

CENSUS OF IRRIGATION—UNITED STATES SUMMARY

TABLE 17.—ENTERPRISES, AREA IRRIGATED, CAPITAL INVESTED, MAINTENANCE AND OPERATION, AND SOURCE OF WATER SUPPLY; BY SPECIFIED GROUPS OF IRRIGATED

[For the 17 western States]

PRIMARY ENTERPRISES (For definitions and explanations, see text)		TOTAL	IRRIGATED UNITS ¹							
			No units ²	1 unit	2 to 4 units	5 to 24 units	25 to 99 units	100 to 999 units	1,000 units and more	
1	Enterprises, 1940.....number...	80,502	2,227	66,269	6,567	3,572	1,253	561	50	
2	Irrigated units, 1939 ³.....number.....	430,022	.....	66,269	16,297	36,782	59,464	141,640	109,570
3	Area irrigated, 1939.....acres.....	21,003,739	.....	5,832,007	1,244,689	2,371,642	2,769,280	5,448,420	3,337,701
4	(a) From which crops were harvested.....acres.....	18,300,138	.....	4,718,854	1,028,946	1,987,380	2,476,494	5,015,186	3,073,378
5	(b) On which crops failed.....acres.....	259,188	.....	62,352	12,127	40,978	58,729	69,570	15,432
6	(c) Irrigated pasture.....acres.....	2,444,413	.....	1,050,801	203,716	343,264	234,057	363,664	248,891
CAPITAL INVESTMENT, 1940										
7	Total capital investment in all enterprises.....dollars..	963,888,263	12,153,234	140,428,110	27,297,580	65,530,535	96,274,601	385,076,346	237,127,857	
8	(a) Cost of irrigation works and equipment.....dollars..	940,555,592	10,776,306	136,646,774	26,099,164	63,086,538	92,951,928	373,329,096	235,668,786	
9	(b) Investment in water rights.....dollars.....	23,332,671	.....	1,376,928	1,198,416	2,443,997	3,322,673	11,747,250	1,462,071
10	Area works were capable of supplying with water.....acres.....	28,055,248	.....	409,125	7,611,711	1,615,820	3,046,312	3,789,805	7,437,618
11	Average investment per acre irrigated.....dollars.....	45.89	.....	24.08	21.93	21.93	34.77	70.68	71.05
12	Average investment per acre which the works could supply with water.....dollars.....	34.36	29.71	18.45	16.89	21.51	25.41	51.77	57.20	
MAINTENANCE AND OPERATION, AND CHARGES, 1939										
13	Enterprises reporting maintenance and operation.....number...	72,015	1,018	59,859	6,069	3,271	1,195	554	49	
14	(a) Area irrigated in these enterprises.....acres.....	20,193,761	.....	5,365,456	1,161,602	2,234,360	2,701,049	5,433,544	3,297,750
15	(b) Cost of maintenance and operation.....dollars.....	43,172,526	91,948	15,638,217	2,024,941	2,767,493	4,033,704	11,123,017	7,493,206	
16	(c) Average cost per irrigated acre reporting.....dollars.....	2.14	.....	2.91	1.74	1.24	1.49	2.05	2.27
17	Total annual charges ³.....dollars.....	32,876,404	21,597	.....	.....	3,457,516	5,353,930	14,288,661	9,744,700
18	Average charge per irrigated acre reporting.....dollars.....	2.99	.....	.....	.....	1.55	1.97	2.63	2.92
19	Area against which charges were assessed.....acres.....	16,570,704	66,500	.....	.....	2,473,709	3,304,829	6,533,300	4,192,366
20	Average annual charge per acre assessed.....dollars.....	1.96	0.32	.....	.....	1.40	1.62	2.19	2.32
21	Total charges collected ³.....dollars.....	27,552,300	13,127	.....	.....	1,906,794	4,320,177	12,302,456	9,009,806
INDEBTEDNESS AND ARREARAGE, 1939										
22	Enterprises reporting indebtedness ⁴.....number.....	1,329	17	.....	.....	376	525	370	41
23	(a) Area irrigated in these enterprises.....acres.....	8,618,597	.....	.....	.....	436,002	1,448,334	4,274,010	2,460,248
24	(b) Indebtedness.....dollars.....	360,304,925	1,874,967	.....	.....	10,593,203	29,868,739	173,497,174	144,470,842
25	(c) Average indebtedness per acre irrigated.....dollars.....	41.81	.....	.....	.....	24.30	20.62	40.59	58.72
26	(d) Cost of irrigation works and equipment.....dollars.....	625,781,421	5,356,241	.....	.....	26,301,698	65,022,794	320,607,061	208,493,627
27	(e) Investment in water rights.....dollars.....	14,752,904	1,294,798	.....	.....	1,184,475	2,215,890	9,600,122	457,619
28	(f) Total investment.....dollars.....	640,534,325	6,651,039	.....	.....	27,486,173	67,238,684	330,207,183	208,951,246
29	(g) Maintenance and operation.....dollars.....	19,596,943	29,626	.....	.....	802,790	2,924,315	9,142,287	6,697,925
