

Table 11. Energy Expenses for On-Farm Pumping of Irrigation Water by Type of Energy: 1988 and 1984

[Excludes irrigation data for Alaska, Hawaii, and abnormal and horticultural specialty farms]

Geographic and water resources areas	Total energy expenses for pumping											
	Farms	Pumps powered	Acres irrigated	Expenses (\$1,000)	Per acre irrigated (dollars)	Farms with 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 \$29,999	\$30,000 or more
TOTAL												
Conterminous United States												
1988	148 713	449 063	33 801 311	1 041 034	31	45 865	22 335	34 919	19 959	14 692	4 450	6 493
1984	135 319	426 814	31 067 689	1 002 548	32	43 040	21 412	30 282	18 014	11 877	4 405	6 289
27 leading Irrigation States												
17 Western States	136 303	426 218	32 856 008	1 021 537	31	39 341	19 372	32 893	19 257	14 538	4 428	6 474
1988	110 218	336 031	25 104 127	884 306	35	31 535	15 640	26 294	15 102	11 792	3 935	5 920
1984	105 209	328 448	25 042 211	872 285	35	32 047	14 892	24 423	14 532	9 816	3 577	5 922
All other States	12 410	22 845	945 303	19 497	21	6 524	2 963	2 026	702	154	22	19
1984	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1988 DATA												
Arizona	1 328	4 782	465 613	49 011	105	202	76	86	113	348	61	442
Arkansas	4 913	27 277	2 735 539	49 593	18	231	331	1 087	1 456	1 371	190	247
California	32 170	92 678	5 149 173	282 716	55	9 179	5 308	8 613	3 122	3 068	949	1 931
Colorado	4 723	14 250	1 445 164	49 421	34	778	390	1 292	771	806	267	419
Florida	6 308	23 507	1 349 225	23 888	18	3 239	783	1 427	458	239	51	111
Georgia	3 113	6 345	606 065	11 262	19	1 133	447	829	418	227	30	29
Idaho	6 520	15 476	1 843 381	64 319	35	2 607	400	1 190	848	628	340	507
Illinois	910	1 945	188 939	4 025	21	244	144	283	133	80	15	11
Kansas	6 565	22 394	2 604 096	64 117	25	1 124	429	1 810	1 412	922	329	539
Louisiana	2 826	6 296	647 243	10 885	17	891	331	811	555	203	9	26
Michigan	2 033	4 796	299 155	7 432	25	798	391	450	221	127	24	22
Minnesota	1 640	3 256	325 461	6 274	19	417	350	518	218	99	21	17
Mississippi	1 420	5 882	751 076	10 124	13	242	289	298	255	210	84	42
Missouri	1 782	7 466	578 454	6 485	11	338	488	530	295	102	20	9
Montana	3 232	7 369	628 777	9 266	15	800	1 158	791	304	139	29	11
Nebraska	18 421	66 506	5 260 251	118 476	23	1 821	2 994	5 675	4 589	2 388	620	334
Nevada	791	1 698	229 064	8 511	37	171	77	228	119	91	48	57
New Mexico	2 317	6 654	481 100	19 510	41	812	152	419	487	194	95	158
North Dakota	498	1 208	123 577	2 586	21	189	69	77	85	50	23	5
Oklahoma	1 669	5 024	442 742	10 976	25	267	226	495	371	222	37	51
Oregon	6 728	14 916	800 420	20 919	26	3 602	1 385	1 026	422	149	56	88
South Dakota	1 046	2 410	265 155	6 041	23	64	197	488	164	96	22	15
Texas	11 128	55 277	3 827 384	130 413	34	3 251	285	1 756	1 586	2 207	937	1 106
Utah	2 327	3 963	294 992	10 792	37	928	275	712	122	180	32	78
Washington	9 312	18 900	1 015 199	32 094	32	5 386	1 594	1 378	459	263	72	160
Wisconsin	1 140	3 417	270 724	7 264	27	273	178	366	146	88	49	40
Wyoming	1 443	2 526	228 039	5 138	23	354	625	258	128	41	18	19
Water resources areas:												
WRA 01 New England	942	2 443	24 312	1 162	48	784	23	54	66	10	2	3
WRA 02 Mid-Atlantic	2 440	4 912	246 466	4 783	19	1 339	419	455	148	64	10	5
WRA 03 South Atlantic-Gulf	13 818	36 412	2 210 114	40 689	18	6 735	2 318	3 013	1 034	491	84	143
WRA 04 Great Lakes	3 045	7 059	452 647	10 616	23	1 398	485	603	324	158	39	38
WRA 05 Ohio	2 682	4 041	126 055	3 308	26	1 550	570	459	73	25	1	4
WRA 06 Tennessee	632	1 655	20 772	1 050	51	64	452	53	63	-	-	-
WRA 07 Upper Mississippi	3 581	8 209	748 931	16 436	22	830	694	1 185	485	261	71	55
WRA 08 Lower Mississippi	9 312	41 307	4 259 523	69 542	16	1 263	1 169	2 323	2 255	1 732	284	286
WRA 09 Souris-Red-Rainy	371	1 054	124 355	2 177	18	33	77	131	69	37	21	3
WRA 10 Missouri	28 607	93 583	7 962 197	192 330	24	3 443	4 832	8 770	6 386	3 271	1 056	849
WRA 11 Arkansas-White-Red	10 745	41 191	4 368 360	107 487	25	2 097	1 008	2 368	2 108	1 709	563	892
WRA 12 Texas-Gulf	9 148	44 145	2 633 888	94 223	36	2 907	252	1 449	1 401	1 730	644	765
WRA 13 Rio Grande	2 272	7 203	587 621	24 360	41	787	47	496	254	406	102	180
WRA 14 Upper Colorado	952	1 338	92 352	3 182	34	214	258	363	41	69	2	5
WRA 15 Lower Colorado	1 485	5 189	489 012	49 661	102	308	76	104	134	350	67	446
WRA 16 Great Basin	3 159	5 525	541 401	18 854	35	1 215	418	756	301	261	79	129
WRA 17 Pacific Northwest	22 917	49 826	3 649 941	117 593	32	11 537	3 817	3 619	1 664	1 049	476	755
WRA 18 California	32 605	93 971	5 263 364	283 581	54	9 361	5 420	8 718	3 153	3 069	949	1 935

