

CENSUS OF IRRIGATION — IDAHO

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND
AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

		COLUMBIA RIVER			
				Snake River	
				Upper Snake River	
				Total	
ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		STATE TOTAL ¹	Total	Total	Total
IRRIGATED FARMS AND AREAS					
1	Irrigated farms.....1939..number.....	42,343	38,005	37,328	10,234
2	Area irrigated.....1939..acres.....	2,277,857	2,038,177	2,030,929	634,039
3	(a) Cropland harvested.....1939..acres.....	2,025,435	1,817,359	1,810,546	582,383
4	(b) Crop failure.....1939..acres.....	12,448	8,533	8,503	1,358
5	(c) Pasture.....1939..acres.....	238,974	212,265	211,880	50,298
6	Area irrigated.....1929..acres.....	2,181,250	1,937,872	1,929,886	
7	1919..acres.....	2,488,806	2,164,787	2,159,781	
8	Increase or decrease (-), 1929-1939.....percent.....	4.4	5.2	5.2	
9	Irrigable area in enterprises.....1940..acres.....	2,870,023	2,565,086	2,554,495	750,794
10	1930..acres.....	2,814,048	2,459,718	2,446,391	
11	1920 ² ..acres.....	3,780,048	3,104,993	3,092,104	
12	Excess of irrigable area over the area irrigated..1940..acres.....	592,166	526,919	523,566	116,755
13	1930..acres.....	632,798	521,846	516,505	
14	1920 ² ..acres.....	1,291,242	940,206	932,373	
15	Area works were capable of supplying with water...1940..acres.....	2,593,534	2,309,183	2,299,385	723,022
16	1930..acres.....	2,617,021	2,271,846	2,259,240	
17	1920..acres.....	3,092,810	2,662,693	2,655,248	
18	Increase or decrease (-), 1930-1940.....percent.....	-0.9	1.6	1.8	
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	315,677	271,006	268,456	88,983
20	1930..acres.....	435,771	333,974	329,354	
21	1920..acres.....	604,004	498,046	495,517	
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	87.8	88.3	88.3	87.7
23	1929..percent.....	83.3	85.3	85.4	
24	1919..percent.....	80.5	81.3	81.3	
CAPITAL INVESTED TO JANUARY 1					
25	Total investment in irrigation enterprises.....1940..dollars....	102,565,798	97,488,128	96,777,781	20,077,436
26	(a) Cost of irrigation works and equipment.....1940..dollars....	100,989,161	96,097,763	95,390,396	19,864,325
27	(b) Investment in water rights (reported).....1940..dollars....	1,596,637	1,390,365	1,387,385	213,111
28	Total investment in irrigation enterprises.....1930..dollars....	84,500,354	79,649,767	78,773,614	6,415,940
29	1920..dollars....	91,501,009	84,344,396	83,740,542	10,359,346
30	Increase or decrease (-), 1930-1940.....percent.....	21.4	22.4	22.9	212.9
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	39.55	42.22	42.09	27.77
32	1930..dollars....	32.29	35.06	34.87	12.69
33	1920..dollars....	29.59	31.67	31.47	17.31
34	Average investment per acre irrigated.....1939..dollars....	45.04	47.83	47.65	31.67
35	Estimated final investment in existing enterprises..1940..dollars....	109,513,311	104,302,195	103,579,513	20,549,296
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars....	38.16	40.66	40.55	27.37
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
		Primary	Sup.	Primary	Sup.
		Enterprises		Enterprises	
37	Enterprises reporting maintenance and operation...1939..number.....	2,986	155	2,571	134
38	Area irrigated in these enterprises.....1939..acres.....	2,219,466	889,254	1,990,706	885,352
39	Cost of maintenance and operation.....1939..dollars....	2,266,798	202,690	2,093,332	201,696
40	Average cost, per acre irrigated.....1939..dollars....	1.02	0.23	1.05	0.23
41	Total annual charges (reported) ⁴ 5.....1939..dollars....	2,461,470	184,534	2,275,524	184,090
42	Average annual charge per acre irrigated.....1939..dollars....	1.25	0.21	1.28	0.21
43	Area against which charges were assessed.....1939..acres.....	2,141,909	885,270	1,918,173	883,365
44	Average annual charge per acre assessed.....1939..dollars....	1.15	0.21	1.19	0.21
45	Total charges collected ⁴.....1939..dollars....	2,635,522	67,069	2,467,798	66,635
46	Indebtedness to December 31 (reported) ⁵.....1939..dollars....	23,488,279	2,929,859	23,050,120	2,929,859
WATER DELIVERED TO IRRIGATORS, 1939					
47	Enterprises reporting water delivered.....1939..number.....	2,852	138	2,414	116
48	Area irrigated by these enterprises.....1939..acres.....	2,034,989	896,000	1,812,319	893,106
49	Water delivered.....1939..acre-feet.....	8,356,951	1,042,271	7,804,257	1,039,676
50	Average water delivered per acre irrigated.....1939..acre-feet.....	4.1	1.2	4.3	1.2
51	Average cost of water per acre irrigated.....1939..dollars....	1.16	0.21	1.19	0.21
52	Average cost of water per acre-foot delivered..1939..dollars....	0.28	0.18	0.28	0.18
DRAINAGE OF IRRIGATED LAND					
53	Enterprises reporting land drained or needing drainage.....1939..number.....	192		172	
54	Irrigable area in these enterprises.....1939..acres.....	943,910		917,668	
55	Irrigated area in these enterprises.....1939..acres.....	731,717		706,750	
56	Area for which drains have been installed.....1939..acres.....	238,907		238,582	
57	Additional area needing drainage.....1939..acres.....	29,042		22,798	

¹Data for unidentified independent basins for the 1930 and 1920 Censuses are included only in State total.²For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.³Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

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⁵Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION — IDAHO

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		COLUMBIA RIVER—Continued				
		Snake River—Continued				
		Upper Snake River—Continued			Lower Snake River	
		Blackfoot River (7)	Portneuf River (8)	Bannock Creek (9)	Total	Direct (10)
IRRIGATED FARMS AND AREAS						
1	Irrigated farms.....1939..number....	1,009	643	63	27,094	11,039
2	Area irrigated.....1939..acres.....	45,623	25,372	1,393	1,396,690	632,699
3	(a) Cropland harvested.....1939..acres.....	38,823	21,512	1,303	1,228,163	609,858
4	(b) Crop failure.....1939..acres.....	160	907	.....	7,145	1,363
5	(c) Pasture.....1939..acres.....	6,650	2,953	90	161,582	21,478
6	Area irrigated.....1929..acres.....	45,167	41,774	.....	.....	.....
7	.....1919..acres.....	53,910	37,996	.....	.....	.....
8	Increase or decrease (-), 1929-1939.....percent....	1.0	-39.3	.....	.....	.....
9	Irrigable area in enterprises.....1940..acres.....	77,440	30,793	4,713	1,803,701	801,868
10	.....1930..acres.....	81,163	58,646	.....	.....	.....
11	.....1920..acres.....	77,255	75,823	.....	.....	.....
12	Excess of irrigable area over the area irrigated.....1940..acres.....	31,817	5,421	3,320	406,811	169,137
13	.....1930..acres.....	36,006	17,072	.....	.....	.....
14	.....1920..acres.....	23,345	37,927	.....	.....	.....
15	Area works were capable of supplying with water.....1940..acres.....	76,610	30,056	1,813	1,576,363	695,674
16	.....1930..acres.....	78,943	48,718	.....	.....	.....
17	.....1920..acres.....	60,225	59,270	.....	.....	.....
18	Increase or decrease (-), 1930-1940.....percent....	-3.0	-38.3	.....	.....	.....
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	30,987	4,684	420	179,473	63,975
20	.....1930..acres.....	33,786	6,944	.....	.....	.....
21	.....1920..acres.....	6,315	21,274	.....	.....	.....
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	59.6	84.4	76.8	88.6	90.8
23	.....1929..percent....	57.2	85.7	.....	.....	.....
24	.....1919..percent....	89.5	64.1	.....	.....	.....
CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises.....1940..dollars....	2,230,384	568,835	30,752	76,700,345	39,855,702
26	(a) Cost of irrigation works and equipment.....1940..dollars....	2,213,258	539,421	30,450	75,526,071	39,817,437
27	(b) Investment in water rights (reported).....1940..dollars....	17,116	29,414	302	1,174,274	38,265
28	Total investment in irrigation enterprises.....1930..dollars....	1,792,321	628,201	.....	.....	.....
29	.....1920..dollars....	1,022,276	1,141,528	.....	.....	.....
30	Increase or decrease (-), 1930-1940.....percent....	24.4	-9.6	.....	.....	.....
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	29.11	18.93	16.96	48.56	57.21
32	.....1930..dollars....	22.70	12.92	.....	.....	.....
33	.....1920..dollars....	16.97	19.26	.....	.....	.....
34	Average investment per acre irrigated.....1939..dollars....	48.89	22.42	22.08	54.91	62.90
35	Estimated final investment in existing enterprises.....1940..dollars....	2,537,264	649,930	70,752	83,030,217	40,852,797
36	investment and irrigable area, per acre.....1940..dollars....	32.76	21.11	15.01	46.03	50.95
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
		Primary		Sup.	Primary	
		Enterprises		Enterprises	Enterprises	
37	Enterprises reporting maintenance and operation.....1939..number....	25	116	4	7	111
38	Area irrigated in these enterprises.....1939..acres.....	44,877	24,028	195	1,263	1,367,632
39	Cost of maintenance and operation.....1939..dollars....	52,145	21,553	178	505	1,657,779
40	Average cost, per acre irrigated.....1939..dollars....	1.16	0.90	0.91	0.40	1.21
41	Total annual charges (reported) ³.....1939..dollars....	21,892	21,105	196	1,753,268	166,550
42	Average annual charge per acre irrigated.....1939..dollars....	0.56	1.07	0.30	1.47	0.34
43	Area against which charges were assessed.....1939..acres.....	40,192	20,722	655	1,302,341	481,599
44	Average annual charge per acre assessed.....1939..dollars....	0.54	1.02	0.30	1.35	0.34
45	Total charges collected ³.....1939..dollars....	3,520	18,159	.....	1,989,416	48,563
46	Indebtedness to December 31 (reported) ⁴.....1939..dollars....	1,909,634	34,257	23,840	19,873,645	169,198
WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered.....1939..number....	26	121	4	10	1,825
48	Area irrigated by these enterprises.....1939..acres.....	45,423	20,902	195	1,393	1,206,380
49	Water delivered.....1939..acre-feet....	175,576	44,434	367	4,795	4,717,687
50	Average water delivered per acre irrigated.....1939..acre-feet....	3.9	2.1	1.9	3.4	3.9
51	Average cost of water per acre irrigated.....1939..dollars....	0.51	1.11	0.91	0.40	1.33
52	Average cost of water per acre-foot delivered.....1939..dollars....	0.13	0.52	0.49	0.12	0.34
DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage.....1939..number....	2	5	.....	132	18
54	Irrigable area in these enterprises.....1939..acres.....	(5)	2,902	.....	833,812	438,122
55	Irrigated area in these enterprises.....1939..acres.....	(5)	2,762	.....	642,915	335,140
56	Area for which drains have been installed.....1939..acres.....	.....	20	.....	228,894	55,920
57	Additional area needing drainage.....1939..acres.....	(5)	534	.....	16,863	2,542