30	(h) Total annual charges ³.....dollars.....	25,711,540	10,209	.....	.....	1,193,575	3,974,369	12,206,033	8,327,354
31	(i) Total charges collected ³.....dollars.....	22,722,525	74,928	.....	.....	881,533	3,306,932	10,600,840	7,858,292
32	(j) Area against which annual charges were assessed.....acres.....	10,810,295	16,760	.....	.....	524,406	1,835,744	5,313,007	3,120,378
33	(k) Average indebtedness per acre assessed.....dollars.....	32.90	7.91	.....	.....	18.92	16.25	32.59	45.58
34	(l) Average charges per acre assessed.....dollars.....	2.38	0.61	.....	.....	2.28	2.16	2.30	2.67
35	(m) Average charges per acre irrigated.....dollars.....	2.99	.....	.....	.....	2.77	2.75	2.86	3.38
36	Enterprises reporting arrearage ⁴.....number.....	187	5	.....	.....	51	65	59	7
37	(a) Area assessed in these enterprises.....acres.....	2,671,635	9,440	.....	.....	64,609	441,594	1,102,196	1,053,796
38	(b) Total arrearage.....dollars.....	30,859,349	446,327	.....	.....	2,811,582	6,396,312	9,545,299	11,659,829
39	(c) Average arrearage per acre assessed.....dollars.....	11.29	6.23	.....	.....	38.73	14.50	8.66	11.06
40	(d) Indebtedness.....dollars.....	143,287,600	1,491,804	.....	.....	5,710,031	14,002,909	69,954,407	52,128,449
TYPE, 1940										
41	Individual and partnership.....number.....	75,179	2,099	65,767	6,250	1,039	23	1	.....
42	Cooperative (incorporated and unincorporated).....number.....	4,155	48	323	262	2,255	949	309	9	
43	Irrigation district.....number.....	410	11	2	3	89	147	135	23	
44	Commercial.....number.....	258	7	26	8	111	61	43	2	
45	U. S. Bureau of Reclamation.....number.....	72	1	1	.....	4	16	38	12
46	U. S. Office of Indian Affairs.....number.....	188	11	32	32	39	41	30	3	
47	All other.....number.....	240	50	118	12	35	16	8	1	
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939										
48	Enterprises reporting pay roll.....number.....	3,833	23	.....	.....	2,108	1,100	552	50
49	Wages and salaries paid and payable for 1939.....dollars.....	15,737,214	605,858	.....	.....	973,553	2,336,236	6,390,466	5,431,101
50	Persons employed during week ending April 29, 1939.....number.....	23,597	527	.....	.....	4,605	5,150	8,484	4,831
SOURCE OF WATER SUPPLY, 1939										
51	Streams, gravity.....number.....	25,726	515	18,434	2,929	2,539	934	354	21	
52	Streams, pumped.....number.....	5,915	277	5,092	317	109	65	46	9	
53	Wells, pumped.....number.....	38,715	1,219	33,998	2,721	630	115	32	.....
54	Wells, pumped and flowing; or wells flowing.....number.....	1,561	23	1,453	70	12	.....	3	.....
55	Lakes, gravity or pumped.....number.....	503	13	426	42	10	8	4	.....
56	Streams and springs; or springs.....number.....	4,427	81	3,943	217	134	44	8	.....
57	Mixed, streams and wells.....number.....	1,472	32	1,078	106	81	62	95	18	
58	Other mixed or stored storm water.....number.....	2,183	67	1,845	165	57	25	22	2	
SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)		TOTAL		IRRIGATED UNITS¹						
				No units ²	1 unit	2 to 4 units	5 to 24 units	25 to 99 units	100 to 999 units	1,000 units and more
1	Enterprises, 1940.....number.....	11,135	805	9,563	552	84	66	53	12	
2	Irrigated units, 1939 ¹.....number.....	61,794	.....	9,563	1,283	1,011	3,514	13,297	33,126
3	Area irrigated, 1939.....acres.....	3,287,210	.....	513,281	67,384	125,186	340,926	882,425	1,358,007
CAPITAL INVESTMENT, 1940										
4	Total capital investment in all enterprises.....dollars.....	88,160,938	4,531,859	14,434,239	1,269,112	1,889,114	7,262,672	26,870,792	31,903,150	
5	(a) Cost of irrigation works and equipment.....dollars.....	85,117,122	4,523,204	14,374,179	1,256,368	1,735,937	6,696,662	24,627,728	31,903,044	
6	(b) Investment in water rights.....dollars.....	3,043,816	8,655	60,060	12,744	153,177	566,010	2,243,064	106	
7	Area works were capable of supplying with water.....acres.....	4,268,994	205,891	636,887	82,063	146,379	393,559	1,110,826	1,692,789	
8	Average investment per acre irrigated.....dollars.....	26.82	.....	28.12	18.83	15.09	21.30	30.45	23.49
9	Average investment per acre which the works could supply with water.....dollars.....	20.65	22.01	22.66	15.47	12.91	18.45	24.19	18.85	