Table 11. Energy Expenses for On-Farm Pumping of Irrigation Water by Type of Energy: 1988 and 1984—Con.

[Excludes irrigation data for Alaska, Hawaii, and abnormal and horticultural specialty farms]

Geographic and water resources areas	Electricity												
	Farms	Pumps powered	Acres irrigated	Energy used (1,000 kWh)	Expenses (\$1,000)	Expenses per acre irrigated (dollars)	Farms with expenses of—						
							\$1 to \$499	\$500 to \$999	\$1,000 to \$1,999	\$2,000 to \$4,999	\$5,000 to \$9,999	\$10,000 to \$19,999	\$20,000 or more
TOTAL													
Conterminous United States --- 1988..	105 227	282 472	18 991 265	(S)	712 514	38	17 381	15 025	18 186	25 739	12 744	9 038	7 114
1984..	96 324	281 317	18 106 589	(NA)	639 892	35	22 229	13 075	15 165	20 300	12 223	6 708	6 621
27 leading irrigation States -- 1988..	101 309	275 529	18 686 791	(S)	704 977	38	16 767	14 532	16 498	24 926	12 502	8 980	7 104
17 Western States ----- 1988..	87 097	239 268	15 760 225	(S)	639 379	41	13 776	13 435	13 817	21 028	10 576	7 814	6 651
1984..	81 398	233 159	15 406 148	(NA)	579 653	38	18 750	10 980	12 008	17 333	10 310	5 849	6 168
All other States --- 1988..	3 918	6 943	304 474	(S)	7 537	25	614	493	1 688	813	242	58	10
1984..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1988 DATA													
Arizona -----	1 100	3 808	388 749	(S)	42 639	110	58	12	65	61	93	358	453
Arkansas -----	3 696	12 738	1 170 583	(S)	28 532	24	9	166	565	1 199	988	588	201
California -----	31 425	88 632	4 568 367	(S)	266 442	58	3 545	5 528	5 187	8 361	3 073	2 991	2 740
Colorado -----	4 157	11 797	1 239 603	(S)	41 632	34	234	630	253	1 012	801	657	570
Florida -----	3 458	8 564	476 744	(S)	10 373	22	1 460	220	544	876	157	141	60
Georgia -----	1 438	2 230	183 492	(S)	4 018	22	511	142	196	373	107	89	20
Idaho -----	6 022	14 562	1 754 031	(S)	63 083	36	1 349	983	341	1 054	820	640	835
Illinois -----	470	895	86 122	(S)	1 914	22	67	38	125	126	69	34	11
Kansas -----	1 848	5 593	471 850	(S)	13 775	29	100	148	133	793	357	207	110
Louisiana -----	724	1 068	98 014	(S)	1 611	16	234	93	174	134	53	34	2
Michigan -----	1 217	2 655	149 186	(S)	4 307	29	312	165	261	263	121	66	29
Minnesota -----	1 032	2 116	216 003	(S)	4 297	20	172	61	171	387	143	75	23
Mississippi -----	697	1 938	210 926	(S)	3 567	17	16	123	187	165	100	65	41
Missouri -----	801	2 197	156 368	(S)	2 207	14	105	48	333	181	94	29	11
Montana -----	2 772	6 532	579 836	(S)	8 781	15	256	151	1 224	658	304	140	39
Nebraska -----	10 259	30 380	2 257 005	(S)	52 654	23	460	769	2 290	3 091	2 383	917	349