¹ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.² Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION—IDAHO

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IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE
IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

COLUMBIA RIVER—Continued													
Snake River—Continued													
Lower Snake River—Continued													
Raft River (11)	Goose Creek (12)	Salmon Falls Creek (13)	Little and Big Wood Rivers			Bruneau River (16)	Boise River						
			Total (14)	Direct (15)	Total (17)		Direct (18)						
156	307	281	1,550	1,480	70	138	8,585	8,499					
11,938	17,977	23,719	89,354	80,012	9,342	12,536	314,381	309,657					
10,557	16,969	22,951	82,321	73,261	9,060	11,175	249,236	245,740					
60	85	160	590	590	.....	96	4,006	3,938					
1,321	922	608	6,443	6,161	282	1,265	61,139	59,979					
8,935	18,128	28,847	103,149	103,149	.....	18,042	318,496	.....				
23,620	.....	41,330	147,901	147,901	.....	21,301	328,395	.....				
33.6	-0.8	-17.8	-13.4	-22.4	.....	-30.5	-1.3	.....				
17,388	20,153	39,306	120,375	109,703	10,672	13,138	428,566	421,817					
31,135	24,191	36,977	184,634	184,634	.....	22,836	378,757	.....				
42,906	.....	87,260	301,682	301,682	.....	35,043	388,313	.....				
5,480	2,176	15,587	31,021	29,691	1,330	602	114,185	112,160					
22,200	6,065	8,130	81,485	81,485	.....	4,704	60,261	.....				
19,286	.....	45,930	153,761	153,761	.....	13,742	59,918	.....				
13,553	18,941	39,174	109,889	99,217	10,672	12,842	355,301	348,770					
18,115	24,191	36,977	139,451	139,451	.....	21,651	329,322	.....				
26,436	.....	49,920	233,972	233,972	.....	23,511	368,654	.....				
-25.2	-21.7	5.9	-21.2	-28.9	.....	-40.7	7.9	.....				
1,615	904	15,455	20,535	19,205	1,330	306	40,920	39,113					
9,180	6,065	8,130	36,302	36,302	.....	3,609	10,826	.....				
2,816	.....	8,590	86,071	86,071	.....	2,210	40,459	.....				
88.1	94.9	60.5	81.3	80.6	87.5	97.6	88.5	88.8					
49.3	74.9	78.0	74.0	74.0	.....	83.3	96.7	.....				
89.3	.....	82.8	83.2	83.2	.....	90.6	89.0	.....				
132,992	1,849,793	2,756,981	6,187,877	6,125,462	62,415	142,184	18,593,172	18,547,735					
129,304	1,599,467	2,556,821	6,183,924	6,122,529	61,395	141,113	18,365,927	18,320,937					
3,686	250,326	200,160	3,953	2,933	1,020	1,071	227,245	226,798					
17,460	1,507,220	2,517,550	10,504,183	10,504,183	.....	523,454	16,135,214	.....				
100,828	.....	4,152,745	6,411,832	6,411,832	.....	532,745	16,013,734	.....				
681.7	22.7	9.5	-41.1	-41.7	.....	-72.8	15.2	.....				
9.81	97.66	70.38	56.31	61.74	5.85	11.07	52.33	53.18					
0.96	62.30	68.08	75.33	75.33	.....	24.13	49.00	.....				
3.82	.....	89.19	27.40	27.40	.....	22.66	43.41	.....				
11.14	102.90	110.24	69.25	76.56	6.68	11.34	59.14	59.90					
272,177	1,850,293	2,760,281	6,495,367	6,427,852	67,415	143,484	21,244,224	21,195,437					
15.65	91.81	70.23	53.96	58.59	6.32	10.92	49.57	60.25					
39	17	15	Primary	Sup.	41	19	Primary	Sup.	242	73	164	72	
			Enterprises				Enterprises						Enterprises
10,115	17,240	23,599	80,923	(2)	73,851	(2)	7,072	11,532	(2)	310,927	121,220	306,255	121,178
4,976	10,183	20,612	65,385	(2)	63,060	(2)	2,325	8,670	(2)	384,692	160,782	380,867	160,772
0.49	0.59	0.87	0.61	(2)	0.85	(2)	0.33	0.75	(2)	1.24	1.33	1.24	1.33
2,988	11,368	22,750	90,708	2,500	89,008	2,500	1,700	6,093	.....	362,618	142,718	362,618	142,718
0.42	0.72	1.14	1.21	1.00	1.25	1.00	0.42	1.35	.....	1.20	1.20	1.20	1.20
7,221	16,313	35,000	91,478	4,500	87,478	4,500	4,000	4,900	.....	326,788	118,975	326,788	118,975
0.41	0.70	0.65	0.99	0.66	1.02	0.66	0.42	1.24	.....	1.11	1.20	1.11	1.20
2,897	10,001	21,017	93,877	3,533	91,877	3,533	1,700	3,534	.....	677,114	22,772	677,114	22,772
25	.....	.....	2,042,275	1,050	2,042,275	1,050	.....	.....	.....	9,681,864	112,148	9,681,864	112,148
36	14	15	Primary	Sup.	39	20	Primary	Sup.	225	55	148	54	
			Enterprises				Enterprises						Enterprises
7,410	16,765	23,541	59,528	(2)	52,635	(2)	6,891	9,095	148	293,155	121,372	288,994	121,321
16,394	36,404	52,383	222,304	(2)	215,355	(2)	6,940	9,537	198	1,188,498	121,388	1,179,302	121,345
2.2	2.2	3.7	4.1	(2)	4.1	(2)	1.0	1.0	1.3	4.0	4.1	4.1	1.0
0.65	0.70	1.04	0.84	(2)	0.91	(2)	0.35	0.87	1.62	1.21	1.19	1.22	1.19
0.30	0.32	0.47	0.22	(2)	0.22	(2)	0.34	0.54	1.13	0.30	1.19	0.30	1.19
.....
.....	(2)	48	46
.....	(2)	342,637	342,610
.....	(2)	282,429	282,158
.....	147,606	147,606
.....	7,793	7,668
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³Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

