		Quantity of On-Farm Surface Water Applied		Enter Code for Unit of Measure 1 = Total Acre-Feet 2 = Total Gallons 3 = Inches/Acre	
0449		0451		0452	

3. Report the area under protection irrigated with on-farm surface water in 2018. Under protection includes nursery, greenhouse, floriculture, sod, mushrooms, vegetable seeds, and propagative materials grown under glass, rigid plastic, plastic film, shade cloth, fiberglass, "tunnel" protection and hoop houses

None

Square Feet Under Protection Irrigated with On-Farm Surface Water	
0458	

4. Did this operation use **on-farm recycled water** to irrigate any crops, including horticultural crops, grown during 2018?

0600 1 **Yes** - Continue 3 **No** - Go to Item 5 below

a. How many acres in the open and square feet under protection were irrigated with **on-farm recycled water** during 2018?

Acres in the Open		Square Feet Under Protection	
0601		0936	

5. Did this operation use **reclaimed water from on-farm livestock facilities** to irrigate any crops, including horticultural crops, grown during 2018? (For the purposes of this irrigation survey, to be considered an irrigation application of reclaimed water, at least 0.5 inches of reclaimed water must be applied on the area during the growing season. If this minimum amount is not met, mark (X) "No" below.)

0543 1 **Yes** - Continue 3 **No** - Go to Section 5

a. How many acres in the open and/or square feet under protection were irrigated with one or more applications of **reclaimed water from on-farm livestock facilities** during 2018?

Acres in the Open		Square Feet Under Protection	
0587		0588	

b. How much **reclaimed water from on-farm livestock facilities** was used for irrigation during 2018?

Acre-Feet		OR	Gallons	
0599			0561	

SECTION 5 OFF-FARM WATER

1. Did this operation irrigate with off-farm water in 2018?

INCLUDE

- acres in the open and area under protection irrigated with off-farm water from all suppliers
- all off-farm surface water, municipal (such as town or city) water, and rural water suppliers
- area irrigated with reclaimed water from off-farm sources such as treated municipal sewer water (blue water), industrial, off-farm livestock operations, or other off-farm sources

0457 1 **Yes** - Continue 3 **No** - Go to Section 6

If exact amounts are not available, provide your best estimate for quantity of water applied. If total area irrigated in the open is less than one acre, report as one acre in item 2.

2. Report acres in the open irrigated with off-farm water and amount of water applied in 2018. Include irrigated horticultural crops grown in the open and irrigated pastureland

Acres in the Open Irrigated by Off-Farm Water		Quantity of Off-Farm Water Applied		Enter Code for Unit of Measure 1 = Total Acre-Foot 2 = Total Gallons 3 = Inches/Acre	
0454		0968		0969	

3. Report the area under protection irrigated with off-farm water in 2018. Under protection includes nursery, greenhouse, floriculture, sod, mushrooms, vegetable seeds, and propagative materials grown under glass, rigid plastic, plastic film, shade cloth, fiberglass, "tunnel" protection and hoop houses.....

Square Feet Under Protection Irrigated with Off-Farm Water	
None <input type="checkbox"/>	0428

4. Did you pay for the off-farm water received on this operation?
0675 1 **Yes** - Report the total dollars paid for the off-farm water.....
3 **No** - Continue

Dollars	
0456	\$00

5. 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, and USDA small watershed project?
- c. All other suppliers? Include ¹⁰¹² town and city water. Specify: ..

0664	1 <input type="checkbox"/> None	2 <input type="checkbox"/> Some	3 <input type="checkbox"/> All
0665	1 <input type="checkbox"/> None	2 <input type="checkbox"/> Some	3 <input type="checkbox"/> All
0666	1 <input type="checkbox"/> None	2 <input type="checkbox"/> Some	3 <input type="checkbox"/> All

6. Did this operation use **reclaimed water from off-farm sources** such as municipal reclaimed water, industrial, off-farm livestock operations, or other off-farm sources to irrigate any crops in 2018? Off-farm reclaimed water is wastewater that has been treated for non-potable reuse purposes. (For the purposes of this irrigation survey, to be considered an irrigation application of reclaimed water, at least 0.5 inches of reclaimed water must be applied on the area during the growing season. If this minimum amount is not met, mark (X) "No" below.)

0602 1 **Yes** - Continue 3 **No** - Go to Section 6

a. How many acres in the open and/or square feet under protection were irrigated with one or more applications of **reclaimed water from off-farm sources** during 2018?

Acres in the Open		Square Feet Under Protection	
0597		0598	

b. How much **reclaimed water from off-farm sources** was used for irrigation during 2018?.....

Acre-Feet		OR	Gallons	
0644			0645	

c. What sources of reclaimed water were used on this operation in 2018? Mark (X) all that apply.

- 1001 Municipal 1002 Industrial
1003 Off-farm livestock operation 1004 Other - Specify: 1005

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SECTION 6 PUMPS, OTHER THAN WELL PUMPS, USED FOR IRRIGATION

1. Were any surface water source pumps used on this operation for irrigation during 2018?

0488 1 **Yes** - Continue

3 **No** - Go to Section 7

	None	Number of Pumps Used	Vertical Lift (Average Feet)	Discharge Capacity (Average GPM)	Discharge Operating Pressure (Average PSI)
		0490	0774	0491	0687
2. Tailwater pits (pits that hold water previously used for irrigation)	<input type="checkbox"/>	0492	0775	0493	0688
3. Ponds, lakes, reservoirs, rivers, canals, etc.	<input type="checkbox"/>	0494	0776	0777	0778
4. Relifting or boosting water within system (pumps providing additional lift, pressure, or lateral movement)	<input type="checkbox"/>				

SECTION 7 ENERGY EXPENSE FOR ALL WELL AND OTHER IRRIGATION PUMPS

Report the energy expense by power source. Report the fuel used and power expense for pumping irrigation water for the well pumps reported in Section 3 and for other pumps reported in Section 6 above. Report energy expense for acres in the open and area under protection. If irrigated acres in the open were less than one acre, round to one acre. Include the cost of any additional charges such as the 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	None	Number of Wells and Other Pumps Used (Reported in Sections 3 & 6)	Cost of Energy Used to Power Pumps (Dollars)	Area Irrigated with Water Pumped from Wells		Area Irrigated with Pumped Surface Water (Both on- and off-farm)	
				Acres in the Open (Whole Acres)	Square Feet Under Protection	Acres in the Open (Whole Acres)	Square Feet Under Protection
		0495	0496	0497	0124	0781	0537
1. Electricity	<input type="checkbox"/>		\$.00				
2. Natural gas	<input type="checkbox"/>	0498	0499	0500	0125	0782	0538
3. LP gas, propane, or butane	<input type="checkbox"/>	0501	0502	0503	0126	0783	0539
4. Diesel and biodiesel fuel	<input type="checkbox"/>	0504	0505	0506	0127	0784	0540
5. Gasoline, ethanol, and blends	<input type="checkbox"/>	0507	0508	0509	0128	0890	0541
6. Solar and other pumps without direct energy expense	<input type="checkbox"/>	0779		0780	0129	0786	0542

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SECTION 8 METHOD OF WATER DISTRIBUTION IN FIELDS IN THE OPEN

1. Did this operation irrigate any fields in the open?

- Include acres of horticultural crops grown in the open or under natural shade.
- Exclude crops grown under protection: glass, rigid plastic, plastic film, including "tunnel" protection. (Methods for crops grown under protection will be reported in Section 12.)

