

CENSUS OF IRRIGATION: 1940

TABLE 20.—AREA IRRIGATED WITH PUMPED WATER, 1939, 1929, AND 1919; AND AREA WORKS OF ENTERPRISES

(For the 17 western States)

ITEM (For definitions and explanations, see text)		TOTAL	Arizona	Arkansas	California	Colorado
Total area entirely and partly supplied with pumped water-----						
	1939--acres	6,990,655	566,298	160,818	3,186,053	101,582
	1929--acres	5,767,604	406,917	151,305	3,044,209	54,945
	1919--acres	3,105,331	264,727	141,969	1,298,423	49,505
	Increase or decrease (-), 1929-1939-----	percent	21.2	39.2	6.3	4.7
						84.9
ENTIRE SUPPLY PUMPED						
Area irrigated-----						
	1939--acres	4,451,343	149,935	160,112	2,142,514	61,720
	1929--acres	3,918,985	112,761	149,555	1,959,577	42,421
	1919--acres	2,525,338	46,370	141,719	1,126,687	23,732
	Increase or decrease (-), 1929-1939-----	percent	13.6	33.0	7.1	9.3
						45.5
Area works were capable of supplying with water-----						
	1940--acres	6,678,636	211,297	285,166	3,082,138	85,210
	1930--acres	5,420,619	161,384	206,766	2,507,713	66,642
Pumped from--						
Streams--						
Area irrigated-----						
	1939--acres	1,724,800	1,055	6,733	470,538	4,691
	1929--acres	1,713,380	8,123	1,502	469,944	27,765
	1919--acres	1,226,510	6,671	6,009	295,673	12,747
	Increase or decrease (-), 1929-1939-----	percent	0.7	-87.0	348.3	0.1
						-83.1
Proportion of total-----						
	1939--percent	100.0	0.1	0.4	27.2	0.3
	1929--percent	100.0	0.5	0.1	27.4	1.6
Area works were capable of supplying with water-----						
	1940--acres	2,781,219	1,951	10,946	813,716	8,351
	1930--acres	2,708,769	12,380	1,717	818,004	48,331
Wells--						
Area irrigated-----						
	1939--acres	2,508,076	144,175	149,915	1,511,789	56,771
	1929--acres	2,051,735	104,637	142,978	1,453,272	12,143
	1919--acres	1,263,098	39,694	135,260	826,846	10,114
	Increase or decrease (-), 1929-1939-----	percent	22.2	37.8	4.9	4.0
						367.5
Proportion of total-----						
	1939--percent	100.0	5.7	6.0	60.4	2.3
	1929--percent	100.0	5.1	7.0	70.8	0.6
Area works were capable of supplying with water-----						
	1940--acres	3,621,991	201,201	268,145	2,070,540	76,587
	1930--acres	2,465,888	149,005	199,849	1,646,280	15,463
Lakes--						
Area irrigated-----						
	1939--acres	45,831	100	134	21,972	134
	1929--acres	77,818		75	4,097	405
	1919--acres	35,730	5	450	4,168	871
	Increase or decrease (-), 1929-1939-----	percent	-41.1		78.7	436.3
						-66.9
Proportion of total-----						
	1939--percent	100.0	0.2	0.3	48.0	0.3
	1929--percent	100.0		0.1	5.3	0.5
Area works were capable of supplying with water-----						
	1940--acres	70,318	481	361	23,584	138
	1930--acres	135,880		200	4,524	410
Other sources--						
Area irrigated-----						
	1939--acres	172,686	4,605	3,330	138,215	(³)
	1929--acres	76,052	1	5,000	32,264	2,108
	Proportion of total-----					
	1939--percent	100.0	2.7	1.9	80.0	(³)
Area works were capable of supplying with water-----						
	1940--acres	225,108	7,664	5,714	174,298	(³)
	1930--acres	110,082	1	5,000	38,905	2,438

¹ Percent not shown when more than 1,000.

² Less than one-tenth of 1 percent.

³ Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

GENERAL DISCUSSION

XLVII

OPERATING PUMPS WERE CAPABLE OF SUPPLYING WITH WATER, 1940 AND 1930; BY SOURCE OF PUMPED WATER, BY STATES
and Arkansas and Louisiana)

Idaho	Kansas	Louisiana	Montana	Nebraska	Nevada	New Mexico	North Dakota	Oklahoma	Oregon	South Dakota	Texas	Utah	Washington	Wyoming
520,235	58,437	405,951	184,192	109,462	15,179	166,291	2,906	2,089	194,320	56,875	815,689	183,525	258,799	23,976
291,544	15,562	449,435	107,245	26,492	7,876	44,433	1,669	458	137,551	61	600,579	160,612	256,854	9,659
114,784	16,155	435,316	35,988	2,826	8,684	25,496	2,469	295	68,867	1,569	464,149	29,450	145,017	2,072
78.4	275.5	-10.1	71.8	313.2	92.7	274.3	74.1	356.1	41.3	(¹)	35.8	14.3	0.8	143.2
504,927	55,921	398,112	37,017	91,629	2,325	81,869	2,406	2,089	57,522	1,962	800,585	23,741	66,059	10,898
120,921	15,157	448,339	44,419	26,272	3,156	37,541	1,669	458	62,024	61	593,248	123,948	167,803	9,675
112,507	13,985	409,576	15,981	1,661	2,942	17,599	2,469	295	68,189	869	461,618	29,097	48,410	1,672
152.2	268.9	-11.2	-16.7	248.8	-25.9	118.1	44.2	356.1	-7.3	(¹)	34.9	-80.8	-60.6	12.6
317,469	79,717	667,721	59,516	147,532	3,404	111,450	6,731	4,133	77,601	3,951	1,402,068	39,706	79,113	14,683
173,403	22,372	792,008	61,699	37,236	8,295	44,332	1,824	931	100,136	246	893,185	140,540	186,689	15,218
294,402	8,279	247,190	55,925	10,176	652	3,897	2,359	1,163	45,008	1,723	525,547	13,445	44,167	7,860
103,362	3,216	257,390	38,620	2,458	821	6,856	1,669	320	50,337	61	527,700	63,809	139,738	9,489
107,181	730	248,308	15,743	1,115	2,647	1,890	2,469	188	64,576	869	421,538	10,389	26,244	1,825
164.8	157.4	-4.0	-7.0	514.0	-20.6	-43.3	41.3	263.4	-10.9	(¹)	-0.4	-78.9	-68.4	-17.2
17.1	0.5	14.3	2.1	0.6	(²)	0.2	0.1	0.1	2.6	0.1	30.4	0.8	2.6	0.5
6.0	0.2	15.0	2.3	0.1	(²)	0.4	0.1	(²)	2.9	(²)	30.8	3.7	8.2	0.6
302,667	12,344	420,321	58,205	19,482	805	5,905	6,678	2,699	59,955	3,658	955,541	15,939	51,120	10,938
114,487	4,010	518,225	51,094	5,485	1,026	10,071	1,824	630	83,624	246	801,502	65,303	155,943	14,867
5,868	44,972	135,192	844	80,673	568	75,556	47	792	8,173	108	262,774	8,925	17,926	3,008
3,546	11,648	172,695	243	23,452	2,117	30,425	-----	65	3,804	-----	60,793	10,283	19,456	180
414	13,235	154,304	139	546	295	15,709	-----	107	1,993	-----	39,483	7,308	17,504	147
65.5	286.1	-21.7	247.3	244.0	-73.2	148.3	-----	(¹)	114.9	-----	332.2	-13.2	-7.9	(¹)
0.2	1.8	5.4	(²)	3.2	(²)	3.0	(²)	(²)	0.3	(²)	10.5	0.4	0.7	0.1
0.2	0.5	8.4	(²)	1.1	0.1	1.5	-----	(²)	0.2	-----	3.0	0.5	0.9	(²)
8,616	63,876	220,316	980	126,423	1,493	102,933	53	1,143	11,805	112	428,992	11,751	23,290	3,715
4,443	18,069	240,005	289	30,922	7,071	33,864	-----	66	4,179	-----	82,296	12,092	21,712	285
4,334	38	6,528	244	251	-----	(³)	-----	40	3,298	-----	4,406	1,371	2,948	(³)
5,144	-----	1,459	5,528	255	-----	15	-----	35	6,092	-----	1,861	49,451	3,395	6
4,812	-----	6,966	79	-----	-----	-----	-----	-----	1,620	-----	597	11,400	4,662	-----
-15.7	-----	347.4	-95.6	-1.6	-----	(³)	-----	14.3	-45.9	-----	136.8	-97.2	-13.2	(³)
9.5	0.1	14.2	0.5	0.5	-----	(³)	-----	0.1	7.2	-----	9.6	3.0	6.4	(³)
6.6	-----	1.9	7.1	0.3	-----	(²)	-----	(²)	7.8	-----	2.4	63.5	4.4	(²)
5,729	78	12,190	308	589	-----	(³)	-----	95	4,373	-----	6,898	12,016	3,432	(³)
38,645	-----	1,859	10,288	540	-----	65	-----	35	10,354	-----	2,562	62,615	3,717	66
323	2,632	9,202	(³)	529	1,105	2,423	-----	(³)	1,043	(³)	7,858	-----	1,018	-----
8,869	293	16,795	28	107	198	245	-----	40	1,591	-----	2,894	405	5,214	-----
0.2	1.5	5.3	(³)	0.3	0.6	1.4	-----	(³)	0.6	(³)	4.6	-----	0.6	-----
4.57	3,419	14,894	(³)	1,038	1,106	2,378	-----	(³)	1,468	(³)	10,667	-----	1,271	-----
15,928	293	31,919	28	269	198	332	-----	200	1,979	-----	6,825	530	5,317	-----