⁴Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - IDAHO

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND
AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		COLUMBIA RIVER—Continued							
		Snake River—Continued							
		Lower Snake River—Continued							
		Boise River—Continued			Owyhee River				
		North Fork Boise River (18)	South Fork Boise River (19)	Moore Creek (20)	Total	Direct (21)	South Fork Owyhee River		
						Total	Direct	East Fork Owyhee River (23)	
IRRIGATED FARMS AND AREAS									
1	Irrigated farms.....1939..number.....	7	58	21	81	12	24	20	
2	Area irrigated.....1939..acres.....	149	3,745	830	12,020	987	5,990	5,820	
3	(a) Cropland harvested.....1939..acres.....	137	2,563	776	8,701	729	3,685	3,795	
4	(b) Crop failure.....1939..acres.....		64	4	275		275	205	
5	(c) Pasture.....1939..acres.....	12	1,098	50	3,044	258	1,820	1,820	
6	Area irrigated.....1929..acres.....				8,250				
7	.....1919..acres.....				10,903			
8	Increase or decrease (-), 1929-1939.....percent.....				45.7				
9	Irrigable area in enterprises.....1940..acres.....	248	5,548	953	13,020	1,064	6,307	6,137	
10	.....1930..acres.....				20,623			
11	.....1920 ¹ ..acres.....				17,241			
12	Excess of irrigable area over the area irrigated.....1940..acres.....	99	1,803	123	1,000	77	317	317	
13	.....1930..acres.....				12,373			
14	.....1920 ¹ ..acres.....				6,338			
15	Area works were capable of supplying with water.....1940..acres.....	243	5,364	924	12,582	1,049	6,297	6,127	
16	.....1930..acres.....				8,878			
17	.....1920..acres.....				11,760			
18	Increase or decrease (-), 1930-1940.....percent.....				41.7				
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	94	1,619	94	562	62	307	307	
20	.....1930..acres.....				828			
21	.....1920..acres.....				857			
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	61.3	69.8	89.8	95.5	94.1	95.1	95.0	
23	.....1929..percent.....				92.9			
24	.....1918..percent.....				92.7			
CAPITAL INVESTED TO JANUARY 1									
25	Total investment in irrigation enterprises.....1940..dollars.....	1,480	31,446	12,511	154,510	12,600	85,800	80,600	
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	1,420	31,145	12,425	151,785	12,600	84,000	78,800	
27	(b) Investment in water rights (reported).....1940..dollars.....	60	301	86	2,725		1,800	1,800	
28	Total investment in irrigation enterprises.....1930..dollars.....				98,552				
29	.....1920..dollars.....				64,467			
30	Increase or decrease (-), 1930-1940.....percent.....				56.6				
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	6.09	5.86	13.54	12.28	12.01	13.63	13.15	
32	.....1930..dollars.....				11.11			
33	.....1920..dollars.....				5.48			
34	Average investment per acre irrigated.....1939..dollars.....	9.93	8.40	15.07	12.65	12.77	14.32	13.55	
35	Estimated final investment in existing enterprises.....1940..dollars.....	1,480	31,596	15,711	155,510	12,600	86,800	81,600	
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	5.97	5.70	16.48	11.94	11.84	13.76	13.30	
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS			Primary	Sup.					
			Enterprises						
37	Enterprises reporting maintenance and operation.....1939..number.....	6	55	1	17	73	11	20	
38	Area irrigated in these enterprises.....1939..acres.....	137	3,737	(²)	798	11,765	987	5,830	
39	Cost of maintenance and operation.....1939..dollars.....	147	3,133	(²)	545	7,700	665	2,710	
40	Average cost, per acre irrigated.....1939..dollars.....	1.07	0.84	(²)	0.68	0.65	0.67	0.46	
41	Total annual charges (reported) ³.....1939..dollars.....								
42	Average annual charge per acre irrigated.....1939..dollars.....								
43	Area against which charges were assessed.....1939..acres.....								
44	Average annual charge per acre assessed.....1939..dollars.....								
45	Total charges collected ³.....1939..dollars.....								
46	Indebtedness to December 31 (reported) ⁴.....1939..dollars.....								
WATER DELIVERED TO IRRIGATORS, 1939									
47	Enterprises reporting water delivered.....1939..number.....	5	52	1	20	75	11	21	
48	Area irrigated by these enterprises.....1939..acres.....	83	3,248	(²)	830	11,850	987	5,890	
49	Water delivered.....1939..acre-feet.....	186	5,369	(²)	1,639	20,858	2,242	8,700	
50	Average water delivered per acre irrigated.....1939..acre-feet.....	2.2	1.7	(²)	2.0	1.8	2.3	1.5	
51	Average cost of water per acre irrigated.....1939..dollars.....	1.23	0.91	(²)	0.68	0.65	0.67	0.46	
52	Average cost of water per acre-foot delivered.....1939..dollars.....	0.55	0.55	(²)	0.35	0.37	0.30	0.31	
DRAINAGE OF IRRIGATED LAND									
53	Enterprises reporting land drained or needing drainage.....1939..number.....	(²) 1	(²) 1						
54	Irrigable area in these enterprises.....1939..acres.....	(²)	(²)						
55	Irrigated area in these enterprises.....1939..acres.....	(²)	(²)						
56	Area for which drains have been installed.....1939..acres.....	(²)	(²)						
57	Additional area needing drainage.....1939..acres.....	(²)	(²)						

¹For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.²Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION—IDAHO

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IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE
IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

COLUMBIA RIVER—Continued												
Snake River—Continued												
Lower Snake River—Continued												
Owyhee River—Con.	Payette River				Weiser River	Salmon River						
Jordan Creek (24)	Total	Direct	North Fork Payette River (26)	South Fork Payette River (27)	(28)	Total	Upper Salmon River					
		(25)					Total	Total				
45	2,511	2,124	345	42	864	1,049	676	1				
5,043	133,704	85,668	45,137	2,909	31,281	112,824	85,975	2				
4,077	101,598	74,670	24,191	2,737	29,746	80,676	65,877	3				
966	96	86	10	10	15	366	364	4				
122,468	32,010	10,902	20,946	162	1,520	31,782	19,744	5				
123,072	122,468				33,422	93,818		6				
9.2	123,072				68,869	115,108		7				
					-6.4	20.3		8				
5,649	173,018	119,426	50,626	2,966	39,173	131,014	102,488	9				
	141,797				42,326	116,341		10				
	165,142				79,625	224,527		11				
606	39,314	33,768	5,489	57	7,892	18,190	16,513	12				
	19,329				8,904	22,523		13				
	42,070				21,056	109,419		14				
5,236	149,398	96,837	49,595	2,966	33,268	130,111	101,820	15				
	139,485				40,939	110,064		16				
	117,011				69,719	163,036		17				
	7.1				-18.7	18.2		18				
193	15,604	11,179	4,458	57	1,987	17,287	15,845	19				
	17,027				7,517	16,246		20				
					10,849	47,928		21				
96.3	89.5	88.5	91.0	96.1	94.0	88.7	84.4	22				
	87.8				81.6	85.2		23				
					84.4	70.6		24				
56,110	4,509,126	4,116,404	369,667	24,055	1,303,656	789,069	579,337	25				
55,185	4,395,332	4,013,131	368,246	23,955	992,088	768,221	566,937	26				
925	113,794	103,273	10,421	100	311,568	20,848	11,400	27				
	4,698,747				1,122,891	875,750		28				
	2,915,780				2,019,450	1,175,362		29				
	-4.0				16.1	-9.9		30				
10.72	30.18	42.51	7.43	8.11	39.19	6.06	5.68	31				
	33.66				27.42	7.96		32				
	24.82				28.95	7.21		33				
11.13	33.72	48.06	8.17	8.27	41.68	6.99	6.73	34				
56,110	6,530,886	6,116,429	390,202	24,055	1,503,806	795,809	584,162	35				
9.93	37.75	51.22	7.71	8.11	38.39	6.07	5.70	36				
	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.
	Enterprises		Enterprises		Enterprises		Enterprises		Enterprises		Enterprises	
42	312	9	125	5	157	4	82	3	723	7	464	3
4,948	129,351	8,022	83,556	7,687	42,886	335	31,624	11,427	108,072	5,537	82,116	857
4,325	94,429	3,491	75,039	3,310	18,637	181	27,351	1,094	39,743	1,462	28,151	346
0.87	0.73	0.44	0.90	0.43	0.43	0.54	0.29	0.88	0.10	0.26	0.34	0.36
	120,888	3,000	106,093	3,000	14,705	70	43,870	7,273	7,675	1,152	6,895	75
	1.15	0.40	1.37	0.40	0.54	0.07	1.77	0.64	0.32	0.24	0.42	0.15
	106,229	7,500	77,967	7,500	27,262	1,000	29,651	11,945	24,477	4,800	16,597	500
	1.14	0.40	1.36	0.40	0.54	0.07	1.48	0.61	0.31	0.24	0.40	0.15
	94,803	5,000	78,244	5,000	16,559		40,728	7,051	2,196	150	2,121	150
	1,081,712		1,036,512		45,200		151,600	56,000	2,600			
43	292	8	99	5	164	3	66	2	641	8	411	3
4,973	103,726	524	68,978	189	31,850	335	19,482	(2)	83,862	5,727	61,609	957
9,816	525,146	946	432,292	269	88,817	677	59,736	(2)	288,647	13,365	238,111	8,633
2.0	5.1	1.8	6.3	1.4	2.8	2.0	3.1	(2)	3.4	2.3	3.8	9.0
0.87	1.08	0.94	1.36	1.66	0.51	0.54	0.28	0.85	0.25	0.34	0.32	0.28
0.44	0.21	0.52	0.22	1.17	0.18	0.27	0.28	(2)	0.10	0.11	0.08	0.03
	15		15				(2)	1	45		45	
	34,449		34,449				(2)		9,777		9,777	
	28,742		28,742						8,506		8,506	
	24,996		24,996						233		233	
	4,148		4,148				(2)		1,545		1,545	

³Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
⁴Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION—IDAHO