0489 ¹ **Yes - Continue** ³ **No - Go to Section 12**

Report acres irrigated by each type of 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. Report information for the field distribution system, NOT for the delivery system used to convey water from the source to the field, if different.

2. Gravity irrigation

None

Acres in the Open Irrigated by Gravity System (Field Water Conveyance System)					
Total	Unlined Open Ditch	Lined Open Ditch	Poly Pipe (or other single-year use, lay-flat tubing)	Above Ground Pipe (except poly pipe) ¹	Underground Pipe ²
0855	0859	0857	0056	0057	0858
a. Down rows or furrows	<input type="checkbox"/>				
0865	0869	0867	0066	0067	0868
b. Controlled flooding (between borders or within basins).	<input type="checkbox"/>				
0875					
c. Uncontrolled flooding (rangeland, pastureland, etc.)	<input type="checkbox"/>				
0885					
d. Other gravity systems	<input type="checkbox"/>				

¹ Include gated pipe and riser or hydrant systems connected to above ground pipe.
² Include riser or hydrant systems connected to underground pipe.

3. Sprinkler irrigation – Inlet pressure

None

Acres In the Open 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)
0569	0576	0575	0570
a. Center pivot systems (circle).	<input type="checkbox"/>		
0571	0577	0578	0579
b. Linear move tower systems (and other linear continuous move drive systems)	<input type="checkbox"/>		
0568	0565	0566	0567
c. Solid set or permanent systems (except low-flow micro systems)	<input type="checkbox"/>		

d. Mechanical move systems

None

Acres Irrigated (all pressures)

(i) Side roll, wheel move, or other mechanical move systems and other discrete move systems

0240

(ii) Big gun or traveler systems

0241

e. Hand-move systems, including hand watered nursery and other horticultural crops grown in the open

0242

f. Other sprinkler systems

0243

4. Drip, trickle, or low-flow micro irrigation

a. Surface drip (on or above ground)

0248

b. Sub-surface drip (root zone)

0246

c. Low-flow micro sprinklers or sprays (these systems apply water at low pressure and are not self-propelled or easily moved)

0247

d. Other drip, trickle, or low-flow micro systems

0249

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SECTION 9 ACRES HARVESTED IN THE OPEN AND PASTURELAND

1. Did this operation irrigate any crops in the open or pastureland?
 0388 1 **Yes** - Continue 3 **No** - Go to Section 12

For each item listed, report the irrigated acres harvested in the first column. If pastureland is irrigated, report total acres of irrigated pastureland in the first column. For selected crops, report the average yield from the irrigated harvested acres in the second column. Then report the average irrigation water applied per acre in either acre-feet or inches for the acres reported in column one. Report the crop as irrigated if water was applied to supplement rainfall, even if the amount of water applied was not sufficient to obtain maximum yields. **Report nursery and other horticultural crops grown in the open in item 17.**

Irrigated Crops and Pastureland		Irrigated Land Include preplant and supplemental or semi-irrigation					
		Irrigated Acres Harvested	Average Yield per Irrigated Acre Harvested		Average Estimated Quantity of Water Applied per Acre		
					Acre-Feet	Tenths	OR
2. Corn for grain or seed – Exclude popcorn and sweet corn.	None <input type="checkbox"/>	0050	0051		0052		0053
				Bu.			
3. Corn for silage or greenchop – Exclude popcorn and sweet corn.	<input type="checkbox"/>	0060	0061	Tenths	0062		0063
				Tons			
4. Sorghum for grain or seed	<input type="checkbox"/>	0070	0071		0072		0073
				Bu.			
5. Wheat for grain or seed	<input type="checkbox"/>	0080	0081		0082		0083
				Bu.			
6. Soybeans for beans	<input type="checkbox"/>	0106	0101		0102		0103
				Bu.			
7. Beans, dry edible	<input type="checkbox"/>	0110	0111		0112		0113
				Cwt.			
8. Rice – Include post harvest water applied to improve residue decomposition ..	<input type="checkbox"/>	0120	0121		0122		0123
				Cwt.			
9. Other small grains (barley, oats, rye, etc.) ..	<input type="checkbox"/>	0130			0132		0133
10. Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage)	<input type="checkbox"/>	0140	0141	Tenths	0142		0143
				Tons, dry			

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SECTION 9 Continued –

Irrigated Crops and Pastureland		Irrigated Land Include preplant and supplemental or semi-irrigation						
		Irrigated Acres Harvested		Average Yield per Irrigated Acre Harvested		Average Estimated Quantity of Water Applied per Acre		
		Acres	Tenths	Tons, dry	Lbs.	Acre-Feet	Tenths	OR
11. All other hay and haylage including small grain, other tame, and wild hay (dry hay, greenchop, and silage)	None	0150	0151	Tenths		0152		0153
	<input type="checkbox"/>							
12. Peanuts		0550	0551		Lbs.			0553
	<input type="checkbox"/>							
13. Cotton		0160	0161		Lbs. lint			0163
	<input type="checkbox"/>							
14. All land from which vegetables, potatoes, and melons were harvested		0186	Tenths			0187		0188
	<input type="checkbox"/>							
a. Sweet corn		0850	Tenths	0851		0852		0853
	<input type="checkbox"/>				Cwt.			
b. Tomatoes in the open		0860	Tenths	0861		0862		0863
	<input type="checkbox"/>				Cwt.			
c. Lettuce and romaine		0870	Tenths	0871		0872		0873
	<input type="checkbox"/>				Cwt.			
d. Potatoes – Exclude sweet potatoes		0190	Tenths	0191		0192		0193
	<input type="checkbox"/>				Cwt.			
15. All berries		0560	Tenths			0562		0563
	<input type="checkbox"/>							
16. Land in bearing and non-bearing fruit orchards, citrus or other groves, vineyards, and nut trees		0210	Tenths			0212		0213
	<input type="checkbox"/>							
17. Nursery and other horticultural crops grown in the open (Note: Nursery, greenhouse, and other horticultural crops grown under protection will be reported in a later section.)		0690	Tenths			0691		0692
	<input type="checkbox"/>							
18. All other crops grown in the open and not listed - Specify: 0620 <input type="text"/>		0621				0622		0623
	<input type="checkbox"/>							
19. Irrigated pastureland, all types		0230				0232		0233
	<input type="checkbox"/>							

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SECTION 10 FIELD WATER DISTRIBUTION AND WATER SOURCE FOR CROPS IN THE OPEN