¹Schedules called for "Number of farms," see explanation in text.

²Relates to enterprises reporting no irrigation in 1939 but having works capable of supplying water in 1940.

³Annual charges, reported only by enterprises serving 5 or more units, may include for these enterprises costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

CENSUS OF IRRIGATION—UNITED STATES SUMMARY

TABLE 17.—ENTERPRISES, AREA IRRIGATED, CAPITAL INVESTED, MAINTENANCE AND OPERATION, AND SOURCE OF WATER SUPPLY; BY SPECIFIED GROUPS OF IRRIGATED

[For the 17 western States

	SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)	TOTAL	IRRIGATED UNITS ¹						
			No units ²	1 unit	2 to 4 units	5 to 24 units	25 to 99 units	100 to 999 units	1,000 units and more
MAINTENANCE AND OPERATION, AND CHARGES, 1939									
10	Enterprises reporting maintenance and operation.....number...	10,089	180	9,181	525	80	63	50	10
11	(a) Area irrigated in these enterprises.....acres.....	2,953,963	.....	491,729	64,812	122,707	314,907	851,721	1,138,087
12	(b) Cost of maintenance and operation.....dollars.....	2,828,094	20,246	1,754,675	146,409	32,625	147,767	375,009	351,363
13	(c) Average cost per irrigated acre reporting.....dollars.....	0.95	.....	3.57	2.26	0.27	0.47	0.44	0.31
14	Total annual charges ³.....dollars.....	1,408,263	5,420	.....	.....	52,048	206,940	808,165	335,690
15	Average charge per irrigated acre reporting.....dollars.....	0.60	.....	.....	.....	0.43	0.73	0.99	0.30
16	Area against which charges were assessed.....acres.....	2,592,476	20,465	.....	.....	126,982	299,625	1,008,162	1,137,242
17	Average annual charge per acre assessed.....dollars.....	0.54	0.26	.....	.....	0.41	0.69	0.80	0.30
18	Total charges collected ³.....dollars.....	1,148,062	23,584	.....	.....	48,451	177,673	513,987	384,367
INDEBTEDNESS AND ARREARAGE, 1939									
19	Enterprises reporting indebtedness ⁴.....number.....	90	4	.....	.....	17	31	30	8
20	(a) Area irrigated in these enterprises.....acres.....	1,992,609	.....	.....	.....	39,172	222,570	558,134	1,172,733
21	(b) Indebtedness.....dollars.....	26,335,949	2,139,073	.....	.....	254,414	2,796,396	9,044,012	12,101,454
22	(c) Average indebtedness per acre irrigated.....dollars.....	13.22	.....	.....	.....	6.49	12.56	16.20	10.32
23	(d) Cost of irrigation works and equipment.....dollars.....	52,755,167	2,448,925	.....	.....	620,477	5,023,076	16,406,996	28,255,693
24	(e) Investment in water rights.....dollars.....	2,672,198	2,257	.....	.....	127,133	551,435	1,991,267	106
25	(f) Total investment.....dollars.....	55,427,365	2,451,182	.....	.....	747,610	5,574,511	18,398,263	28,255,799
26	(g) Maintenance and operation.....dollars.....	617,924	4	.....	.....	7,572	81,795	263,522	265,031
27	(h) Total annual charges ⁵.....dollars.....	1,064,346	5,240	.....	.....	26,490	129,507	650,819	252,290