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		COLUMBIA RIVER—Continued				
		Snake River—Continued				
		Lower Snake River—Continued				
		Salmon River—Continued				
		Upper Salmon River—Continued			Lower Salmon River	
		Direct (29)	Pahsimeroi River (30)	Lemhi River (31)	Total	Direct (32)
IRRIGATED FARMS AND AREAS						
1	Irrigated farms.....1939..number.....	266	82	326	373	169
2	Area irrigated.....1939..acres.....	26,218	12,468	47,269	26,849	10,591
3	(a) Cropland harvested.....1939..acres.....	21,518	9,531	34,738	14,799	7,377
4	(b) Crop failure.....1939..acres.....	147	19	168	12	10
5	(c) Pasture.....1939..acres.....	4,533	2,818	12,343	12,038	3,207
6	Area irrigated.....1929..acres.....					
7	.....1919..acres.....					
8	Increase or decrease (-), 1929-1939.....percent.....					
9	Irrigable area in enterprises.....1940..acres.....	36,693	13,213	52,582	26,526	11,452
10	.....1930..acres.....					
11	.....1920..acres.....					
12	Excess of irrigable area over the area irrigated.....1940..acres.....	10,475	725	5,313	1,677	866
13	.....1930..acres.....					
14	.....1920..acres.....					
15	Area works were capable of supplying with water.....1940..acres.....	36,135	13,103	52,582	26,291	11,277
16	.....1930..acres.....					
17	.....1920..acres.....					
18	Increase or decrease (-), 1930-1940.....percent.....					
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	9,917	615	5,313	1,442	663
20	.....1930..acres.....					
21	.....1920..acres.....					
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	72.6	95.3	89.9	94.9	93.9
23	.....1929..percent.....					
24	.....1919..percent.....					
CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises.....1940..dollars.....	237,433	70,188	270,716	210,732	90,796
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	232,369	69,898	264,670	201,284	90,590
27	(b) Investment in water rights (reported).....1940..dollars.....	5,064	290	6,046	9,448	206
28	Total investment in irrigation enterprises.....1939..dollars.....					
29	.....1929..dollars.....					
30	Increase or decrease (-), 1930-1940.....percent.....					
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	6.57	5.36	5.15	7.45	8.05
32	.....1930..dollars.....					
33	.....1920..dollars.....					
34	Average investment per acre irrigated.....1939..dollars.....	9.06	5.62	5.73	7.85	8.57
35	Estimated final investment in existing enterprises.....1940..dollars.....	239,598	70,188	274,376	211,647	91,411
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	6.53	5.31	5.22	7.42	7.98
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
		Primary		Sup.		
		Enterprises		Enterprises		
37	Enterprises reporting maintenance and operation.....1939..number.....	164	35	265	269	123
38	Area irrigated in these enterprises.....1939..acres.....	24,175	10,887	47,054	25,956	10,141
39	Cost of maintenance and operation.....1939..dollars.....	8,958	3,775	15,418	10,592	5,553
40	Average cost, per acre irrigated.....1939..dollars.....	0.37	0.35	0.33	0.41	0.55
41	Total annual charges (reported) ³.....1939..dollars.....	1,666	2,465	2,564	980	320
42	Average annual charge per acre irrigated.....1939..dollars.....	0.24	0.74	0.44	0.15	0.10
43	Area against which charges were assessed.....1939..acres.....	7,230	3,520	5,847	7,880	3,200
44	Average annual charge per acre assessed.....1939..dollars.....	0.23	0.70	0.44	0.15	0.10
45	Total charges collected ⁵.....1939..dollars.....	500	880	741	75	
46	Indebtedness to December 31 (reported) ⁴.....1939..dollars.....				2,500	2,500
WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered.....1939..number.....	120	38	253	230	94
48	Area irrigated by these enterprises.....1939..acres.....	10,565	7,994	43,050	22,253	5,631
49	Water delivered.....1939..acre-feet.....	30,826	31,040	176,245	50,536	11,759
50	Average water delivered per acre irrigated.....1939..acre-feet.....	2.9	3.9	4.1	2.3	1.8
51	Average cost of water per acre irrigated.....1939..dollars.....	0.39	0.42	0.29	0.37	0.49
52	Average cost of water per acre-foot delivered.....1939..dollars.....	0.13	0.11	0.07	0.16	0.28
DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage.....1939..number.....	4		41		
54	Irrigable area in these enterprises.....1939..acres.....	291		9,466		
55	Irrigated area in these enterprises.....1939..acres.....	261		8,245		
56	Area for which drains have been installed.....1939..acres.....	25		208		
57	Additional area needing drainage.....1939..acres.....	40		1,505		

¹For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

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

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COLUMBIA RIVER—Continued												
Snake River—Continued									Spokane River			
Lower Snake River—Continued									Total	Direct	Coeur d'Alene River	
Salmon River—Continued					Clearwater River							
Lower Salmon River—Continued					Total	Direct	Selway River	South Fork Clearwater River				
North Fork Salmon River (38)	Panther Creek (34)	Middle Fork Salmon River (35)	South Fork Salmon River (36)	Little Salmon River (37)								
(38)	(34)	(35)	(36)	(37)		(38)	(40)	(41)		(45)	(46)	
25	16	13	7	126	533	525	3	5	630	616	14	
832	1,003	398	495	13,527	4,457	4,264	63	130	6,270	6,116	154	
677	536	351	380	5,478	4,375	4,183	63	129	6,029	5,892	137	
2					32	32			20	20		
153	467	47	115	8,049	50	49		1	221	204	17	
					4,896							
					4,623							
					-9.0							
1,027	1,006	568	587	13,885	6,684	6,441	63	180	7,842	7,685	177	
					5,216							
					5,777							
195	3	170	92	359	2,227	2,177		50	1,572	1,549	23	
					320							
					1,154							
1,027	1,006	548	587	13,846	4,630	4,432	63	135	7,726	7,549	177	
					5,154							
					5,545							
					-10.2							
195	3	150	92	319	173	168		5	1,456	1,433	23	
					258							
					922							
81.0	99.7	72.6	84.3	97.7	96.3	96.2	100.0	96.3	81.2	81.0	87.0	
					95.0							
					83.4							
16,130	11,405	4,375	3,610	84,416	425,283	424,276	112	895	695,776	692,126	3,650	
16,130	11,375	4,350	3,610	75,259	424,652	423,705	112	835	693,486	689,888	3,600	
	30	25		9,157	691	571		60	2,290	2,240	50	
					431,309							
					298,755							
					-1.4							
15.71	11.34	7.98	6.15	6.10	91.85	95.73	1.78	6.63	90.06	91.68	20.62	
					89.68							
					53.88							
19.39	11.37	10.99	7.29	6.24	95.42	99.50	1.78	6.68	110.97	113.17	23.70	
16,430	11,405	4,375	3,610	84,416	425,783	424,776	112	895	706,351	702,701	3,650	
16.00	11.34	7.70	6.15	6.08	63.70	65.95	1.78	4.97	90.07	91.68	20.62	
					Primary Sup.	Primary Sup.	Primary Sup.					
					Enterprises	Enterprises	Enterprises					
21	16	9	7	83	4	43	3	3	24	14	10	
722	1,003	313	495	13,287	4,580	4,071	22	63	5,858	5,770	86	
1,209	584	267	197	2,782	1,116	28,914	262	25	23,491	23,268	203	
1.67	0.58	0.85	0.40	0.21	0.24	7.10	11.91	0.40	4.01	4.04	2.31	
				660	1,077	34,748			27,522	27,522		
				0.14	0.25	9.71			4.80	4.80		
	</											