1. Did this operation irrigate any crops in the open or pastureland?

1489

1 **Yes - Continue**

3 **No - Go to Section 12**

WATER DISTRIBUTION CODES – USE IN THE TABLE BELOW

CODE	PRESSURE SYSTEM	CODE	GRAVITY SYSTEM
01 = Hand-move system 02 = Solid set or permanent system 03 = Side roll or wheel line system 04 = Big gun or traveling gun system 05 = Linear move system (under 15 PSI) 06 = Linear move system (15 to 29 PSI) 07 = Linear move system (30 to 59 PSI) 08 = Linear move system (60 PSI or more) 09 = Center pivot system (under 15 PSI) 10 = Center pivot system (15 to 29 PSI) 11 = Center pivot system (30 to 59 PSI) 12 = Center pivot system (60 PSI or more) 13 = Low-flow irrigation (drip, trickle, or micro sprinkler system) 14 = Other pressure system – Specify:		15 = Down rows or furrows from unlined open ditches 16 = Down rows or furrows from lined open ditches 17 = Down rows or furrows from poly pipe, lay-flat tubing, or above ground or underground pipe 18 = Controlled flooding within field borders from unlined open ditches 19 = Controlled flooding within field borders from lined open ditches 20 = Controlled flooding within field borders from poly pipe, lay-flat tubing, or above ground pipe 21 = Controlled flooding within field borders from underground pipe 22 = Uncontrolled flooding (rangeland, pastureland, etc.) including open discharge from a well or pump 23 = Other gravity system – Specify:	
1006	<input type="text"/>	1007	<input type="text"/>

Report for irrigated acres in the open. For each irrigated crop in the open, report separately the primary field distribution method, acres irrigated by water source, and acres on which chemigation was used in the irrigation system. Refer to the table above for the water distribution codes.

Irrigated Crops and Pastureland	Enter Code from Above for Primary Method of Field Water Distribution	Water Source (Column totals may exceed irrigated crop acres reported in Section 9 when more than one water source was used.)			Acres on which chemigation was applied through the irrigation system		
		Ground Water from Wells (Acres)	On-Farm Surface Water ¹ (Acres)	Off-Farm Water (All Suppliers) ² (Acres)	Commercial Fertilizer (Acres)	Pesticide Application (Acres)	
2. Corn for grain or seed – Exclude popcorn and sweet corn . <input type="checkbox"/>	None	0250	0255	0254	0256	0252	0253
3. Corn for silage or greenchop – Exclude popcorn and sweet corn . <input type="checkbox"/>		0260	0265	0264	0266	0262	0263
4. Sorghum for grain or seed <input type="checkbox"/>		0270	0275	0274	0276	0272	0273
5. Wheat for grain or seed <input type="checkbox"/>		0280	0285	0284	0286	0282	0283
6. Soybeans for beans <input type="checkbox"/>		0300	0305	0304	0306	0302	0303
7. Beans, dry edible <input type="checkbox"/>		0310	0315	0314	0316	0312	0313
8. Rice <input type="checkbox"/>		0320	0325	0324	0326	0322	0323
9. Other small grains (barley, oats, rye, etc.) <input type="checkbox"/>		0330	0335	0334	0336	0332	0333
10. Alfalfa and alfalfa mixtures (dry hay, greenchop, and silage) . <input type="checkbox"/>		0340	0345	0344	0346	0342	0343

¹ On-farm water source includes recycled water and reclaimed water from on-farm livestock operations.
² 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 Continued –

Irrigated Crops and Pastureland	Enter Code from Previous Page for Primary Method of Field Water Distribution	Water Source (Column totals may exceed irrigated crop acres reported in Section 9 when more than one water source was used.)						Acres on which chemigation was applied through the irrigation system				
		Ground Water from Wells (Acres)		On-Farm Surface Water ¹ (Acres)		Off-Farm Water (All Suppliers) ² (Acres)		Commercial Fertilizer (Acres)		Pesticide Application (Acres)		
11. All other hay and haylage including small grain, other ame, and wild hay (dry hay, greenchop, and silage).....	None <input type="checkbox"/>	0350	0355	0354	0356	0352	0353					
12. Peanuts.....	<input type="checkbox"/>	0580	0585	0584	0586	0582	0583					
13. Cotton.....	<input type="checkbox"/>	0360	0365	0364	0366	0362	0363					
14. All acres in the open from which vegetables, potatoes, and melons were harvested.....	<input type="checkbox"/>	0474	0479	Ten ths	0478	Ten ths	0480	Ten ths	0476	Ten ths	0477	Ten ths
a. Sweet corn.....	<input type="checkbox"/>	0900	0905	Ten ths	0904	Ten ths	0906	Ten ths	0902	Ten ths	0903	Ten ths
b. Tomatoes in the open.....	<input type="checkbox"/>	0910	0915	Ten ths	0914	Ten ths	0916	Ten ths	0912	Ten ths	0913	Ten ths
c. Lettuce and romaine.....	<input type="checkbox"/>	0920	0925	Ten ths	0924	Ten ths	0926	Ten ths	0922	Ten ths	0923	Ten ths
d. Potatoes – Exclude sweet potatoes.....	<input type="checkbox"/>	0390	0395	Ten ths	0394	Ten ths	0396	Ten ths	0392	Ten ths	0393	Ten ths
15. All berries.....	<input type="checkbox"/>	0590	0595	Ten ths	0594	Ten ths	0596	Ten ths	0592	Ten ths	0593	Ten ths
16. Land in bearing and non-bearing fruit orchards, citrus or other groves, vineyards, and nut trees..	<input type="checkbox"/>	0410	0415	Ten ths	0414	Ten ths	0416	Ten ths	0412	Ten ths	0413	Ten ths
17. Nursery and other horticultural crops grown in the open (Note: Nursery, greenhouse, and other horticultural crops grown under protection will be reported in a later section.).....	<input type="checkbox"/>	1110	1115	Ten ths	1114	Ten ths	1116	Ten ths	1112	Ten ths	1113	Ten ths
18. All other crops grown in the open and not listed – Specify:		1120	1125		1124		1126		1122		1123	
1119 <input type="text"/>	<input type="checkbox"/>	0430	0435		0434		0436		0432		0433	
19. Irrigated pastureland, all types...	<input type="checkbox"/>											

¹ On-farm water source includes recycled water and reclaimed water from on-farm livestock operations.
² 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.

21308119

SECTION 11 IRRIGATION FOR NURSERY AND OTHER HORTICULTURAL CROPS GROWN IN THE OPEN

1. Were any irrigated nursery, floriculture, sod, mushrooms, vegetable seeds, propagative materials, Christmas trees, or other horticultural crops grown in the open (including natural shade) on this operation in 2018?

0751 1 **Yes - Continue** 3 **No - Go to Section 12**

2. Report total acres and irrigated acres for nursery and other horticultural crops grown in the open (including natural shade)

None

Acres in the Open			
Total Acres		Irrigated Acres	
	Tenths		Tenths
0737		0738	

3. For nursery and other horticultural crops in the open, enter the total acres and irrigated acres by crop category on this operation in 2018.

NURSERY AND OTHER HORTICULTURAL CROPS IN THE OPEN

a. Floriculture and bedding crops
Bedding/garden plants - annuals, herbaceous perennials, vegetable plants; cut flowers and cut florist greens; indoor foliage plants; potted flowering plants; hanging baskets

None

Total Acres		Irrigated Acres	
	Tenths		Tenths
0739		0740	

b. Nursery crops
Nursery stock - ornamentals, shrubs, flowering trees, evergreens, live Christmas trees, fruit and nut trees and plants, vines, palms, ornamental grasses, bareroot herbaceous perennials; aquatic plants

0741		0742	
------	--	------	--

c. Sod

0743		0744	
------	--	------	--

d. Propagative materials
Bulbs, corms, rhizomes, tubers, cuttings, seedlings, liners, plugs, flower seeds, tobacco plants, vegetable seeds, vegetable transplants to farm fields

0745		0746	
------	--	------	--

e. Christmas trees and short rotation woody crops

0747		0748	
------	--	------	--

f. Other horticultural crops - Specify:

1010 ...