28	(i) Total charges collected ³.....dollars.....	1,000,936	22,482	.....	.....	31,148	119,381	448,568	379,367
29	(j) Area against which annual charges were assessed.....acres.....	1,975,639	17,465	.....	.....	39,172	206,375	694,885	1,017,742
30	(k) Average indebtedness per acre assessed.....dollars.....	11.63	3.54	.....	.....	6.30	11.80	12.89	11.08
31	(l) Average charges per acre assessed.....dollars.....	0.54	0.30	.....	.....	0.68	0.63	0.94	0.25
32	(m) Average charges per acre irrigated.....dollars.....	0.67	.....	.....	.....	0.70	0.67	1.26	0.25
33	Enterprises reporting arrearage ⁶.....number.....	15	2	.....	.....	3	4	6	.....
34	(a) Area assessed in these enterprises.....acres.....	222,483	(⁶)	.....	.....	4,506	14,200	186,312	.....
35	(b) Total arrearage.....dollars.....	220,936	(⁶)	.....	.....	6,100	66,969	138,167	.....
36	(c) Average arrearage per acre assessed.....dollars.....	0.93	(⁶)	.....	.....	1.35	4.22	0.74	.....
37	(d) Indebtedness.....dollars.....	4,604,073	(⁶)	.....	.....	12,900	282,840	3,401,439	.....
TYPE, 1940									
38	Individual and partnership.....number.....	10,871	786	9,530	540	14	.....	1	.....
39	Cooperative (incorporated and unincorporated).....number.....	201	13	32	12	60	49	34	1
40	Irrigation district.....number.....	17	2	.....	.....	4	6	4	1
41	Commercial.....number.....	17	2	.....	.....	5	5	4	1
42	U. S. Bureau of Reclamation.....number.....	25	1	1	.....	.....	6	9	8
43	U. S. Office of Indian Affairs.....number.....	.....	.....	.....	.....	.....	.....	.....	.....
44	All other.....number.....	4	1	.....	.....	1	.....	1	1
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939									
45	Enterprises reporting pay roll.....number.....	166	10	.....	.....	52	54	46	4
46	Wages and salaries paid and payable for 1939.....dollars.....	334,308	58,683	.....	.....	11,887	57,306	173,999	32,433
47	Persons employed during week ending April 29, 1939.....number.....	409	34	.....	.....	60	110	186	19
SOURCE OF SUPPLEMENTAL WATER SUPPLY, 1939									
48	Streams, pumped.....number.....	231	26	197	5	1	1	1	.....
49	Wells, pumped or flowing.....number.....	10,186	736	9,000	430	15	3	2	.....
50	Streams, gravity or storage.....number.....	718	43	366	117	68	62	50	12

¹ Schedules called for "Number of farms," see explanation in text.

² Relates to enterprises reporting no irrigation in 1939 but having works capable of supplying water in 1940.

³ Annual charges, reported only by enterprises serving 5 or more units, may include for these enterprises costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

CENSUS OF IRRIGATION—UNITED STATES SUMMARY

CHARGES, INDEBTEDNESS AND ARREARAGE, TYPE OF ENTERPRISE, PAY ROLL, NUMBER OF EMPLOYEES, UNITS,¹ AREAS IRRIGATED, AND COST OF WORKS: CENSUS OF 1940—Continued

and Arkansas and Louisiana]