⁴ Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION—IDAHO

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		COLUMBIA RIVER--Continued				GREAT SALT LAKE	
		Clark Fork			Kootenai River	Bear River	
		Total	Direct	Priest River		Total	Direct
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number.....	38	34	5	8	3,514	2,993
2	Area irrigated.....1939..acres.....	750	677	73	228	162,146	143,379
3	(a) Cropland harvested.....1939..acres.....	662	589	73	122	142,557	125,558
4	(b) Crop failure.....1939..acres.....	10	10	.....	.....	512	505
5	(c) Pasture.....1939..acres.....	78	78	.....	106	19,077	17,316
6	Area irrigated.....1929..acres.....	.....	.....	.....	.....	161,304	78,031
7	.....1919..acres.....	.....	.....	.....	.....	214,106	110,036
8	Increase or decrease (-), 1929-1939.....percent.....	.....	.....	.....	.....	0.5	83.7
9	Irrigable area in enterprises.....1940..acres.....	1,998	1,837	161	761	193,153	168,603
10	.....1930..acres.....	.....	.....	.....	.....	183,647	94,258
11	.....1920 ² ..acres.....	.....	.....	.....	.....	321,804	158,929
12	Excess of irrigable area over the area irrigated.....1940..acres.....	1,248	1,160	88	533	31,007	25,224
13	.....1930..acres.....	.....	.....	.....	.....	22,943	16,227
14	.....1920 ² ..acres.....	.....	.....	.....	.....	107,698	49,893
15	Area works were capable of supplying with water.....1940..acres.....	1,346	1,224	122	726	177,838	157,320
16	.....1930..acres.....	.....	.....	.....	.....	180,716	92,192
17	.....1920..acres.....	.....	.....	.....	.....	247,166	132,880
18	Increase or decrease (-), 1930-1940.....percent.....	.....	.....	.....	.....	-1.6	70.6
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	596	547	49	498	15,692	13,941
20	.....1930..acres.....	.....	.....	.....	.....	19,412	14,161
21	.....1920..acres.....	.....	.....	.....	.....	33,060	22,844
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	55.7	55.3	59.8	31.4	91.2	91.1
23	.....1929..percent.....	.....	.....	.....	.....	89.3	84.6
24	.....1919..percent.....	.....	.....	.....	.....	86.6	82.8
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars.....	9,221	8,096	1,125	5,350	3,833,159	3,618,553
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	8,601	7,566	1,035	5,280	3,656,016	3,468,978
27	(b) Investment in water rights (reported).....1940..dollars.....	620	530	90	70	177,143	149,575
28	Total investment in irrigation enterprises.....1930..dollars.....	.....	.....	.....	.....	2,275,519	736,516
29	.....1920..dollars.....	.....	.....	.....	.....	3,328,007	2,088,003
30	Increase or decrease (-), 1930-1940.....percent.....	.....	.....	.....	.....	68.5	391.3
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	6.85	6.61	9.22	7.37	21.55	23.00
32	.....1930..dollars.....	.....	.....	.....	.....	12.59	7.99
33	.....1920..dollars.....	.....	.....	.....	.....	13.46	15.71
34	Average investment per acre irrigated.....1939..dollars.....	12.29	11.96	15.41	23.46	23.64	25.24
35	Estimated final investment in existing enterprises.....1940..dollars.....	10,861	9,596	1,265	5,470	3,907,244	3,688,963
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	5.44	5.22	7.86	7.19	20.23	21.88
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						Primary	Sup.
						Enterprises	Enterprises
37	Enterprises reporting maintenance and operation.....1939..number.....	24	19	5	5	252	21
38	Area irrigated in these enterprises.....1939..acres.....	675	602	73	110	152,304	2,902
39	Cost of maintenance and operation.....1939..dollars.....	707	642	65	145	106,028	994
40	Average cost, per acre irrigated.....1939..dollars.....	1.05	1.07	0.89	1.32	0.70	0.34
41	Total annual charges (reported) ⁵.....1939..dollars.....	.....	.....	.....	.....	112,497	444
42	Average annual charge per acre irrigated.....1939..dollars.....	.....	.....	.....	.....	0.81	0.23
43	Area against which charges were assessed.....1939..acres.....	.....	.....	.....	.....	149,151	1,905
44	Average annual charge per acre assessed.....1939..dollars.....	.....	.....	.....	.....	0.75	0.23
45	Total charges collected ⁵.....1939..dollars.....	.....	.....	.....	.....	107,215	434
46	Indebtedness to December 31 (reported) ⁵.....1939..dollars.....	.....	.....	.....	.....	150,159	.....
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number.....	33	28	5	8	274	22
48	Area irrigated by these enterprises.....1939..acres.....	708	635	73	228	146,162	2,894
49	Water delivered.....1939..acre-feet.....	1,803	1,717	186	639	276,115	2,585
50	Average water delivered per acre irrigated.....1939..acre-feet.....	2.7	2.7	2.5	2.8	1.9	0.9
51	Average cost of water per acre irrigated.....1939..dollars.....	1.03	1.05	0.89	1.32	0.62	0.33
52	Average cost of water per acre-foot delivered.....1939..dollars.....	0.38	0.39	0.35	0.47	0.43	0.36
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number.....	4	4	.....	1	15	13
54	Irrigable area in these enterprises.....1939..acres.....	30	30	.....	(*)	23,872	23,252
55	Irrigated area in these enterprises.....1939..acres.....	18	16	.....	(*)	23,210	22,620
56	Area for which drains have been installed.....1939..acres.....	15	15	.....	.....	325	325
57	Additional area needing drainage.....1939..acres.....	7	7	.....	(*)	5,789	5,419

¹ In the 1930 and 1920 reports, Camas Creek apparently included the area now designated as Mud Lake Direct (58) (number refers to separate map); therefore, no 1930 or 1920 figures for these basins can be shown separately.

² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

⁵ Percent not shown when more than 1,000.

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GREAT SALT LAKE—Continued				INDEPENDENT BASINS									
Bear River—Continued				Mad Lake									
Thomas Creek	Malad River	Total	Direct	Camas Creek ¹			Medicine Lodge Creek	Birch Creek	Little Lost River	Big Lost River	Deep Creek		
				Total	Direct	Beaver Creek							
(55)	(57)		(58)		(59)	(60)	(61)	(62)	(63)	(64)	(65)		
48	473	226	194	42	36	6	27	19	87	369	66		
4,175	14,592	29,934	22,710	7,224	6,222	1,002	3,045	3,698	11,927	26,935	2,595		
3,275	13,724	26,617	21,973	4,644	3,792	852	2,719	2,693	11,277	20,622	2,591		
.....	7	56	46	10	10	.....	35	.....	650	2,662	.....	
900	861	3,261	681	2,570	2,420	150	281	1,006	.....	3,051	4	
3,168	8,858	20,895	.....	.....	806	3,883	.....	.....	4,964	40,078	.....	
8,905	16,679	18,992	.....	.....	1,502	5,019	.....	.....	11,552	72,789	.....	
31.8	64.7	43.3	.....	.....	24.3	-23.6	.....	.....	140.3	-34.3	.....	
5,175	19,375	42,189	32,658	9,531	8,251	1,280	5,021	4,241	15,717	40,050	4,556		
3,246	10,522	59,836	.....	.....	1,546	5,187	.....	.....	5,694	85,283	.....	
8,829	43,404	97,789	.....	.....	2,590	12,445	.....	.....	31,432	204,645	.....	
1,000	4,793	12,255	9,848	2,307	2,029	278	1,976	543	3,790	13,715	1,961		
78	1,664	38,941	.....	.....	740	1,204	.....	.....	720	45,205	.....	
24	28,725	78,797	.....	.....	1,088	7,426	.....	.....	19,900	132,057	.....	
4,275	16,243	40,583	31,447	9,136	7,856	1,280	4,321	4,041	15,717	38,695	3,156		
3,246	10,502	59,721	.....	.....	1,536	5,187	.....	.....	5,694	79,698	.....	
8,905	17,128	46,160	.....	.....	1,970	8,390	.....	.....	18,732	105,727	.....	
31.7	54.7	-32.0	.....	.....	.....	-16.7	.....	.....	176.5	-51.6	.....	
100	1,651	10,649	8,737	1,912	1,634	278	1,276	343	3,790	12,360	561		
78	1,644	38,626	.....	.....	.....	730	1,204	.....	720	39,908	.....	
.....	449	29,168	.....	.....	.....	468	3,371	.....	7,180	32,839	.....	
97.7	89.8	73.8	72.2	79.1	79.2	78.3	70.5	91.5	75.9	68.1	82.2		
87.6	84.3	35.0	.....	.....	.....	62.5	76.8	.....	87.3	50.1	.....	
100.0	87.4	39.4	.....	.....	.....	76.2	59.8	.....	61.7	68.8	.....	
12,835	201,771	393,946	367,882	26,064	17,139	8,925	17,195	25,750	211,390	593,766	22,462		
12,100	174,838	382,577	364,457	18,120	11,620	6,500	14,275	14,900	211,350	582,618	19,662		
735	26,833	11,369	3,425	7,944	5,519	2,425	2,920	10,850	40	1,150	2,800		
42,830	89,852	555,425	.....	.....	.....	8,500	7,535	.....	16,600	1,833,725	.....	
25,389	332,175	585,886	.....	.....	.....	7,259	31,690	.....	474,465	2,708,698	.....	
-70.0	124.3	-29.1	.....	.....	.....	5.0	128.2	.....	(³)		