TABLE 20.—AREA IRRIGATED WITH PUMPED WATER, 1939, 1929, AND 1919; AND AREA WORKS OF ENTERPRISES OPERATING

(For the 17 western States)

ITEM (For definitions and explanations, see text)		TOTAL	Arizona	Arkansas	California	Colorado
PART OF SUPPLY PUMPED						
Area irrigated-----	1939--acres	2,539,312	416,363	706	1,043,539	39,862
	1929--acres	1,848,619	294,156	1,750	1,084,632	12,524
	1919--acres	579,993	218,357	250	171,736	25,773
Increase or decrease (-), 1929-1939-----	percent	37.4	41.5	-59.7	-3.8	218.3
Area works were capable of supplying with water-----	1940--acres	3,354,816	516,149	1,229	1,427,377	53,634
	1930--acres	2,530,903	390,108	2,694	1,503,517	13,284
Supplied from--						
Streams, gravity and pumped--						
Area irrigated-----	1939--acres	1,266,148	47,614	(*)	251,196	24,334
	1929--acres	258,094	53		85,169	2,828
	1919--acres	199,595			60,278	9,430
Increase or decrease (-), 1929-1939-----	percent	390.6	(¹)		194.9	760.5
Proportion of total-----	1939--percent	100.0	3.8	(²)	19.9	1.9
	1929--percent	100.0	(³)		33.0	1.1
Area works were capable of supplying with water-----	1940--acres	1,796,105	56,592	(²)	454,260	36,246
	1930--acres	437,233	70		200,955	3,032
Wells, pumped and flowing--						
Area irrigated-----	1939--acres	20,835	374		5,877	482
	1929--acres	16,798	258		9,761	
	1919--acres	35,685	558		23,561	85
Increase or decrease (-), 1929-1939-----	percent	24.0	45.0		-39.8	
Proportion of total-----	1939--percent	100.0	1.8		28.2	2.3
	1929--percent	100.0	1.5		58.1	
Area works were capable of supplying with water-----	1940--acres	24,850	457		6,757	902
	1930--acres	20,767	438		11,442	
Streams, gravity and wells, pumped--						
Area irrigated-----	1939--acres	1,252,329	368,375	479	786,466	15,046
	1929--acres	1,164,349	292,681		780,960	8,956
	1919--acres	344,713	217,799	250	87,897	16,258
Increase or decrease (-), 1929-1939-----	percent	7.6	25.9		0.7	68.0
Proportion of total-----	1939--percent	100.0	29.4	(³)	62.7	1.2
	1929--percent	100.0	25.1		67.1	0.8
Area works were capable of supplying with water-----	1940--acres	1,533,861	459,100	729	966,360	16,486
	1930--acres	1,507,586	358,891		1,022,726	9,412
Other combinations--						
Area irrigated-----	1939--acres					
	1929--acres	409,378	1,164	1,750	208,742	740
Proportion of total-----	1939--percent					
Area works were capable of supplying with water-----	1940--acres					
	1930--acres	565,317	30,709	2,694	268,394	840
Supplemental from pumped streams ⁴ --						
Area irrigated-----	1939--acres	25,644	(²)	(²)	5,807	8,892
	1929--acres	24,871	80		2,453	527
Proportion of total-----	1939--percent	100.0	(²)	(²)	22.6	34.6
Area works were capable of supplying with water-----	1940--acres	35,357	(²)	(²)	11,002	11,605
	1930--acres	32,787	98		4,046	542
Supplemental from pumped wells ⁴ --						
Area irrigated-----	1939--acres	518,429	15,210	302	355,435	104,309
	1929--acres	293,026	1,592		287,136	1,343
Proportion of total-----	1939--percent	100.0	2.9	0.1	68.5	20.1
Area works were capable of supplying with water-----	1940--acres	693,540	21,452	1,216	484,197	126,120
	1930--acres	321,748	1,595		314,399	2,229
Other mixed ⁵ --						
Area irrigated-----	1939--acres	266,927	6,166	623	50,757	17,398
Proportion of total-----	1939--percent	100.0	2.3	0.2	19.0	6.5
Area works were capable of supplying with water-----	1940--acres	325,947	7,100	1,210	70,627	20,027