Nevada -----	732	1 530	206 565	(S)	7 727	37	145	14	58	228	111	78	98
New Mexico -----	1 587	4 316	271 946	(S)	13 032	48	287	294	50	321	369	89	177
North Dakota -----	293	898	97 556	(S)	2 205	23	7	47	17	68	77	54	23
Oklahoma -----	684	1 649	88 903	(S)	2 721	31	105	23	165	171	180	22	18
Oregon -----	6 208	14 155	751 425	(S)	20 201	27	2 421	845	1 316	933	403	147	143
South Dakota -----	884	1 969	223 257	(S)	5 475	25	19	19	95	483	158	73	37
Texas -----	7 103	29 750	1 439 992	(S)	53 112	37	1 421	1 344	363	1 504	791	988	692
Utah -----	1 627	3 045	231 816	(S)	9 437	41	98	360	93	703	121	152	100
Washington -----	9 280	18 678	1 002 495	(S)	31 989	32	3 214	2 143	1 597	1 378	453	263	232
Wisconsin -----	679	1 860	179 128	(S)	4 772	27	105	41	125	194	94	65	55
Wyoming -----	1 116	1 974	186 829	(S)	4 475	24	57	125	570	209	82	38	35
Water resources areas:													
WRA 01 New England -----	273	817	5 958	(S)	407	68	144	48	2	68	5	4	2
WRA 02 Mid-Atlantic -----	537	987	49 109	(S)	1 044	21	59	128	180	124	33	13	-
WRA 03 South Atlantic-Gulf -----	6 309	12 627	733 196	(S)	16 092	22	2 205	614	1 486	1 378	303	243	80
WRA 04 Great Lakes -----	1 708	3 771	226 994	(S)	6 260	28	517	213	311	361	169	91	46
WRA 05 Ohio -----	961	1 328	49 059	(S)	1 995	41	33	7	556	328	24	10	3
WRA 06 Tennessee -----	67	370	5 920	(S)	378	64	-	4	-	-	63	-	-
WRA 07 Upper Mississippi -----	2 015	4 501	434 187	(S)	10 060	23	296	127	368	685	303	162	74
WRA 08 Lower Mississippi -----	4 972	15 479	1 488 702	(S)	32 496	22	281	268	1 043	1 477	999	676	228
WRA 09 Souris-Red-Rainy -----	297	882	102 424	(S)	1 816	18	-	29	59	108	47	33	21
WRA 10 Missouri -----	17 574	48 298	4 041 726	(S)	103 166	26	684	1 551	3 904	5 312	3 674	1 554	895
WRA 11 Arkansas-White-Red -----	4 166	13 832	1 057 352	(S)	28 979	27	535	485	393	1 182	918	291	362
WRA 12 Texas-Gulf -----	6 591	26 631	1 214 337	(S)	45 804	38	1 235	1 309	368	1 298	878	941	562
WRA 13 Rio Grande -----	1 819	5 664	461 105	(S)	19 367	42	325	282	16	415	184	374	223
WRA 14 Upper Colorado -----	775	1 092	75 479	(S)	2 036	27	15	151	229	324	33	17	6
WRA 15 Lower Colorado -----	1 244	4 135	404 452	(S)	43 066	106	60	116	72	75	104	358	459
WRA 16 Great Basin -----	2 257	4 239	433 612	(S)	16 512	38	226	422	181	748	269	220	191
WRA 17 Pacific Northwest -----	21 808	47 928	3 529 313	(S)	115 755	33	7 062	3 720	3 712	3 402	1 635	1 059	1 218
WRA 18 California -----	31 854	89 891	4 678 340	(S)	267 282	57	3 704	5 551	5 306	8 454	3 103	2 992	2 744

Table 11. Energy Expenses for On-Farm Pumping of Irrigation Water by Type of Energy: 1988 and 1984—Con.