0749		0750	
------	--	------	--

SECTION 11 CONTINUED –

4. For nursery and other horticultural crops in the open, report area irrigated or watered in 2018 by method used. If more than one method was used on the same area, report for all methods that apply. Report quantity of water used for growing and finishing in the unit or units of measure most often used on this operation.

IRRIGATION METHODS	None	1		2		OR	3		
		Total Acres Irrigated or Watered Tenths	Quantity of Water Applied	Enter Code for Unit of Measure 1 = Acre-Feet 2 = Gallons 3 = Inches/Acre	Average Flow Rate (Gallons per Minute) Tenths		Number of Hours per Week Used in 2018	Number of Weeks Used in 2018	
		0796	0797	0798			0799	0800	0801
a. Hand watered.....	<input type="checkbox"/>	0802	0803	0804		OR	0805	0806	0807
b. Gravity irrigation.....	<input type="checkbox"/>	0808	0809	0810		OR	0811	0812	0813
c. Sprinkler.....	<input type="checkbox"/>	0814	0815	0816		OR	0817	0818	0819
d. Drip, trickle, or low-flow micro irrigation.....	<input type="checkbox"/>	0820	0821	0822		OR	0823	0824	0825
e. Subirrigation (including hydroponic)...	<input type="checkbox"/>					OR			

5. For each method used to irrigate or water nursery and other horticultural crops 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 handwatered crops was ground water, then report 100 percent in column 1, row a. If this operation used gravity irrigation and half of the water came from ground water and half came from on-farm surface water, then report 50 percent in column 1, row b and 50 percent in column 2, row b.

IRRIGATION METHODS	Water Source			
	1 Ground Water from Wells (Percent)	2 On-Farm Surface Water (Percent)	3 Off-Farm Water (All Suppliers) (Percent)	Total
	0832	0833	0834	
a. Hand watered.....				100%
	0835	0836	0837	
b. Gravity irrigation.....				100%
	0838	0839	0840	
c. Sprinkler.....				100%
	0841	0842	0843	
d. Drip, trickle, or low-flow micro irrigation.....				100%
	0844	0845	0846	
e. Subirrigation (including hydroponic).....				100%

For each irrigation method used, columns 1 + 2 + 3 must equal 100 percent.

21308135

SECTION 12 IRRIGATION FOR NURSERY, GREENHOUSE, AND OTHER HORTICULTURAL CROPS GROWN UNDER PROTECTION

1. Were any irrigated nursery or greenhouse crops, floriculture, sod, mushrooms, vegetable seeds, propagative materials, or other horticultural crops grown under protection on this operation in 2018? Include crops grown under glass, rigid plastic, plastic film, shade cloth, fiberglass, "tunnel" protection and hoop houses. Exclude crops temporarily covered for early germination, frost protection, etc. Report crops grown under natural shade in Section 11.

0627 1 **Yes - Continue** 3 **No - Go to Section 13**

2. Report total area and irrigated area for nursery, greenhouse, and other horticultural crops grown under protection

Square Feet Under Protection			
Total Area		Irrigated Area	
0628		0629	

3. For nursery or greenhouse crops, floriculture, sod, mushrooms, vegetable seeds, propagative materials, or other horticultural crops grown under protection, enter the total area and irrigated area by horticultural crop category on this operation in 2018.

NURSERY, GREENHOUSE, AND OTHER HORTICULTURAL CROPS UNDER PROTECTION

a. Floriculture and bedding crops
Bedding/garden plants - annuals, herbaceous perennials, vegetable plants; cut flowers and cut florist greens; indoor foliage plants; potted flowering plants; hanging baskets

Total Area (Square Feet)		Irrigated Area (Square Feet)	
0630		0631	

b. Nursery crops
Nursery stock - ornamentals, shrubs, flowering trees, evergreens, live Christmas trees, fruit and nut trees and plants, vines, palms, ornamental grasses, bareroot herbaceous perennials; aquatic plants.

0632		0633	
------	--	------	--

c. Propagative materials
Bulbs, corms, rhizomes, tubers, cuttings, seedlings, liners, plugs, flower seeds, tobacco plants, vegetable seeds, vegetable transplants to farm fields

0636		0637	
------	--	------	--

d. Food crops grown under protection
Tomatoes, other vegetables and fresh cut herbs, fruits and berries

0638		0639	
------	--	------	--

e. Mushroom crops

0640		0641	
------	--	------	--

f. Other horticultural crops – Specify:

1011 . . .

0642		0643	
------	--	------	--

SECTION 12 CONTINUED –

4. For nursery, greenhouse, and other horticultural crops under protection, report area irrigated or watered in 2018 by method used. If more than one method was used on the same area, report for all methods that apply. Report quantity of water in the unit or units of measure most often 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		OR	3		
		Total Area Irrigated or Watered (Square Feet)	a. Quantity of Water Applied	b. Enter Code for Unit of Measure 1=Acre-Feet 2=Gallons 3=Gallons/Sq Ft 4=Inches/Sq Ft		a. Average Flow Rate (Gallons per Minute) Tenths	b. Number of Hours per Week Used in 2018	c. Number of Weeks Used in 2018
		0701	0702	0703		0704	0705	0706
a. Hand watered	<input type="checkbox"/>	0707	0708	0709	OR	0710	0711	0712
b. Gravity irrigation	<input type="checkbox"/>	0713	0714	0715	OR	0716	0717	0718
c. Sprinkler	<input type="checkbox"/>	0719	0720	0721	OR	0722	0723	0724
d. Drip, trickle, or low-flow micro irrigation	<input type="checkbox"/>	0725	0726	0727	OR	0728	0729	0730
e. Subirrigation (including hydroponic) ...	<input type="checkbox"/>				OR			

5. For each method used to irrigate or water nursery, greenhouse, or other horticultural crops 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 handwatered crops was ground water, then report 100 percent in column 1, row a. If this operation used gravity irrigation and half of the water came from ground water and half came from on-farm surface water, then report 50 percent in column 1, row b and 50 percent in column 2, row b.

IRRIGATION METHODS	Water Source			
	1 Ground Water from Wells (Percent)	2 On-Farm Surface Water (Percent)	3 Off-Farm Water (All Suppliers) (Percent)	Total
a. Hand watered	0646	0647	0648	100%
b. Gravity irrigation	0649	0650	0651	100%
c. Sprinkler	0652	0653	0654	100%
d. Drip, trickle, or low-flow micro irrigation	0655	0656	0657	100%
e. Subirrigation (including hydroponic)	0658	0659	0660	100%

For each irrigation method used, columns 1 + 2 + 3 must equal 100 percent.