¹ Percent not shown when more than 1,000.

² Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

³ Less than one-tenth of 1 percent.

⁴ Areas shown under supplemental pumping are parts of areas shown under primary pumping and therefore are not added again into the totals (see text).

⁵ May include data for enterprises having unsegregated pumped or partly pumped sources and not included in above classifications or totals.

GENERAL DISCUSSION

XLIX

PUMPS WERE CAPABLE OF SUPPLYING WITH WATER, 1940 AND 1930; BY SOURCE OF PUMPED WATER, BY STATES—Continued

and Arkansas and Louisiana)

Idaho	Kansas	Louisiana	Montana	Nebraska	Nevada	New Mexico	North Dakota	Oklahoma	Oregon	South Dakota	Texas	Utah	Washington	Wyoming
215,306	2,516	5,819	147,175	17,833	12,864	84,422	500	-----	136,798	34,913	15,104	159,784	192,740	13,078
170,623	405	1,096	62,824	220	4,740	6,892	-----	-----	75,527	-----	7,331	36,664	89,051	184
2,227	2,190	23,740	20,027	965	5,742	7,897	-----	-----	698	500	2,531	353	96,607	400
26.2	521.2	450.9	134.3	(¹)	171.2	(¹)	-----	-----	81.1	-----	106.0	335.8	116.4	(¹)
240,238	3,345	7,454	229,956	32,167	13,489	127,872	590	-----	172,379	73,749	19,906	193,497	227,826	14,133
206,440	800	1,195	114,194	315	22,884	8,212	-----	-----	91,117	-----	9,041	43,922	122,993	187
174,792	(²)	1,830	145,679	12,814	2,780	70,129	500	-----	132,382	34,913	12,007	151,206	191,824	11,908
76,894	-----	-----	56,970	-----	-----	-----	-----	-----	14,636	-----	3,200	14,200	4,144	-----
1,870	600	12,620	19,872	850	720	-----	-----	-----	253	-----	350	50	92,702	-----
127.3	-----	-----	155.7	-----	-----	-----	-----	-----	804.5	-----	275.2	964.8	(¹)	-----
13.9	(²)	0.1	11.5	1.0	0.2	5.5	(³)	-----	10.5	2.8	0.9	11.9	15.2	0.9
29.8	-----	-----	22.1	-----	-----	-----	-----	-----	5.6	-----	1.2	5.5	1.6	-----
197,391	(²)	2,685	228,320	26,301	2,895	110,675	590	-----	166,279	73,749	15,694	184,225	226,781	12,892
90,212	-----	-----	104,449	-----	-----	-----	-----	-----	14,636	-----	4,700	14,200	4,979	-----
414	(²)	214	-----	-----	237	11,729	-----	-----	-----	-----	1,141	307	-----	-----
50	-----	196	-----	-----	177	5,855	-----	-----	-----	-----	-----	398	103	-----
-----	50	1,075	-----	-----	65	6,556	-----	-----	340	-----	1,727	178	1,490	-----