[Excludes irrigation data for Alaska, Hawaii, and abnormal and horticultural specialty farms]

Geographic and water resources areas	Natural gas												
	Farms	Pumps powered	Acres irrigated	Energy used (1,000 mcf)	Expenses (\$1,000)	Expenses per acre irrigated (dollars)	Farms with expenses of—						
							\$1 to \$499	\$500 to \$999	\$1,000 to \$1,999	\$2,000 to \$4,999	\$5,000 to \$9,999	\$10,000 to \$19,999	\$20,000 or more
TOTAL													
Conterminous United States .. 1988..	17 296	53 449	5 657 430	(S)	160 320	28	1 082	1 154	2 273	4 298	3 800	2 580	2 109
..... 1984..	15 519	51 799	5 800 547	(NA)	195 474	34	281	847	2 650	3 879	2 737	2 632	2 493
27 leading Irrigation States .. 1988..	17 264	53 413	5 653 750	(S)	160 260	28	1 082	1 154	2 253	4 289	3 797	2 580	2 109
17 Western States .. 1988..	16 074	51 410	5 421 874	(S)	155 291	29	1 067	1 045	2 093	3 599	3 669	2 511	2 090
..... 1984..	14 349	49 559	5 572 844	(NA)	189 884	34	772	2 344	3 511	2 458	2 503	2 485	2 485
All other States .. 1988..	32	36	3 680	(S)	59	16	-	-	20	9	3	-	-
..... 1984..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1988 DATA													
Arizona	160	485	59 712	(S)	6 000	100	3	2	11	31	10	3	100
Arkansas	468	921	113 914	(S)	2 072	18	9	64	126	195	32	25	17
California	126	504	33 251	(S)	1 761	53	-	3	31	72	14	6	6
Colorado	385	958	124 231	(S)	4 672	38	-	-	51	35	97	129	73
Florida	1	(D)	(D)	(S)	(D)	(D)	-	(D)	(D)	(D)	-	-	-
Georgia	-	-	-	(S)	-	-	-	-	-	-	-	-	-
Idaho	34	79	18 133	(S)	286	16	-	-	-	-	23	11	-
Illinois	16	47	4 822	(S)	78	16	-	2	1	9	2	1	1
Kansas	4 260	12 922	1 753 671	(S)	40 884	23	582	174	156	1 255	916	599	578
Louisiana	667	950	104 320	(S)	2 698	26	6	34	31	465	88	42	1
Michigan	5	(D)	(D)	(S)	(D)	(D)	-	(D)	(D)	(D)	-	-	-
Minnesota	4	4	410	(S)	16	38	-	-	2	2	-	-	-
Mississippi	11	20	2 130	(S)	26	12	-	2	-	9	-	-	-
Missouri	15	47	4 643	(S)	52	11	-	5	-	7	2	1	-
Montana	38	57	4 465	(S)	80	18	-	-	19	19	-	-	-
Nebraska	4 503	9 982	902 552	(S)	20 157	22	104	583	1 254	1 283	823	322	134
Nevada	-	-	-	(S)	-	-	-	-	-	-	-	-	-
New Mexico	658	1 809	173 124	(S)	5 591	32	7	150	87	96	155	94	69
North Dakota	2	(D)	(D)	(S)	(D)	(D)	-	(D)	(D)	(D)	-	-	-
Oklahoma	842	2 459	274 471	(S)	7 248	26	2	91	57	276	189	167	60
Oregon	2	(D)	(D)	(S)	(D)	(D)	-	(D)	(D)	(D)	-	-	-
South Dakota	-	-	-	(S)	-	-	-	-	-	-	-	-	-
Texas	4 985	22 025	2 066 756	(S)	68 389	33	368	44	394	572	1 366	1 172	1 069
Utah	51	88	4 584	(S)	59	13	1	1	48	-	1	-	-
Washington	-	-	-	(S)	-	-	-	-	-	-	-	-	-
Wisconsin	3	3	526	(S)	14	27	-	-	1	-	2	-	-
Wyoming	28	36	4 558	(S)	144	32	-	-	11	1	15	-	1
Water resources areas:													
WRA 01 New England	-	-	-	(S)	-	-	-	-	-	-	-	-	-
WRA 02 Mid-Atlantic	-	-	-	(S)	-	-	-	-	-	-	-	-	-
WRA 03 South Atlantic-Gulf	4	7	287	(S)	16	56	-	-	1	-	3	-	-
WRA 04 Great Lakes	7	10	1 790	(S)	15	9	-	2	2	3	-	-	-
WRA 05 Ohio	7	7	1 085	(S)	18	16	-	-	-	7	-	-	-
WRA 06 Tennessee	-	-	-	(S)	-	-	-	-	-	-	-	-	-
WRA 07 Upper Mississippi	45	79	7 887	(S)	136	17	-	2	2	15	6	1	1
WRA 08 Lower Mississippi	1 154	1 927	223 243	(S)	4 816	22	15	104	157	672	121	67	18
WRA 09 Souris-Red-Rainy	-	-	-	(S)	-	-	-	-	-	-	-	-	-
WRA 10 Missouri	5 994	14 060	1 363 805	(S)	34 616	25	104	583	1 365	1 861	1 126	576	379
WRA 11 Arkansas-White-Red	6 151	20 065	2 661 172	(S)	66 483	25	959	266	331	1 173	1 417	1 088	917
WRA 12 Texas-Gulf	3 089	14 886	1 186 468	(S)	41 378	35	-	55	286	431	915	764	618
WRA 13 Rio Grande	401	1 128	105 427	(S)	4 452	42	-	96	47	62	96	34	66
WRA 14 Upper Colorado	51	58	2 541	(S)	75	30	1	43	-	-	7	-	-
WRA 15 Lower Colorado	181	550	66 217	(S)	6 205	94	3	2	11	43	13	5	104
WRA 16 Great Basin	73	133	18 841	(S)	181	10	-	1	48	-	24	-	-
WRA 17 Pacific Northwest	13	35	5 416	(S)	167	31	-	-	2	-	-	11	-
WRA 18 California	126	504	33 251	(S)	1 761	53	-	-	3	31	72	14	6