^aAnnual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

^a Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - IDAHO

DRAINAGE BASIN TABLE II—ENTERPRISES AND IRRIGATION

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		STATE TOTAL ¹	COLUMBIA RIVER							
			Total	Snake River						
				Total	Upper Snake River					
					Total	Direct (1)	South Fork Snake River			
							Total	Direct (2)	Salt River (3)	
ENTERPRISES AND IRRIGATION WORKS JANUARY 1										
1	Enterprises.....1940..number.....	2 3,639	3,119	3,040	635	78	170	132	39	
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	713	740	756	1,139	2,680	1,295	1,631	128	
3	Diversion dams.....1940..total number.....	3,209	2,750	2,680	465	29	98	76	22	
4	1930..total number.....	2,305	1,806	1,784	.....	.....	89	.....	.....
5	1920..total number.....	2,872	2,071	2,055	.....	.....	112	.....	.....
6	(a) Concrete and masonry.....1940..number.....	336	248	237	100	11	37	37	.....
7	(b) Timber.....1940..number.....	290	238	231	35	1	16	8	8	
8	(c) Earth and rock.....1940..number.....	1,964	1,727	1,685	219	15	22	15	7	
9	(d) Other, mixed, and not reported.....1940..number.....	619	537	527	111	2	23	16	.....
10	Main canals and laterals.....1940..total length, miles.....	13,802.1	12,045.0	11,905.8	3,027.7	817.6	775.1	734.1	41.0	
11	1930..total length, miles.....	14,344	12,724	12,855	.....	.....	817	.....	.....
12	1920..total length, miles.....	17,298	14,067	14,054	.....	.....	1,051	.....	.....
13	(a) Earth.....1940..length, miles.....	13,489	11,941	11,901	3,018	817	772	731	41	
14	(b) Lined.....1940..length, miles.....	113.1	104.0	94.8	9.7	0.6	3.1	3.1	.....
15	1940..capacity, c.f.s. ²	71,510	65,342	64,899	25,624	5,309	8,897	8,683	214	
16	1930..capacity, c.f.s. ²	78,763	67,487	67,161	.....	.....	7,031	.....	.....
17	1920..capacity, c.f.s. ²	86,273	74,815	74,825	.....	.....	8,609	.....	.....
18	Pipe lines ⁴.....1940..total length, miles.....	299.9	285.7	213.4	15.6	4.4	0.7	0.1	0.6	
19	1930..total length, miles.....	263.4	254.6	192.0	.....	.....	.....	.....	.....
20	1920..total length, miles.....	180.6	173.6	168.4	.....	.....	.....	.....	.....
21	(a) Concrete.....1940..length, miles.....	96.0	94.1	62.5	4.7	2.4	0.6	.....	0.6
22	(b) Metal.....1940..length, miles.....	58.5	50.8	41.3	5.4	1.0	0.1	0.1	.....
23	(c) Wood-stave.....1940..length, miles.....	121.0	116.7	101.7	5.3	1.0	.....	.....	.....
24	(d) Other.....1940..length, miles.....	24.4	24.1	7.9	0.2	.....	.....	.....	.....
25	Storage dams.....1940..total number.....	260	212	207	47	7	4	4	.....
26	1930..total number.....	152	121	116	.....	.....	3	.....	.....
27	1920..total number.....	288	191	190	.....	.....	7	.....	.....
28	(a) Concrete and masonry.....1940..number.....	44	38	34	7	2	1	1	.....
29	(b) Earth and rock.....1940..number.....	185	145	144	35	4	2	2	.....
30	(c) Other, mixed, and not reported.....1940..number.....	31	29	29	5	1	1	1	.....
31	Reservoirs.....1940..total number.....	290	239	231	45	6	4	4	.....
32	(a) 1-99 acre-foot capacity.....1940..number.....	164	134	128	27	3	3	3	.....
33	(b) 100-999 acre-foot capacity.....1940..number.....	70	53	51	11	2	1	1	.....
34	(c) 1,000 and over acre-foot capacity.....1940..number.....	56	52	52	7	1	.....	.....	.....
35	1940..total capacity, ac.-ft. ⁵	3,795,272	3,730,064	3,729,158	2,129,009	1,700,602	163	163	.....
36	1930..total capacity, ac.-ft. ⁵	155	125	121	.....	.....	1	.....	.....
37	1920..total capacity, ac.-ft. ⁵	3,645,373	3,545,738	3,545,232	.....	.....	200	.....	.....
38	Wells, flowing.....1940..number.....	375	251	251	2	2	.....	.....	.....
39	1930..number.....	220	180	180	.....	.....	.....	.....	.....
40	1920..number.....	142	85	85	.....	.....	.....	.....	.....
41	1940..yield, g.p.m. ⁴	40,105	28,529	28,529	(⁵)	(⁵)	.....	.....	.....
42	1930..yield, g.p.m. ⁴	30,108	20,808	20,808	.....	.....	.....	.....	.....
43	1920..yield, g.p.m. ⁴	15,133	7,665	7,665	.....	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	309	236	236	14	2	2	2	.....
45	1930..number.....	121	104	101	.....	.....	.....	.....	.....
46	1920..number.....	53	53	53	.....	.....	.....	.....	.....
47	1940..yield, g.p.m. ⁴	225,164	120,006	119,906	15,280	(⁵)	(⁵)	(⁵)	.....
48	1930..yield, g.p.m. ⁴	94,601	25,811	25,656	.....	.....	.....	.....	.....
49	1920..yield, g.p.m. ⁴	17,749	17,749	17,749	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number.....	865	581	567	81	43	3	3	.....
51	1930..total number.....	393	357	350	.....	.....	1	.....	.....
52	Prime movers.....1940..capacity, hp.....	44,537	39,993	38,672	2,903	2,511	21	21	.....
53	1930..capacity, hp.....	33,754	30,143	29,039	.....	.....	5	.....	.....
54	1920..capacity, hp.....	28,364	27,435	27,435	.....	.....	.....	.....	.....
55	(a) Electric.....1940..number.....	495	424	414	54	38	1	1	.....
56	1940..capacity, hp.....	40,575	36,151	34,875	2,584	2,459	(⁵)	(⁵)	.....
57	(b) Internal-combustion.....1940..number.....	150	139	136	24	5	2	2	.....
58	1940..capacity, hp.....	1,839	1,721	1,711	316	52	(⁵)	(⁵)	.....
59	(c) Other.....1940..number.....	20	18	17	3	.....	.....	.....	.....
60	1940..capacity, hp.....	2,123	2,121	2,086	3	.....	.....	.....	.....
61	Pumps.....1940..total number.....	675	590	576	78	40	3	3	.....
62	1930..number.....	465	429	411	.....	.....	1	.....	.....
63	1920..number.....	232	215	215	.....	.....	.....	.....	.....
64	1940..capacity, g.p.m. ⁴	2,719,905	2,338,758	2,333,131	195,348	166,805	3,210	3,210	.....
65	1930..capacity, g.p.m. ⁴	2,113,513	1,822,173	1,785,256	.....	.....	600	.....	.....
66	1920..capacity, g.p.m. ⁴	1,397,681	1,286,516	1,286,516	.....	.....	.....	.....	.....
67	(a) Centrifugal.....1940..number.....	492	420	409	67	38	3	3	.....
68	1940..capacity, g.p.m. ⁴	2,272,855	1,958,386	1,912,860	183,186	164,585	3,210	3,210	.....
69	1940..average capacity, g.p.m. ⁴	4,715	4,663	4,677	2,734	4,331	1,070	1,070	.....
70	(b) Turbine.....1940..number.....	111	85	85	8	2	.....	.....	.....
71	1940..capacity, g.p.m. ⁴	214,755	170,446	170,446	12,020	(⁵)	.....	.....	.....
72	1940..average capacity, g.p.m. ⁴	1,935	1,794	1,784	1,502	(⁵)	.....	.....	.....
73	(c) Plunger.....1940..number.....	10	7	5	.....	.....	.....	.....	.....
74	1940..capacity, g.p.m. ⁴	257	234	183	.....	.....	.....	.....	.....
75	1940..average capacity, g.p.m. ⁴	26	53	39	.....	.....	.....	.....	.....
76	(d) Other.....1940..number.....	72	68	67	3	.....	.....	.....	.....
77	1940..capacity, g.p.m. ⁴	232,237	209,632	209,632	142	.....	.....	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	26	26	25	19	23	8	8	.....
79	1930..average, feet.....	32	32	31	.....	.....	6	.....	.....
80	1920..average, feet.....	29	32	32	.....	.....	.....	.....	.....
81	from pumped wells.....1940..average, feet.....	29	29	27	20	(⁵)	(⁵)	(⁵)	.....
82	from surface sources.....1940..average, feet.....	24	24	23	19	24	15	15	.....

¹ Data for unidentified independent basins for the 1930 and 1920 Censuses are included only in State total.² Includes interdrainage basin projects counted as independent enterprises in each basin into which they extend. For actual number of enterprises see State table 1.³ Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