728.0	-----	9.2	-----	-----	33.9	100.3	-----	-----	-----	-----	-----	-22.9	-----	-----
2.0	(²)	1.0	-----	-----	1.1	56.3	-----	-----	-----	-----	5.5	1.5	-----	-----
0.3	-----	1.2	-----	-----	1.1	34.8	-----	-----	-----	-----	-----	2.4	0.6	-----
419	(²)	393	-----	-----	360	13,704	-----	-----	-----	-----	1,258	428	-----	60
64	-----	220	-----	-----	189	6,879	-----	-----	-----	-----	-----	518	1,017	-----
40,100	2,443	3,775	1,496	5,019	9,837	2,564	-----	-----	4,416	-----	1,956	8,271	916	1,170
72,959	405	-----	2,694	70	2,260	655	-----	-----	994	-----	850	20	708	137
357	1,540	10,045	155	115	4,957	1,341	-----	-----	105	500	454	125	2,415	400
-45.0	503.2	-----	-44.5	(¹)	335.3	291.5	-----	-----	344.3	-----	130.1	(¹)	29.4	754.0
3.2	0.2	0.3	0.1	0.4	0.8	0.2	-----	-----	0.4	-----	0.2	0.7	0.1	0.1
6.3	(³)	-----	0.2	(³)	0.2	(³)	-----	-----	(³)	-----	(³)	(³)	(³)	(³)
42,428	3,183	4,396	1,636	5,866	10,234	3,299	-----	-----	6,100	-----	2,954	8,844	1,045	1,201
90,044	800	-----	4,520	70	17,045	935	-----	-----	1,158	-----	860	20	965	140
20,720	-----	900	3,160	150	2,303	382	-----	-----	59,897	-----	3,281	22,046	84,096	47
26,120	-----	975	5,225	245	5,650	398	-----	-----	75,323	-----	3,481	29,184	116,032	47
552	-----	(²)	304	2,708	-----	(²)	-----	-----	2,424	-----	1,802	(²)	145	2,781
8,915	-----	60	-----	-----	-----	20	-----	-----	7,887	-----	254	75	4,600	-----
2.2	-----	(²)	1.2	10.6	-----	(²)	-----	-----	9.5	-----	7.0	(²)	0.6	10.8
605	-----	(²)	387	3,413	-----	(²)	-----	-----	2,453	-----	2,395	(²)	160	2,830
9,256	-----	1,000	-----	-----	-----	20	-----	-----	11,074	-----	1,700	118	4,933	-----
2,517	13,429	2,429	1	15,548	518	5,031	-----	-----	703	-----	(²)	1,943	850	(²)
120	1,050	200	-----	-----	-----	-----	-----	-----	612	-----	-----	816	157	-----
0.5	2.6	0.5	(³)	3.0	0.1	1.0	-----	-----	0.1	-----	(²)	0.4	0.2	(²)
3,303	18,926	3,985	2	23,750	605	5,775	-----	-----	893	-----	(²)	2,258	854	(²)
128	1,162	650	-----	-----	-----	-----	-----	-----	612	-----	-----	816	157	-----
57,173	146	6,745	12,467	4,680	22,781	23,910	-----	85	17,386	278	8,884	20,272	12,575	4,601
21.5	0.1	2.5	4.7	1.8	8.5	9.0	-----	(⁵)	6.5	0.1	3.3	7.6	4.7	1.7
64,570	288	11,608	13,171	6,766	24,665	31,573	-----	154	19,262	402	12,549	20,811	15,756	5,408