Table 11. Energy Expenses for On-Farm Pumping of Irrigation Water by Type of Energy: 1988 and 1984—Con.

[Excludes irrigation data for Alaska, Hawaii, and abnormal and horticultural specialty farms]

Geographic and water resources areas	LP gas, propane, and butane												
	Farms	Pumps powered	Acres irrigated	Energy used (1,000 gal)	Expenses (\$1,000)	Expenses per acre irrigated (dollars)	Farms with expenses of—						
							\$1 to \$499	\$500 to \$999	\$1,000 to \$1,999	\$2,000 to \$4,999	\$5,000 to \$9,999	\$10,000 to \$19,999	\$20,000 or more
TOTAL													
Conterminous United States .. 1988..	13 906	27 187	1 874 920	(S)	36 252	19	1 940	2 501	3 355	4 628	1 077	295	110
..... 1984..	12 668	25 499	1 804 629	(NA)	38 912	22	1 272	1 763	3 173	4 464	1 434	524	38
27 leading irrigation States .. 1988..	12 880	25 234	1 784 508	(S)	34 292	19	1 772	2 262	3 184	4 223	1 040	292	107
17 Western States .. 1988..	8 838	16 307	1 127 707	(S)	24 722	22	946	1 735	2 364	2 760	717	226	90
..... 1984..	8 972	17 618	1 264 756	(NA)	26 377	21	939	1 330	2 357	3 062	942	305	17
All other States .. 1988..	1 026	1 953	90 412	(S)	1 960	22	168	239	171	405	37	3	3
..... 1984..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1988 DATA													
Arizona	24	80	2 720	(S)	56	21	16	-	-	-	8	-	-
Arkansas	1 462	3 215	273 050	(S)	4 235	16	80	125	372	702	157	25	1
California	136	529	53 648	(S)	1 199	22	-	8	29	52	17	20	10
Colorado	371	592	37 054	(S)	1 940	52	-	28	-	242	50	51	-
Florida	477	(D)	24 540	(S)	739	30	244	67	66	74	13	5	8
Georgia	717	845	43 789	(S)	755	17	366	84	99	154	14	-	-
Idaho	51	111	6 868	(S)	144	23	-	1	23	27	-	-	-
Illinois	82	135	10 460	(S)	215	21	16	4	20	34	5	3	-
Kansas	1 103	1 515	105 512	(S)	2 337	22	446	79	218	239	82	31	8
Louisiana	210	421	30 078	(S)	577	19	6	47	17	116	24	-	-
Michigan	103	(D)	10 281	(S)	230	22	32	13	22	31	4	-	1
Minnesota	40	45	6 701	(S)	77	11	-	8	13	19	-	-	-
Mississippi	251	448	50 172	(S)	611	12	34	60	41	95	14	5	2
Missouri	658	2 901	203 863	(S)	2 030	10	39	107	164	228	89	26	5
Montana	40	50	7 022	(S)	56	8	-	19	1	20	-	-	-
Nebraska	5 545	10 255	708 645	(S)	13 990	20	256	1 434	1 806	1 484	469	47	49
Nevada	6	6	540	(S)	1	2	6	-	-	-	-	-	-
New Mexico	102	156	13 163	(S)	246	19	2	56	5	28	5	6	-
North Dakota	92	(D)	5 061	(S)	103	20	64	-	23	-	-	5	-
Oklahoma	285	498	27 906	(S)	615	22	5	31	144	88	11	6	-
Oregon	6	(D)	300	(S)	9	30	-	-	6	-	-	-	-
South Dakota	59	113	6 167	(S)	100	16	8	-	45	5	1	-	-
Texas	861	2 090	139 991	(S)	3 810	27	74	15	46	570	74	59	23
Utah	57	57	3 399	(S)	30	9	40	11	6	-	-	-	-
Washington	6	6	384	(S)	1	2	6	-	-	-	-	-	-
Wisconsin	42	65	3 867	(S)	101	26	9	12	6	10	3	2	-
Wyoming	94	141	9 327	(S)	86	9	23	53	12	5	-	1	-
Water resources areas:													
WRA 01 New England	310	716	7 418	(S)	397	53	149	69	49	33	7	-	3
WRA 02 Mid-Atlantic	51	128	6 729	(S)	84	13	6	25	1	16	3	-	-
WRA 03 South Atlantic-Gulf	1 628	2 085	91 982	(S)	2 196	24	623	234	281	450	27	5	8
WRA 04 Great Lakes	131	200	13 697	(S)	312	23	37	15	27	43	6	2	1
WRA 05 Ohio	26	80	6 965	(S)	121	17	-	1	6	10	6	3	-
WRA 06 Tennessee	53	53	3 975	(S)	186	47	-	-	-	53	-	-	-
WRA 07 Upper Mississippi	198	357	27 022	(S)	452	17	20	39	52	73	11	3	-
WRA 08 Lower Mississippi	2 228	6 201	498 399	(S)	6 625	13	151	302	418	1 028	273	50	6
WRA 09 Souris-Red-Rainy	7	7	525	(S)	7	13	-	6	-	1	-	-	-
WRA 10 Missouri	6 500	11 791	834 938	(S)	16 268	19	353	1 565	1 987	2 007	485	54	49
WRA 11 Arkansas-White-Red	1 718	3 265	216 695	(S)	4 449	21	457	126	463	452	155	46	19
WRA 12 Texas-Gulf	610	1 324	89 719	(S)	2 628	29	74	17	6	366	74	59	14
WRA 13 Rio Grande	87	112	7 972	(S)	179	22	2	60	1	17	5	2	-
WRA 14 Upper Colorado	73	73	1 025	(S)	910	888	-	22	-	-	-	51	-
WRA 15 Lower Colorado	24	80	2 720	(S)	56	21	16	-	-	-	8	-	-
WRA 16 Great Basin	63	63	3 939	(S)	31	8	46	11	6	-	-	-	-
WRA 17 Pacific Northwest	57	117	7 252	(S)	144	20	6	1	23	27	-	-	-
WRA 18 California	142	535	53 948	(S)	1 208	22	-	8	35	52	17	20	10