ACRES IRRIGATED							COST OF IRRIGATION WORKS AND EQUIPMENT					
No acres ²	1 to 99 acres	100 to 299 acres	300 to 1,799 acres	1,800 to 7,499 acres	7,500 to 74,999 acres	75,000 acres and more	Less than \$5,000	\$5,000 to \$14,999	\$15,000 to \$99,999	\$100,000 to \$1,499,999	\$1,500,000 to \$9,999,999	
160	6,319	1,208	280	67	49	6	9,491	405	126	58	9	10
.....	261,430	189,692	150,921	242,672	997,549	1,141,699	506,096	157,569	250,743	1,011,397	1,058,136	11
20,246	1,068,809	548,143	380,163	149,063	369,763	291,867	1,461,291	306,406	267,061	512,033	279,303	12
.....	4.09	2.89	18.52	0.61	0.37	0.26	2.69	1.96	1.07	0.51	0.26	13
5,420	1,445	8,246	122,207	207,405	794,543	268,997	12,433	23,742	183,373	877,905	310,750	14
.....	5.25	2.93	2.58	0.95	0.84	0.24	0.39	0.38	0.32	0.89	0.29	15
20,465	275	3,961	71,162	229,800	1,125,094	1,141,699	33,623	70,649	246,569	1,160,694	1,060,521	16
0.26	5.25	2.07	1.72	0.90	0.71	0.24	0.37	0.34	0.74	0.76	0.29	17
23,584	1,545	10,033	106,164	163,653	677,428	165,635	4,679	19,496	129,911	544,173	449,603	18
4	.....	5	18	25	32	6	4	9	26	42	9	19
.....	743	15,849	104,816	104,816	679,626	1,191,575	2,022	14,315	93,969	672,110	1,210,173	20
2,139,073	7,310	289,099	1,937,977	1,937,977	15,670,895	6,290,895	2,652	7,622	479,663	13,245,862	12,569,530	21
.....	9.84	18.24	18.49	23.06	5.28	5.28	1.31	0.53	5.10	19.71	10.41	22
2,446,925	54,226	943,563	4,023,421	23,367,139	21,917,893	12,201	89,276	1,263,957	21,355,210	30,034,523	30,034,523	23
2,257	.....	126,225	178,059	2,097,657	268,000	122,550	100	53,307	2,496,241	.....	.....	24
2,451,182	54,226	1,069,788	4,201,480	25,464,796	22,185,893	134,751	89,376	1,317,264	23,851,451	30,034,523	30,034,523	25
4	.....	2,741	66,062	67,792	247,810	213,515	1,280	3,582	39,995	305,571	267,496	26
5,240	.....	2,411	65,843	129,003	673,252	188,597	1,068	3,704	71,135	689,495	298,944	27
22,482	.....	2,545	66,443	122,290	620,374	164,802	1,161	5,507	66,374	478,291	449,603	28
17,465	.....	643	22,907	97,554	807,371	1,029,699	3,312	13,315	97,034	791,296	1,070,692	29
3.54	.....	8.26	7.84	17.94	19.22	5.30	0.31	3.47	3.69	13.65	10.99	30
0.30	.....	3.75	2.87	1.32	0.83	0.18	0.32	0.28	0.73	0.87	0.28	31
.....	.....	4.44	4.77	1.42	1.08	0.18	0.21	0.72	1.06	1.11	0.29	32
2	.....	5	1	6	5	.....	.....	5	9	.....	.....	33
(6)	.....	143	1,508	22,698	180,469	.....	.....	143	23,828	198,512	.....	34
(6)	.....	2,400	700	83,219	114,917	.....	.....	2,400	14,400	204,136	.....	35
(6)	.....	16.78	0.46	3.77	0.64	.....	.....	16.78	0.31	0.99	.....	36
(6)	.....	2,400	7,500	1,206,840	2,478,439	.....	.....	2,400	84,144	4,517,529	.....	37
786	8,656	1,214	209	5	1	.....	10,418	380	68	5	.....	38
13	22	31	61	48	25	1	66	53	54	27	1	39
2	.....	.....	2	5	8	.....	.....	2	7	8	.....	40
2	.....	1	2	6	6	.....	1	2	5	8	1	41
1	1	.....	1	5	11	6	1	.....	1	14	9	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
1	.....	.....	.....	1	2	.....	.....	.....	2	2	.....	44
10	.....	12	48	51	42	3	21	32	58	49	6	45
58,663	.....	1,194	30,676	62,196	168,887	12,672	3,429	7,720	56,880	206,862	57,417	46
34	.....	8	106	76	173	12	16	54	90	219	26	47
26	172	23	6	3	1	.....	217	9	3	2	.....	48
736	8,190	1,078	179	3	.....	.....	9,745	369	67	5	.....	49
43	317	145	90	64	52	7	524	59	67	57	11	50

¹ Indebtedness and arrearage were reported only by enterprises serving 5 or more units.
² Data for less than 3 enterprises shown with permission of the enterprise involved.
³ Data are included only in total because less than 3 enterprises reported in the 1940 Irrigation Census.