21308150

SECTION 13 EXPENDITURES FOR IRRIGATION

EXPENDITURE AND FUNDING ASSISTANCE CODES – USE IN THE TABLE BELOW

CODE	PRIMARY PURPOSE OF EXPENDITURE	CODE	PRIMARY SOURCE OF FUNDING ASSISTANCE
1 =	New expansion	1 =	No funding assistance or loans
2 =	Water conservation	2 =	FSA Environmental Quality Incentives Program (EQIP)
3 =	Energy conservation	3 =	Other USDA financial assistance or loans
4 =	Scheduled replacement or maintenance	4 =	Non-USDA and all other financial assistance or loans

Report the 2018 expenditure cost, acres affected (rounded to the nearest acre), primary purpose of expenditure, and primary source of funding assistance by expenditure category using the Expenditure and Funding Assistance Codes from the table above. Include the portion of the expenditures made by or shared with others (landlords or government agencies), including programs such as Environmental Quality Incentive Program (EQIP).

EXPENDITURE TYPE	None	Total Cost of Expenditure (Include amount financed)	Irrigated Acres Affected by Expenditure (Acres)	Enter Code from Above for Primary Purpose of Expenditure	Enter Code from Above for Primary Source of Funding Assistance
1. Purchase of new or replacement irrigation equipment and machinery – Include sprinklers, pipes, siphons, nozzles, pumps, engines, motors, filtration equipment, etc. Exclude computers, computer control panels, and software	<input type="checkbox"/>	0511 \$.00	0514	0512	0513
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. Exclude cost of pumps or motors	<input type="checkbox"/>	0515 \$.00	0518	0516	0517
3. Construction or improvement of permanent storage and distribution systems – Include dams, ponds, reservoirs, permanent ditches, canals, flumes, etc.	<input type="checkbox"/>	0519 \$.00	0522	0520	0521
4. Computers, control panels, computer controlled valves, software, and software-controlled hardware for irrigation water management.	<input type="checkbox"/>	0544 \$.00	0547	0545	0546
5. Clearing or leveling non-irrigated land for new irrigation acres (the primary purpose is expansion of irrigation acres)	<input type="checkbox"/>	0548 \$.00	0526		0549
6. Land leveling of previously irrigated land (the primary purpose cannot be new expansion)	<input type="checkbox"/>	0556 \$.00	0559	0557	0558

21308168

SECTION 14 IRRIGATION AND WATER MANAGEMENT PRACTICES

1. How did you decide when to irrigate in 2018? Mark (X) all that apply –

- 1020 Condition of crop (observation or experience)
- 1021 Feel of the soil
- 1022 Use of soil moisture-sensing devices (moisture blocks, tensiometers, capacitance, other electronic sensors)
- 1023 Use of plant moisture-sensing devices such as pressure (chamber) bombs or infrared (IR) thermometer
- 1024 Use of irrigation scheduling service, including commercial and government
- 1025 Reports on daily crop-water evapo-transpiration (ET) use (Internet, newspapers, radio, TV, fax, or email)
- 1026 When water was delivered or available by irrigation water supplier (no choice by water user)
- 1027 Personal calendar schedule
- 1028 Computer simulation models (not from a commercial service)
- 1029 When neighbors began to irrigate

2. Did you have to discontinue irrigation during 2018 long enough to affect crop yields?

- 0669 1 Yes - Continue 3 No - Go to item 3

a. On how many acres did you discontinue irrigation long enough to affect crop yields for any reason during 2018?

Number of Acres	
None <input type="checkbox"/>	1039

b. What were the reasons for discontinuing irrigation? Mark (X) all that apply –

- 1030 Shortage of surface water (water from reservoirs, lakes, streams, water supply organizations, etc.)
- 1031 Shortage of ground water (lowering water level of wells or depletion of ground water)
- 1032 Irrigation equipment failure
- 1033 Energy price increases or energy shortage
- 1034 Water salinity too high
- 1035 Loss of water rights not due to voluntary transfers
- 1036 Cost of purchased water
- 1037 Other – Specify: ¹⁰³⁸

3. Did this operation use gravity irrigation systems to irrigate any acres in the open on this operation (Section 8, item 2) in 2018?

- 0403 1 Yes - Continue 3 No - Go to item 5

4. On how many acres in the open did you use the following practices?

- a. Capture irrigation runoff in tailwater pits, restrict runoff by diking end of the field, limit irrigation set times or number of irrigations, or irrigate only alternative rows.
- b. Use a surge-flow or cablegation system, apply mulch, or use other types of row covers
- c. Use precision-leveling or zero-grading.
- d. Shorten the furrow length; use water-soluble polyacrylamide (PAM); or use special furrowing practices such as wide-spaced bed furrowing, compacted furrows, or furrow diking.

Number of Acres	
None <input type="checkbox"/>	0404
<input type="checkbox"/>	0405
<input type="checkbox"/>	0406
<input type="checkbox"/>	0409

SECTION 14 CONTINUED –

5. 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 –

- 1040 Extension agents or university specialists
- 1041 Private irrigation specialists or crop consultants hired by owner or operator
- 1042 Irrigation equipment dealers
- 1043 Local irrigation district employees or others hired by the water supplier
- 1044 Government specialists from the Natural Resources Conservation Service, local conservation district, Bureau of Reclamation, or other Federal or state agencies
- 1045 Media reports or information in the press
- 1046 Neighboring farmers
- 1047 Electronic information services (Internet, DTN, Internet links to private or public data sources, etc.)
- 1048 None

6. Did any of the following prevent you from implementing improvements that would have reduced energy and/or conserved water in your irrigation system during the past five years? Mark (X) all that apply –

- 1070 Investigating improvements is not a priority at this time
- 1071 Risk of reduced yield or poorer quality crop from not meeting water needs
- 1072 Physical field or crop conditions limit system improvements
- 1073 Improvements will reduce costs, but not enough to recover implementation costs
- 1074 Cannot finance improvements
- 1075 Landlord(s) will not share cost of improvements
- 1076 Uncertainty about future availability of water
- 1077 Will not be farming this operation long enough to justify new improvements
- 1078 Improvements will increase management time or cost

7. Has this operation made irrigation and/or drainage improvements above regular maintenance in the **past five years**?

- 0209 1 **Yes** - Continue 3 **No** - Go to Section 15

8. Did you receive any technical or financial assistance for these irrigation and/or drainage improvements?

- 0211 1 **Yes** - Continue 3 **No** - Go to Section 15

a. From which of the following sources did you receive technical or financial assistance for these improvements? Mark (X) all that apply –

SOURCE OF ASSISTANCE

- (i) USDA programs for water conservation and environmental improvements (CTA, EQIP, RCPP, WHIP, CIG).....
- (ii) Other USDA programs for stewardship (CSP) or easements (CRP, WRP, GRP, FRPP).....
- (iii) Non-USDA Federal programs (Bureau of Reclamation, EPA, or other programs).....
- (iv) State programs (including CREP), local water management, or water supply districts.....
- (v) Private businesses such as equipment dealers, bankers, or lenders.....

Technical Assistance		Financial Assistance	
0215	<input type="checkbox"/>	0216	<input type="checkbox"/>
0217	<input type="checkbox"/>	0218	<input type="checkbox"/>
0219	<input type="checkbox"/>	0235	<input type="checkbox"/>
0236	<input type="checkbox"/>	0237	<input type="checkbox"/>
0238	<input type="checkbox"/>	0239	<input type="checkbox"/>

21308184

SECTION 15 LABOR USED FOR IRRIGATION ON THIS OPERATION IN 2018

1. Did you have any paid labor for the irrigation portion of your operation in 2018?

0731

1 **Yes** - Continue

3 **No** - Go to Section 16

a. Report the number of hours that the hired workers performed irrigation work in 2018 and the average hourly wage. (Exclude contract labor.)