Table 11. Energy Expenses for On-Farm Pumping of Irrigation Water by Type of Energy: 1988 and 1984—Con.

[Excludes irrigation data for Alaska, Hawaii, and abnormal and horticultural specialty farms]

Geographic and water resources areas	Diesel fuel												
	Farms	Pumps powered	Acres irrigated	Energy used (1,000 gal)	Expenses (\$1,000)	Expenses per acre irrigated (dollars)	Farms with expenses of—						
							\$1 to \$499	\$500 to \$999	\$1,000 to \$1,999	\$2,000 to \$4,999	\$5,000 to \$9,999	\$10,000 to \$19,999	\$20,000 or more
TOTAL													
Conterminous United States ... 1988 ..	33 784	75 987	7 040 733	(S)	127 605	18	6 001	4 435	7 122	9 420	4 212	1 933	661
... 1984 ..	30 339	59 723	5 193 599	(NA)	124 519	24	4 657	3 902	6 303	9 812	3 205	1 471	989
27 leading irrigation States ... 1988 ..	27 493	65 992	6 547 758	(S)	119 212	18	3 111	3 687	5 731	8 505	3 935	1 883	641
... 1984 ..	14 173	25 265	2 656 589	(S)	63 052	24	1 673	1 479	3 346	4 555	1 760	1 065	295
All other States ... 1988 ..	16 224	24 869	2 463 100	(NA)	75 201	31	1 658	1 941	2 581	6 932	1 622	794	696
... 1984 ..	6 291	9 995	492 975	(S)	8 392	17	2 890	748	1 391	9 915	277	50	20
	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1988 DATA													
Arizona	109	231	12 316	(S)	288	23	63	3	4	28	1	6	4
Arkansas	2 739	10 248	1 161 955	(S)	14 643	13	68	201	417	1 023	688	240	102
California	1 385	2 834	479 733	(S)	12 844	27	42	223	395	357	149	121	98
Colorado	354	754	34 741	(S)	1 058	30	10	1	179	133	23	1	7
Florida	2 408	13 086	839 543	(S)	12 418	15	280	662	374	591	281	126	94
Georgia	1 619	3 226	375 888	(S)	6 450	17	174	286	288	450	267	127	27
Idaho	491	591	54 763	(S)	751	14	170	120	34	143	22	-	2
Illinois	460	785	86 375	(S)	1 747	20	59	52	71	158	78	35	7
Kansas	1 037	2 272	270 822	(S)	7 085	26	15	7	304	334	141	182	54
Louisiana	2 046	3 857	414 831	(S)	5 999	14	466	347	293	524	328	58	30
Michigan	898	1 535	132 466	(S)	2 708	20	135	188	178	239	104	46	8
Minnesota	695	1 051	101 411	(S)	1 873	18	52	149	183	210	73	22	6
Mississippi	992	3 402	486 178	(S)	5 895	12	46	102	207	279	199	104	55
Missouri	895	2 237	209 158	(S)	2 159	10	118	138	277	255	83	20	4
Montana	413	435	26 832	(S)	314	12	176	174	41	21	-	1	-