CENSUS OF IRRIGATION - IDAHO

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WORKS, 1940, 1930, AND 1920

COLUMBIA RIVER—Continued															
Snake River—Continued															
Upper Snake River—Continued								Lower Snake River							
Henry's Fork			Grays Lake (6)	Blackfoot River (7)	Portneuf River (8)	Bannock Creek (9)	Total	Direct (10)	Raft River (11)	Goose Creek (12)	Salmon Falls Creek (13)	Little and Big Wood Rivers			
Total	Direct (4)	Teton River (5)										Total	Direct (14)	Canas Creek (15)	
189	99	90	22	29	137	10	2,405	376	50	20	17	82	60	22	1
960	1,336	547	174	2,042	219	181	655	1,853	271	947	2,304	1,340	1,651	485	2
147	81	66	21	30	123	17	2,215	296	37	88	17	87	61	26	3
93	.....	.....	.....	55	136	.....	.....	.....	7	5	20	55	.....	.....	4
226	.....	.....	.....	43	101	.....	.....	.....	101	.....	40	271	.....	.....	5
32	24	8	.....	4	16	.....	137	27	8	2	.....	15	14	1	6
16	14	2	.....	2	.....	.....	196	15	.....	1	.....	13	13	.....	7
72	36	36	17	19	67	7	1,466	211	20	25	13	44	19	25	8
27	7	20	4	5	40	10	416	43	9	60	4	15	15	.....	9
770.6	516.5	254.1	38.1	333.1	252.2	41.0	8,968.1	3,403.7	89.0	96.0	72.0	643.4	608.4	35.0	10
683	.....	.....	.....	463	368	.....	.....	78	125	235	.....	999	.....	.....	11
1,157	.....	.....	.....	351	421	.....	.....	163	.....	352	.....	1,105	.....	.....	12
767	513	254	38	333	250	41	8,883	3,386	89	98	70	643	608	35	13
3.6	3.5	0.1	0.1	0.1	2.2	.....	85.1	17.7	.....	.....	2.0	0.4	0.4	.....	14
8,720	7,717	1,003	73	1,755	801	69	38,075	16,729	285	571	789	2,645	2,703	142	15
10,709	.....	.....	.....	2,232	1,072	.....	.....	379	523	841	.....	2,867	.....	.....	16
12,693	.....	.....	.....	1,214	1,274	.....	.....	642	.....	1,857	.....	6,658	.....	.....	17
1.2	0.7	0.5	.....	3.3	6.0	.....	197.8	45.8	1.1	0.2	3.0	.....	.....	.....	18
1.0	.....	.....	.....	3.9	5.5	.....	.....	.....	.....	.....	.....	20.6	.....	.....	19
0.8	.....	.....	.....	1.1	2.8	.....	.....	.....	.....	.....	0.1	7.2	.....	.....	20
0.2	.....	0.2	.....	1.5	.....	.....	57.8	7.2	.....	.....	.....	.....	.....	.....	21
0.5	0.2	0.3	.....	0.8	3.0	.....	35.9	12.9	0.7	0.2	1.0	.....	.....	.....	22
0.5	0.5	.....	.....	1.0	2.8	.....	96.4	24.9	0.4	.....	.....	.....	.....	.....	23
.....	.....	.....	.....	0.2	.....	.....	7.7	0.8	.....	.....	2.0	.....	.....	.....	24
13	10	3	4	1	17	1	160	26	12	3	3	14	6	8	25
4	.....	.....	.....	2	14	.....	.....	.....	2	1	1	4	4	.....	26
25	.....	.....	.....	3	7	.....	.....	.....	.....	.....	.....	24	24	.....	27
1	1	.....	1	.....	2	.....	27	3	7	.....	1	1	1	.....	28
12	9	3	3	.....	13	1	109	10	5	3	2	12	5	7	29
.....	.....	.....	.....	1	2	.....	24	4	.....	.....	.....	1	.....	1	30
13	10	3	4	1	16	1	186	31	13	4	4	15	7	8	31
4	1	3	3	1	13	.....	101	17	12	3	1	2	2	.....	32
5	5	.....	.....	.....	2	1	40	7	.....	.....	1	3	1	2	33
4	4	.....	1	.....	1	.....	45	7	1	1	2	10	4	6	34
210,747	210,732	15	200,131	(*)	17,176	(*)	1,600,149	63,827	1,568	75,007	211,601	353,947	314,647	36,700	35
3	.....	.....	.....	3	11	.....	.....	.....	.....	1	1	5	5	.....	36
82,888	.....	.....	450,250	23,845	.....	.....	.....	.....	.....	74,000	182,660	229,900	228,900	.....	37
.....	.....	.....	.....	.....	.....	.....	249	80	1	.....	4	.....	.....	.....	38
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	39
.....	.....	.....	.....	.....	.....	.....	23,759	4,794	(*)	.....	290	.....	.....	.....	40
2,828	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,900	.....	.....	.....	41
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
5	.....	5	.....	.....	5	.....	222	44	28	1	1	8	8	.....	43
23	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	1	1	.....	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
5,835	5,835	.....	.....	.....	5,375	.....	104,685	25,415	15,920	(*)	(*)	5,945	5,945	.....	46
3,880	.....	.....	.....	3	900	.....	.....	.....	.....	.....	.....	900	900	.....	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,500	2,500	.....	48
8	3	5	.....	.....	27	.....	486	199	21	1	1	8	8	.....	49
44	.....	.....	.....	1	4	.....	.....	.....	.....	.....	.....	3	3	.....	50
208	71	137	.....	.....	163	.....	35,769	29,334	618	(*)	(*)	57	57	.....	51
326	.....	.....	.....	2	25	.....	.....	.....	.....	.....	.....	65	65	.....	52
.....	.....	.....	.....	.....	18	.....	.....	.....	.....	.....	6	32	32	.....	53
1	1	.....	.....	.....	14	.....	360	171	.....	.....	1	1	1	.....	54
(*)	(*)	.....	.....	.....	70	.....	32,291	29,466	.....	(*)	(*)	(*)	(*)	.....	55
6	1	5	.....	.....	11	.....	112	24	20	1	.....	6	6	.....	56
167	(*)	197	.....	.....	91	.....	1,395	248	570	(*)	.....	48	49	.....	57
1	(*)	.....	.....	.....	2	.....	14	4	1	.....	.....	1	1	.....	58
(*)	(*)	.....	.....	.....	(*)	.....	2,083	220	(*)	.....	(*)	(*)	(*)	.....	59
8	3	5	.....	.....	27	.....	498	202	27	1	1	8	8	.....	60
44	.....	.....	.....	1	4	.....	.....	.....	.....	.....	.....	3	3	.....	61
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
12,886	6,661	6,325	.....	.....	1	.....	12,347	1,768,148	15,470	(*)	(*)	5,985	5,985	.....	63
18,695	.....	.....	.....	3	2,236	.....	.....	.....	.....	.....	.....	3,000	3,000	.....	64
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	440	4,050	4,050	.....	65
4	2	2	.....	.....	22	.....	342	156	13	1	.....	5	5	.....	66
8,166	(*)	(*)	.....	.....	7,225	.....	1,729,674	1,644,273	8,600	(*)	(*)	3,945	3,945	.....	67
2,042	(*)	(*)	.....	.....	328	.....	5,056	10,540	472	(*)	.....	789	789	.....	68
3	.....	.....	.....	.....	3	.....	87	31	9	.....	.....	.....	.....	.....	69
4,800	.....	4,800	.....	.....	5,000	.....	158,426	86,445	6,970	(*)	(*)	.....	.....	.....	70
1,600	.....	1,600	.....	.....	1,637	.....	1,621	2,789	774	(*)	(*)	.....	.....	.....	71
.....	.....	.....	.....	.....	.....	.....	5	2	.....	.....	.....	.....	.....	.....	72
.....	.....	.....	.....	.....	.....	.....	193	(*)	.....	.....	.....	.....	.....	.....	73
.....	.....	.....	.....	.....	.....	.....	39	(*)	.....	.....	.....	.....	.....	.....	74
(*)	(*)	.....	.....	.....	64	.....	209,490	37,355	13	.....	.....	3	3	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,050	2,050	.....	76
25	8	38	.....	.....	15	.....	26	28	38	(*)	(*)	19	19	.....	77
21	.....	.....	.....	80	24	.....	.....	.....	.....	.....	.....	22	22	.....	78
.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	17	17	.....	79
31	3	38	.....	.....	18	.....	28	26	39	(*)	(*)	19	19	.....	80
10	10	.....	.....	.....	14	.....	24	29	30	.....	.....	.....	.....	.....	81
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82

*Includes siphons and farm pipe lines reported.

*Total capacity of all reservoirs regardless of size.