None

Total Hours of Paid Irrigation Labor per Year		Average Hourly Wage	
			Cents
0732		0733	\$

b. Report contract irrigation labor expenses on this operation in 2018

None

Total Expense for Contract Irrigation Labor	
0788	\$.00

21308192

SECTION 16 NO IRRIGATED LAND IN 2018

1. Complete this section if you did not irrigate any land in 2018. If you did irrigate land in 2018, skip to Section 17.

2. Was any land irrigated on this operation in 2017?

- 0528 1 **Yes** - Continue 3 **No** - Go to Section 17

3. What were the reasons for not irrigating in 2018? Mark (X) all that apply –

- | | |
|---|---|
| 1050 <input type="checkbox"/> Sufficient soil moisture – no irrigation needed | 1057 <input type="checkbox"/> Sold or leased irrigated land or irrigated area under protection to others and did not irrigate during 2017 |
| 1052 <input type="checkbox"/> Shortage of surface water (water from reservoirs, lakes, streams, water supply organizations, etc.) | 1058 <input type="checkbox"/> Restrictions on water use |
| 1053 <input type="checkbox"/> Shortage of ground water (lowering water level of wells or depletion of ground water) | 1059 <input type="checkbox"/> Converted to non-agricultural use |
| 1054 <input type="checkbox"/> Irrigation uneconomical due to high fuel and power costs and/or low commodity prices | 1060 <input type="checkbox"/> Converted to an agricultural enterprise not requiring irrigation |
| 1055 <input type="checkbox"/> Loss of water rights not due to voluntary transfers | 1061 <input type="checkbox"/> Available surface water too salty |
| 1056 <input type="checkbox"/> Sold or leased water rights or annual water allocation | 1062 <input type="checkbox"/> Other – Specify:
1063 <input type="text"/> |

4. Do you consider your discontinuance of irrigation to be permanent? 0530 1 **Yes** 3 **No**

SECTION 17 VALUE OF SALES IN 2018

1. Which range includes the gross value of all agricultural products sold from this operation in 2018 including 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, including irrigated nursery or greenhouse crops, floriculture, sod, mushrooms, vegetable seeds, and propagative materials?

Percent	
0981	<input type="text"/>
0982	<input type="text"/>
100%	

3. What percent of total sales were from **non-irrigated** crop sales and livestock sales?

SECTION 18 PERSON COMPLETING THIS FORM – Please print

Name Area Code and Phone Number Date (MM DD YY)

Survey Results: To receive the complete results of this survey on the release date, go to www.agcensus.usda.gov.

To have a brief summary emailed to you at a later date, please enter your email address: 1095

Would you rather have a brief summary mailed to you at a later date? 9990 1 **Yes** 3 **No**

Thank you for your response

OFFICE USE

Response	Respondent	Mode	Enum.	Eval.	R. Unit	Change	Optional Use				
1-Comp 2-R 3-Inac	9901 1-Op/Mgr 2-Sp 3-Acct/Bkpr 4-Partner 9-Oth	9902 1-PASI (Mail) 2-PATI (Tel) 3-PAPI (Face-to-Face)	9903	9998	9900	9921	9985	9907	9908	9906	9916
S/E Name											

21308200



INSTRUCTION BOOKLET 2018 IRRIGATION AND WATER MANAGEMENT SURVEY



Completing the 2018 Questionnaire

Everyone who receives a questionnaire must fill it out and return it, including nursery, greenhouse, and other horticultural crop producers.

Use a **blue** or **black** ball point pen.

Round to whole acres.

If You Received More than One Questionnaire for the Same Operation

Duplicate form(s) — If you received extra report forms for the SAME farming operation, return all report forms in the same envelope as the completed report. Make all entries clear and easy to read.

Irrigation is the application of water by any artificial or controlled means, such as sprinklers, furrows and ditches, spreader dikes, flooding, hand watering, or subirrigation pipes. Include the area where lagoon waste water from livestock operations was distributed by a sprinkler or flood system.

Include area in the open and under protection. Under protection includes nursery, greenhouse, floriculture, sod, mushrooms, vegetable seeds, and propagative materials grown under glass, rigid plastic, plastic film, shade cloth, fiberglass, "tunnel" protection, and hoop houses. Crops covered only temporarily to be further grown in the open should not be included for area under protection.

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.

Partial Year Operation

If you stopped farming during 2018, complete the questionnaire for the portion of 2018 that you did farm. Write "Stopped farming in 2018" and the date you stopped farming below the address area. Mail the completed questionnaire in the return envelope.

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 Received More Than One Questionnaire for the Same Operation" above.

How to Enter Your Responses on the Questionnaire

Please enter your answers in the spaces provided 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

Complete Sections 1 and 2 of the questionnaire. If you did not irrigate or water any cropland (including nursery and greenhouse area in the open and under protection), pastureland, or rangeland in 2018, complete Sections 1 and 2 and then go to Section 16 on the back page and complete the remainder of the questionnaire.

Section 1 – Acreage in 2018

Report land owned, rented, or used by the respondent, spouse, partnership, corporation, or organization identified on the questionnaire. If you did not operate any land in 2018, go to Section 18 on the back page and complete the remainder of the questionnaire.

Include all land, regardless of location or use; cropland, pastureland, rangeland, woodland, idle land, **greenhouses or other area under protection**, farmsteads, Conservation Reserve Program (CRP), Wetlands Reserve Program (WRP), Farmable Wetlands Program (FWP), and Conservation Reserve Enhancement Program (CREP). All responses in this section should be rounded to whole acres. Area under protection less than one acre should be reported as one acre. **Exclude** land used under a grazing permit.

Item 1 - Report all land owned in 2018 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, and farmsteads.

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 month (AUM) basis.

Item 3 - Report all land rented or leased to others regardless of the purpose. Include land that was rented and subleased to others.

Item 4 - The acres in item 4, **Box A**, 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 important that this number is correct as it is used to establish consistency throughout the questionnaire. The acreage of this operation must equal the acreage reported in Section 2, item 4, column 1, **Box B**. After completing Section 1, if the acres in Item 4, Box A equal zero and you did not raise or own any livestock, aquaculture, or poultry in 2018, write a description of the land use in the space by item 4. Complete Section 18 and mail the questionnaire in the return envelope.

Section 2 – Land in 2018

Account for total acres in **this operation** in column 1 and irrigated land in **this operation** in column 2. If the same land had more than one use in 2018, report that land only once in the first use that applies. Irrigation refers to the one or more applications of water to land or crops by any artificial or controlled means, such as sprinklers, furrows and ditches, spreader dikes, flooding, hand watering, or subirrigation pipes. Include the area where lagoon waste water from livestock operations was distributed by a sprinkler or flood system.

Include area in the open and under protection. Under protection includes nursery, greenhouse, floriculture, sod, mushrooms, vegetable seeds, and propagative materials grown under glass, rigid plastic, plastic film, shade cloth, fiberglass, “tunnel” protection and hoop houses. Crops covered only temporarily to be further grown in the open should not be included for area under protection.