Nebraska	7 567	14 245	1 327 906	(S)	30 994	23	666	295	1 851	2 968	1 135	580	72
Nevada	79	145	20 479	(S)	776	38	11	6	21	6	14	16	5
New Mexico	170	270	21 463	(S)	620	29	22	3	64	60	8	8	5
North Dakota	168	160	19 590	(S)	253	13	37	89	12	20	7	2	1
Oklahoma	237	379	51 384	(S)	385	7	105	14	40	41	37	-	-
Oregon	243	344	38 343	(S)	504	13	5	53	65	113	6	1	-
South Dakota	171	264	30 956	(S)	383	12	30	4	81	40	8	8	-
Texas	949	1 371	178 662	(S)	5 088	28	2	379	32	205	192	106	33
Utah	480	562	53 818	(S)	1 236	23	244	23	145	18	4	32	14
Washington	61	77	8 514	(S)	53	6	18	29	8	6	-	-	-
Wisconsin	568	1 300	83 364	(S)	2 267	27	40	83	97	221	74	40	13
Wyoming	259	311	26 267	(S)	418	16	57	56	70	62	13	1	-
Water resources areas:													
WRA 01 New England	130	242	6 599	(S)	232	35	27	43	36	15	5	-	4
WRA 02 Mid-Atlantic	1 460	2 557	167 116	(S)	2 986	18	610	172	241	287	107	33	10
WRA 03 South Atlantic-Gulf	5 945	19 284	1 358 762	(S)	21 492	16	1 191	1 350	974	1 413	636	257	124
WRA 04 Great Lakes	1 291	2 253	197 583	(S)	3 736	19	241	281	228	314	157	58	12
WRA 05 Ohio	1 693	2 260	62 102	(S)	992	16	1 384	77	62	115	46	7	2
WRA 06 Tennessee	512	1 020	10 612	(S)	481	45	60	-	452	-	-	-	-
WRA 07 Upper Mississippi	1 697	3 051	275 315	(S)	5 639	20	123	244	388	624	208	89	21
WRA 08 Lower Mississippi	6 017	17 571	2 042 815	(S)	25 561	13	608	717	1 066	1 946	1 155	355	170
WRA 09 Souris-Red-Rainy	113	159	20 986	(S)	345	16	3	22	26	44	12	4	2
WRA 10 Missouri	9 674	17 555	1 641 094	(S)	37 470	23	1 016	637	2 427	3 506	1 257	720	111
WRA 11 Arkansas-White-Red	1 253	3 651	406 823	(S)	7 313	18	139	47	406	221	237	140	63
WRA 12 Texas-Gulf	917	1 263	161 381	(S)	4 399	27	2	379	32	205	191	91	17
WRA 13 Rio Grande	140	214	12 803	(S)	356	28	17	3	69	47	1	1	2
WRA 14 Upper Colorado	74	110	12 932	(S)	141	11	-	6	52	12	2	2	-
WRA 15 Lower Colorado	120	246	13 507	(S)	306	23	71	3	4	29	3	6	4
WRA 16 Great Basin	594	731	73 594	(S)	2 039	28	255	52	179	23	18	48	19
WRA 17 Pacific Northwest	760	964	94 296	(S)	1 261	13	212	171	85	261	28	1	2
WRA 18 California	1 394	2 856	482 613	(S)	12 856	27	42	231	395	358	149	121	98

Table 11. Energy Expenses for On-Farm Pumping of Irrigation Water by Type of Energy: 1988 and 1984—Con.

[Excludes irrigation data for Alaska, Hawaii, and abnormal and horticultural specialty farms]

