

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

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

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

See footnote(s) at end of table.

--continued

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

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

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

See footnote(s) at end of table.

--continued

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

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

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

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