In addition to fully irrigated land, report as irrigated any land to which partial, supplemental, or semi-irrigation was applied in column 2. 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 used for irrigation. Include area under protection that was hand watered.

For conservation program land, 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 should be considered other pasture and grazing land. Except for disaster designation uses, almost all conservation program land will be reported in item 1c, cropland not harvested or grazed.

Item 1a - Include as cropland harvested in the open: field crops, hay and forage, land in vegetables, citrus groves, vineyards, berries, nuts, orchards, Christmas trees (whether harvested in 2018 or not), short rotation woody crops, nursery and other horticultural crops such as bedding and garden plants, nursery stock, and propagative materials.

For winter wheat, report the 2018 acres harvested.

For double cropped acres if more than one crop was harvested from the same land in 2018, report those acres only once as cropland harvested.

Item 1b - Include as nursery, greenhouse, and other horticulture under protection: crops grown under glass, rigid plastic, plastic film, shade cloth, fiberglass, “tunnel” protection, and hoop houses. Crops covered only temporarily, such as for frost protection, to be further grown in the open should not be included for area under protection.

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. Include land on which sugarcane and pineapples were grown but not harvested in 2018.

Item 2a - Exclude land used under a grazing permit.

Item 2b - Report woodland pastured.

Item 2c - Include any pastured land other than cropland and woodland pastured. Include rotation pasture and grazing land that could have been used for crops without additional improvements.

Item 3 - Any land that does not fit into one of the above categories. Include land in roads, buildings, farmsteads, woodland not pastured, and wasteland.

Item 4 - This should equal the sum of all land uses reported in items 1 through 3. Also, **Box B** acres must equal acres in “this operation” reported in Section 1, item 4, **Box A**. Anyone who irrigated any land in 2018 should complete the entire questionnaire.

Item 5 - This question helps determine if this operation irrigated any area in the open or under protection in 2018. If the answer to this question is 'Yes', then continue completing the form. If you did not irrigate any area in the open or under protection, check the 'No' box and go to Section 16 on the back page.

Item 6 - Report the state with the largest amount of irrigated land for "this operation." If you irrigate in more than one state and the acres irrigated happens to be the same in those states, then report the state that includes your farmstead.

Section 3 – Ground Water From Wells

Water usage for this survey will be published in acrefeet. An acre-foot is the quantity of water needed to cover one acre to the depth of one foot, or 326,000 gallons. Ground water is water from a well or wells located on this operation.

Item 1 - Report whether this operation irrigated any land with ground water from wells on this operation at any time during 2018.

Item 2 - Report acres in the open irrigated with ground water from wells and the estimated quantity of ground water used in one of the following units:

- total acre-feet; or
- total gallons; or
- average inches applied per acre

Item 3 - Report the area under protection irrigated with ground water in square feet. Report the area only once, regardless of how many crops were grown for sale from the same area.

Item 4 - Report the total number of wells used on this operation in 2018.

Item 4a - Report the number of wells reported in item 4 above that used backflow prevention devices (check valves) in 2018. Report the number of acres and area under protection irrigated in 2018 with water pumped from wells with backflow prevention devices.

Item 4b - Report how many wells reported in item 4 above used flow meters or flow measuring devices. Report the number of acres and area under protection irrigated in 2018 with water from wells with flow measurement devices.

Item 4c - Report the number of free-flowing wells used in 2018. Free-flowing wells do not require the use of a pump to lift the water to the surface. Water flows to the surface under natural pressure. These are most commonly found in Florida and some western states.

Item 5 - Report the well characteristics for up to 3 primary wells pumped on this operation in 2018.

Note: The 3 primary wells should include those wells with the greatest quantity of water pumped in 2018. Report the characteristics for each individual well even if these values are similar across wells. If less than 3 wells were pumped in 2018, then only report for those wells used. Do not include the characteristics of free flowing wells that did not use a well pump, reported in Item 4c.

Item 5a - If you used more than 3 wells in 2018, then for all other wells (excluding the 3 primary wells), report the average value for well characteristics.

Item 6 - 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 2018.

Section 4 – On-Farm Surface Water

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.

Item 1 - Report whether this operation used any on-farm surface water including recycled and reclaimed water. 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.

Item 2 - Report acres in the open on this operation irrigated with on-farm surface water and the estimated quantity used in one of the following units:

- total acre-feet; or
- total gallons; or
- average inches applied per acre

Item 3 - Report the total area under protection irrigated with on-farm surface water in square feet. Report the area only once, regardless of how many crops were grown for sale from the same area.

Item 4 - Report whether this operation used recycled water to irrigate any crops in 2018.

Item 4a - Report the area on which one or more applications of recycled water for irrigation were made in 2018. Report the acres only once even if multiple applications were made to the same acreage.

Item 5 - Report whether this operation used reclaimed water from on-farm livestock to irrigate any crops in 2018. For the purposes of this survey, the total 2018 application of reclaimed water needs to be at least one half inch to be considered irrigation.

Item 5a - Report the area on which one or more applications of reclaimed water for irrigation were made in 2018. Report the acres only once even if multiple applications were made to the same acreage.

Item 5b - Report how much reclaimed irrigation water was used on this operation in 2018. Report the quantity of reclaimed water in acre-feet or total gallons.

Section 5 – Off-Farm Water

Off-farm surface water is surface or ground water from U.S. Bureau of Reclamation, other Federal agencies, irrigation districts, or other suppliers.

Item 1 - Report whether this operation used any water from off-farm sources.

Item 2 - Report acres in the open on this operation irrigated with off-farm water and the estimated quantity used in one of the following units:

- total acre-feet; or
- total gallons; or
- average inches applied per acre

Item 3 - Report the total area under protection irrigated with off-farm water in square feet. Report the area only once, regardless of how many crops were grown for sale from the same area.

Item 4 - Report whether this operation received any off-farm water and total cost, if any was purchased. Report in whole dollars.

Item 5 - Report the supplier of off-farm water.

Item 6 - Report whether this operation used reclaimed water to irrigate any crops in 2018.

Item 6a - Report the area on which one or more applications of reclaimed water for irrigation were made in 2018. Report the acres only once even if multiple applications were made to the same acreage.

Item 6b - Report how much reclaimed irrigation water was used on this operation in 2018. Report the quantity of reclaimed water in acre-feet or total gallons.

Item 6c - Identify the source(s) of reclaimed water used on this operation by marking an 'X' in all the sources that apply.

Section 6 – Pumps, Other Than Well Pumps, Used For Irrigation

These are pumps that were used for pumping surface water from rivers and streams, irrigation channels, ponds, and other water holding systems.

Tailwater pits hold water that was previously used for irrigation.

Relifting or boosting water within system - Some irrigation systems using water from wells may also have pumps in places other than their well pumps to provide additional lift, pressure, or lateral movement, especially on farms with large distribution systems or irregular terrain. These pumps are often referred to as booster pumps. Include these booster pumps in this section.

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 7 – Energy Expense for All Well and Other Irrigation Pumps

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 4, column 2, Box C. The difference should equal those acres irrigated using no pumps to supply water to the field.

Section 8 – Method of Water Distribution in Fields in the Open

This section refers to the method used to distribute irrigation water.