Geographic and water resources areas	Gasoline and gasohol												
	Farms	Pumps powered	Acres irrigated	Energy used (1,000 gal)	Expenses (\$1,000)	Expenses per acre irrigated (dollars)	Farms with expenses of—						
							\$1 to \$499	\$500 to \$999	\$1,000 to \$1,999	\$2,000 to \$4,999	\$5,000 to \$9,999	\$10,000 to \$19,999	\$20,000 or more
TOTAL													
Conterminous United States	7 940	9 968	236 983	(S)	4 344	18	5 913	1 284	447	217	43	16	20
1984	6 057	8 476	162 325	(NA)	3 751	23	4 035	918	758	274	37	34	1
27 leading irrigation States	5 055	6 050	183 201	(S)	2 796	15	3 698	925	273	108	21	13	17
17 Western States	3 429	3 781	137 732	(S)	1 863	14	2 595	541	195	74	6	1	17
1984	2 595	3 243	65 367	(NA)	1 171	18	1 759	371	389	81	-	-	-
All other States	2 885	3 918	53 762	(S)	1 548	29	2 215	359	174	109	22	3	3
1984	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1988 DATA													
Arizona	124	178	2 116	(S)	27	13	124	-	-	-	-	-	-
Arkansas	83	155	16 037	(S)	110	7	74	-	-	-	-	9	-
California	106	179	14 174	(S)	470	33	69	-	18	3	-	-	16
Colorado	149	149	9 535	(S)	119	12	48	-	96	5	-	-	-
Florida	811	1 154	8 291	(S)	357	43	505	296	1	7	2	-	-
Georgia	10	44	2 896	(S)	39	13	-	2	6	-	-	2	-
Idaho	110	133	9 586	(S)	55	6	86	1	23	-	-	-	-
Illinois	64	83	1 160	(S)	70	60	41	1	18	-	4	-	-
Kansas	85	92	2 241	(S)	36	16	78	-	-	7	-	-	-
Louisiana	-	-	-	(S)	-	-	-	-	-	-	-	-	-
Michigan	354	446	6 218	(S)	175	28	251	60	29	10	4	-	-
Minnesota	38	40	936	(S)	11	12	34	-	2	2	-	-	-
Mississippi	64	74	1 670	(S)	25	15	60	1	2	-	1	-	-
Missouri	54	84	4 422	(S)	37	8	45	-	5	4	-	-	-
Montana	257	295	10 622	(S)	36	3	219	38	-	-	-	-	-
Nebraska	1 593	1 644	64 143	(S)	681	11	1 060	481	-	52	-	-	-
Nevada	16	17	1 480	(S)	8	5	12	-	3	1	-	-	-
New Mexico	89	103	1 404	(S)	21	15	71	14	4	-	-	-	-
North Dakota	24	24	570	(S)	10	17	24	-	-	-	-	-	-
Oklahoma	39	39	78	(S)	7	88	39	-	-	-	-	-	-
Oregon	409	409	8 786	(S)	202	23	373	6	24	6	-	-	-
South Dakota	34	64	4 775	(S)	83	17	14	-	19	-	-	-	1
Texas	28	41	1 983	(S)	14	7	27	-	-	-	1	-	-
Utah	210	211	1 375	(S)	29	21	210	-	-	-	-	-	-
Washington	97	139	3 806	(S)	52	14	88	-	3	-	6	-	-
Wisconsin	148	189	3 839	(S)	109	28	93	24	15	11	4	1	-
Wyoming	59	64	1 058	(S)	15	14	53	1	5	-	-	-	-
Water resources areas:													
WRA 01 New England	444	668	4 337	(S)	127	29	408	36	-	-	-	-	-
WRA 02 Mid-Atlantic	868	1 240	23 512	(S)	669	28	565	133	106	42	17	3	2
WRA 03 South Atlantic-Gulf	1 850	2 409	25 887	(S)	893	35	1 266	481	46	52	2	2	1
WRA 04 Great Lakes	641	825	12 583	(S)	293	23	487	67	65	11	10	1	-
WRA 05 Ohio	335	366	6 844	(S)	183	27	296	1	16	22	-	-	-
WRA 06 Tennessee	53	212	265	(S)	5	19	53	-	-	-	-	-	-
WRA 07 Upper Mississippi	185	221	4 520	(S)	148	33	129	24	15	10	7	-	-
WRA 08 Lower Mississippi	85	129	6 364	(S)	44	7	75	1	4	4	1	-	-
WRA 09 Souris-Red-Rainy	4	6	420	(S)	8	20	2	-	-	2	-	-	-
WRA 10 Missouri	1 774	1 879	80 634	(S)	811	10	1 196	501	24	52	-	-	1
WRA 11 Arkansas-White-Red	306	378	26 318	(S)	263	10	176	14	100	7	-	9	-
WRA 12 Texas-Gulf	28	41	1 983	(S)	14	7	27	-	-	-	-	1	-
WRA 13 Rio Grande	71	85	514	(S)	6	12	71	-	-	-	-	-	-
WRA 14 Upper Colorado	5	5	375	(S)	20	53	-	-	-	5	-	-	-
WRA 15 Lower Colorado	124	178	2 116	(S)	27	13	124	-	-	-	-	-	-
WRA 16 Great Basin	334	359	11 415	(S)	91	8	307	-	26	1	-	-	-
WRA 17 Pacific Northwest	721	782	13 664	(S)	265	19	662	20	27	6	6	-	-
WRA 18 California	112	185	15 212	(S)	475	31	69	6	18	3	-	-	16