Item 1 - Report whether this operation irrigated any fields in the open. If so, complete this section.

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 2 - 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 2a - Row crops are generally irrigated by water flowing down furrows.

Item 2b - 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 2c - 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 2d - Report acreage here if not reported in any of the above gravity system categories.

Item 3 - Sprinkler irrigation is separated into six categories: center pivot, linear move tower, solid set and permanent systems, mechanical move systems, hand-move systems, and other sprinkler systems. Use nozzle pressure for the pressure categories

Item 3a - 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 3b - Linear move tower systems and other linear continuous move drive systems are self-propelled systems that travel in straight lines across the field.

Item 3c - Report for solid set and permanent systems. Exclude low-flow micro systems.

Item 3di - Mechanical move systems include side roll, wheel move, other mechanical move systems, and other discrete move systems.

Item 3dii - Big gun or traveler systems use large pulsating sprinklers and travel across the area being watered.

Item 3e - Hand-move systems are any non-propelled system which must be moved manually.

Item 3f - Report acreage here if not reported in any of the above sprinkler system categories.

Item 4 - 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.

Item 4a - Report acres on which on or above ground surface drip irrigation was used.

Item 4b - Report acres on which sub-surface or root zone drip was used.

Item 4c - Report acres on 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 4d - Report acreage here if not reported in any of the above drip, trickle, or low-flow system categories.

The total acres, by method of water distribution, should be equal to or greater than Section 2, column 2, item 4, total acres irrigated, Box C. Every acre reported as irrigated in Section 2 needs to be reported by method of irrigation in Section 8. If you use multiple methods of water distribution for the same acres, this sum may be larger than Section 2, column 2, item 4, total acres irrigated, Box C.

Section 9 – Acres Harvested in the Open and Pastureland

Report the acres of each crop harvested and its corresponding average yield per acre. 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 2018 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 9 should be equal to or greater than Section 2, item 4, column 2, Box C, total acres irrigated.

Any harvested crop grown in the open not pre-listed should be entered under item 18 'all other crops grown in the open.' Report the crop name in the 'specify' area.

Section 10 – Field Water Distribution and Water Source for Crops in the Open

For each crop with irrigated acres harvested reported in Section 9, report the primary type of irrigation system in the first column by selecting the appropriate water distribution code from the water distribution code list above the table. Report the number of acres irrigated from each water source (ground, on-farm surface, and off-farm suppliers).

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 9.

Report the acres of the irrigated crop by water source.

Section 11 – Irrigation for Nursery and Other Horticultural Crops Grown in the Open

Item 1 - Report whether this operation irrigated any nursery, greenhouse, floriculture, mushrooms, propagative materials, or other horticultural crops grown in the open in 2018. 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 grown in the open and irrigated acres.

Report for each crop category grown on this operation the total acres in the open and irrigated acres in the appropriate category:

- a. Floriculture and bedding crops - Bedding/garden plants - annuals, herbaceous perennials, vegetable plants; cut flowers and cut florist greens; indoor foliage plants; potted flowering plants; hanging baskets
- b. Nursery crops - Nursery stock - ornamentals, shrubs, flowering trees, evergreens, live Christmas trees, fruit and nut trees and plants, vines, palms, ornamental grasses, bareroot herbaceous perennials; aquatic plants
- c. Sod
- d. Propagative materials - Bulbs, corms, rhizomes, tubers, cuttings, seedlings, liners, plugs, flower seeds, tobacco plants, vegetable seeds, vegetable transplants to farm fields
- e. 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.
- f. Other horticultural crops - 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 2018 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. Include hydroponic in this category.

The total area reported, by method used, should be equal to or greater than item 2, irrigated area, code 0738.

Item 5 - 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.

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 12 – Irrigation for Nursery, Greenhouse, and Other Horticultural Crops Grown Under Protection

Item 1 - 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 and hoop houses. 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 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 of 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:

- a. **Floriculture and bedding crops** - Bedding/garden plants - annuals, herbaceous perennials, vegetable plants; cut flowers and cut florist greens; indoor foliage plants; potted flowering plants; hanging baskets
- b. **Nursery crops** - Nursery stock - ornamentals, shrubs, flowering trees, evergreens, live Christmas trees, fruit and nut trees and plants, vines, palms, ornamental grasses, bareroot herbaceous perennials; aquatic plants

- c. **Propagative materials** - Bulbs, corms, rhizomes, tubers, cuttings, seedlings, liners, plugs, flower seeds, tobacco plants, vegetable seeds, vegetable transplants to farm fields
- d. **Food crops grown under protection** - Tomatoes, other vegetables and fresh cut herbs, fruits and berries.
- e. **Mushrooms**
- f. **Other horticultural crops** - 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 2018 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. Include hydroponic in this category.

The total area reported, by method used, should be equal to or greater than item 2, irrigated area, code 0629.

Item 5 - 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.

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 13 – Expenditures for Irrigation

For the construction and improvement categories report the cost of the expenditure in column 1, the irrigated acres affected in column 2, the primary purpose code of the expenditure in column 3, and the primary source code of the funding assistance in column 4 if any were received. Primary purpose codes and source codes of the funding can be found at the top of the page.

Section 14 – Irrigation and Water Management Practices

Item 1 - Report on the method(s) or approach(es) used to decide when to schedule water applications in 2018. Mark all that apply.

Item 2 - Report whether this operation had to discontinue irrigation in 2018 long enough to affect crop yield.

Item 2a - Report the acres which had to discontinue or reduce irrigation long enough to reduce crop yields.

Item 2b - 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.

Item 3 and 4 - If you reported gravity irrigation in Section 8, then complete Items 3 and 4. In Item 4, for each practice, a through d, report the number of gravity irrigated acres using the specific practices.

Item 5 - Report the sources that this operation relied on for guidance in reducing irrigation costs or to conserve water. Mark all that apply.

Item 6 - Report any issues which prevented you from implementing improvements to existing irrigation systems during the past five years. Mark all that apply.

Item 7 - If you made irrigation and/or drainage improvements above regular maintenance in the past five years, then mark item 7 ‘Yes’

Item 8 and 8a - If you received any technical or financial assistance for irrigation and/or drainage improvements, mark yes to item 8 and indicate the sources you received technical or financial assistance in item 8a. Mark all that apply. If no assistance was received, do not mark any check box.

Section 15 – Labor Used for Irrigation on This Operation in 2018

If you paid any labor cost for the irrigation activities, report total hours and average hourly wage 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 16 – No Irrigated Land in 2018

Complete this section ONLY if you did not irrigate in 2018. If you did irrigate in 2018, skip to Section 17.

Item 2 - Report whether any land on this operation was irrigated in 2017.

Item 3 - Report the reasons for not irrigating in 2018. Mark all that apply and if ‘other’ is marked, report the reason(s) in the “specify” response area.

Item 4 - Report whether the discontinuance of irrigation is permanent.

Section 17 – Value of Sales in 2018

Item 1 - Select the appropriate range of the gross value of sales of all agricultural products sold from this operation in 2018. Agricultural products include all crops 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 18 – Person Completing this Form

Please print the name of the person completing this questionnaire, the date completed, and telephone number. Please indicate if you would like a free summary of the survey results in the mail.