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

CENSUS OF IRRIGATION — IDAHO

DRAINAGE BASIN TABLE II.—ENTERPRISES AND IRRIGATION

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		COLUMBIA RIVER—Continued						
		Snake River—Continued						
		Lower Snake River—Continued						
		Boise River					Owyhee River	
		Bruneau River	Total	Direct	North Fork Boise River	South Fork Boise River	Moore Creek	Total
		(16)		(17)	(18)	(19)	(20)	(21)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
1	Enterprises.....1940..number.....	84	374	284	7	62	21	80
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	153	950	1,228	35	87	44	157
3	Diversion dams.....1940..total number.....	154	206	127	4	48	27	174
4	.....1930..total number.....	62	78	.....	.....	.....	.....	51
5	.....1920..total number.....	110	70	.....	.....	.....	.....	71
6	(a) Concrete and masonry.....1940..number.....	4	29	27	.....	2	.....	1
7	(b) Timber.....1940..number.....	10	24	16	.....	6	.....	5
8	(c) Earth and rock.....1940..number.....	89	110	49	4	30	27	158
9	(d) Other, mixed, and not reported.....1940..number.....	51	43	35	.....	8	.....	10
10	Main canals and laterals.....1940..total length, miles.....	118.0	1,941.2	1,839.1	1.0	78.0	23.1	133.0
11	.....1930..total length, miles.....	155	1,925	.....	.....	.....	.....	69
12	.....1920..total length, miles.....	228	992	.....	.....	.....	.....	97
13	(a) Earth.....1940..length, miles.....	118	1,917	1,815	1	78	23	133
14	(b) Lined.....1940..length, miles.....	.....	24.2	24.1	.....	.....	0.1	.....
15	.....1940..capacity, c.f.s.....	435	7,507	7,328	7	131	41	344
16	.....1930..capacity, c.f.s.....	569	13,576	.....	.....	.....	.....	335
17	.....1920..capacity, c.f.s.....	771	6,669	.....	.....	.....	.....	428
18	Pipe lines ².....1940..total length, miles.....	.....	37.8	37.1	0.2	0.4	0.1	.....
19	.....1930..total length, miles.....	.....	47.9	.....	.....	.....	.....	.....
20	.....1920..total length, miles.....	0.2	30.5	.....	.....	.....	.....	.....
21	(a) Concrete.....1940..length, miles.....	.....	28.8	28.6	0.2	.....	.....	.....
22	(b) Metal.....1940..length, miles.....	.....	2.2	1.7	.....	0.4	0.1	.....
23	(c) Wood-stave.....1940..length, miles.....	.....	6.8	6.8	.....	.....	.....	.....
24	(d) Other.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
25	Storage dams.....1940..total number.....	4	14	12	1	1	.....	19
26	.....1930..total number.....	2	7	.....	.....	.....	.....	9
27	.....1920..total number.....	17	14	.....	.....	.....	.....	7
28	(a) Concrete and masonry.....1940..number.....	.....	2	1	1	.....	.....	.....
29	(b) Earth and rock.....1940..number.....	2	11	10	.....	1	.....	13
30	(c) Other, mixed, and not reported.....1940..number.....	2	1	1	.....	.....	.....	6
31	Reservoirs.....1940..total number.....	4	27	25	1	1	.....	22
32	(a) 1-99 acre-feet capacity.....1940..number.....	2	23	21	1	1	.....	2
33	(b) 100-999 acre-feet capacity.....1940..number.....	2	.....	.....	.....	.....	.....	17
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	.....	4	4	.....	.....	.....	3
35	.....1940..total capacity, ac.-ft. ³	575	475,771	475,769	(⁴)	(⁴)	.....	17,759
36	.....1930..total capacity, ac.-ft.....	3	6	.....	.....	.....	.....	9
37	.....1920..total capacity, ac.-ft.....	5,075	466,395	.....	.....	.....	.....	4,698
38	Wells, flowing.....1940..number.....	66	97	97	.....	.....	.....	.....
39	.....1930..number.....	24	6	.....	.....	.....	.....	1
40	.....1920..number.....	38	8	.....	.....	.....	.....	.....
41	.....1940..yield, g.p.m.....	7,440	10,815	10,815	.....	.....	.....	.....
42	.....1930..yield, g.p.m.....	7,378	613	.....	.....	.....	.....	10
43	.....1920..yield, g.p.m.....	1,628	75	.....	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	.....	104	104	.....	.....	.....	.....
45	.....1930..number.....	.....	8	.....	.....	.....	.....	.....
46	.....1920..number.....	1	2	.....	.....	.....	.....	.....
47	.....1940..yield, g.p.m.....	.....	52,715	52,715	.....	.....	.....	.....
48	.....1930..yield, g.p.m.....	.....	7,050	.....	.....	.....	.....	.....
49	.....1920..yield, g.p.m.....	27	900	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number.....	1	124	163	.....	1	.....	.....
51	.....1930..total number.....	2	30	.....	.....	.....	.....	.....
52	Prime movers.....1940..capacity, hp.....	(⁴)	1,648	1,648	.....	(⁴)	.....	.....
53	.....1930..capacity, hp.....	451	387	.....	.....	.....	.....	.....
54	.....1920..capacity, hp.....	457	324	.....	.....	.....	.....	.....
55	(a) Electric.....1940..number.....	.....	123	123	.....	.....	.....	.....
56	.....1940..capacity, hp.....	.....	1,361	1,361	.....	.....	.....	.....
57	(b) Internal-combustion.....1940..number.....	1	38	37	.....	1	.....	.....
58	.....1940..capacity, hp.....	(⁴)	282	280	.....	(⁴)	.....	.....
59	(c) Other.....1940..number.....	.....	3	3	.....	.....	.....	.....
60	.....1940..capacity, hp.....	.....	5	5	.....	.....	.....	.....
61	Pumps.....1940..total number.....	1	165	164	.....	1	.....	.....
62	.....1930..number.....	3	31	.....	.....	.....	.....	.....
63	.....1920..number.....	7	10	.....	.....	.....	.....	.....
64	.....1940..capacity, g.p.m.....	(⁴)	107,679	107,629	.....	(⁴)	.....	.....
65	.....1930..capacity, g.p.m.....	32,130	21,270	.....	.....	.....	.....	.....
66	.....1920..capacity, g.p.m.....	27,465	9,650	.....	.....	.....	.....	.....
67	(a) Centrifugal.....1940..number.....	.....	93	92	.....	1	.....	.....
68	.....1940..capacity, g.p.m.....	.....	42,118	42,065	.....	(⁴)	.....	.....
69	.....1940..average capacity, g.p.m.....	.....	453	457	.....	(⁴)	.....	.....
70	(b) Turbines.....1940..number.....	.....	40	40	.....	.....	.....	.....
71	.....1940..capacity, g.p.m.....	.....	41,011	41,011	.....	.....	.....	.....
72	.....1940..average capacity, g.p.m.....	.....	1,025	1,025	.....	.....	.....	.....
73	(c) Plunger.....1940..number.....	.....	1	1	.....	.....	.....	.....
74	.....1940..capacity, g.p.m.....	(⁴)	(⁴)	(⁴)	.....	.....	.....	.....
75	.....1940..average capacity, g.p.m.....	(⁴)	(⁴)	(⁴)	.....	.....	.....	.....
76	(d) Other.....1940..number.....	1	31	31	.....	.....	.....	.....
77	.....1940..capacity, g.p.m.....	(⁴)	24,542	24,542	.....	.....	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	(⁴)	21	21	.....	(⁴)	.....	.....
79	.....1930..average, feet.....	30	17	.....	.....	.....	.....	.....
80	.....1920..average, feet.....	24	30	.....	.....	.....	.....	.....
81	from pumped wells.....1940..average, feet.....	(⁴)	25	25	.....	(⁴)	.....	.....
82	from surface sources.....1940..average, feet.....	(⁴)	15	15	.....	(⁴)	.....	.....

¹Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.²Includes siphons and farm pipe lines reported.

CENSUS OF IRRIGATION - IDAHO

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WORKS, 1940, 1930, AND 1920-Continued

COLUMBIA RIVER—Continued														
Snake River—Continued														
Lower Snake River—Continued														
Owyhee River—Continued				Payette River				Weiser River	Total	Salmon River				
South Fork Owyhee River			Jordan Creek (24)	Total	Direct	North Fork Payette River (26)	South Fork Payette River (27)			Upper Salmon River				
Total	Direct (22)	East Fork Owyhee River (23)						Total	Direct	(25)	(28)	Total	Total	Direct (29)	Pahsimeroi River (30)	Lemhi River (31)
23	4	19	46	353	144	178	31	104	802	510	189	51	270	1
274	42	322	114	423	672	279	96	320	162	200	191	257	195	2
40	5	35	117	233	104	73	56	79	814	540	230	55	255	3
				153				135	548					4
				51				30	363					5
				24	13	10	1	13	12	7	3	2	2	6
				5	9	4	1	9	96	64	28	1	35	7
40	5	35	101	178	67	57	54	38	570	400	197	48	155	8
			10	17	15	2		19	136	69	2	4	63	9
55.0	7.0	48.0	60.0	747.4	551.0	156.4	40.0	267.0	1,428.8	1,073.8	405.4	95.0	573.4	10
				692				338	1,350					11
				785				478	1,693					12
55	7	48	60	739	544	155	40	259	1,406	1,063	400	95	568	13
				8.4	7.0	1.4		8.0	20.8	10.8	5.4		5.4	14
94	12	82	203	3,591	2,474	1,032	85	1,622	4,247	3,455	1,333	312	1,810	15
				4,757				873	3,594					16
				4,450				1,822	4,747					17
				43.9	42.8	0.9	0.2	6.1	3.2	1.5	0.8		0.7	18
				14.5				7.0	6.1					19
				5.2				15.1	1.9					20
				19.9	19.9				0.1	0.1	0.1			21
				4.3	3.3	0.8	0.2	0.1	1.7	1.2	0.6		0.6	22
				17.2	17.1	0.1		4.0	1.2					23
				2.5	2.5			2.0	0.2	0.2	0.1		0.1	24
12	1	11	4	41	14	26	1	9	13	5	3		2	25
				20				7	9					26
				12				9	12					27
				9	2	6	1	2	2	1			1	28
8	1	7	4	29	12	17		4	7	4	3		1	29
4		4		3		3		3	4					30
14	1	13	4	38	16	20	2	9	13	5	3		2	31
12	1	11	2	22	13	8	1	2	11	5	3		2	32
				7	1	6		3						33
2		2		9	2	6	1	4	2					34
14,821	(4)	14,621	536	296,991	34,658	100,426	(4)	91,375	7,324	106	31		(4)	35
				24				8	10					36
				101,125				73,100	4,304					37
				1		1								38
								3						39
				(4)		(4)								40
														41
				36				16						42
														43
				14	14			1	1	1	1			44
				3										45
				3										46
				2,010	2,010			(4)	(4)	(4)	(4)			47
				645										48
				9,000										49
				51	49	2		3	6	3	3			50
				96				3	7					51
				2,409	2,401	(4)		302	90	21	21			52
				1,975				264	38					53
				608				620	36					54
				30	30			3	3	2	(4)	2		55
				512	512			302	21	(4)	(4)			56
				16	14	2			3	1	(4)	1		57
				92	84	(4)			69	(4)	(4)			58
				5	5									59
				1,805	1,805									60
				53	51	2		3	7	4	4			61
				101				4	7					62
				13				5	2					63
				177,946	177,521	(4)		12,780	4,060	3,410	3,410			64
				179,191				14,000	1,965					65
				18,256				31,100	10,875					66
				32	30	2		3	6	3	3			67
				10,536	10,113	(4)		12,780	3,160	2,510	2,510			68
				329	337	(4)		4,260	527	837	837			69
				6	6									70
				23,950	23,950									71
				3,992	3,992									72
				1	1									73
				(4)	(4)									74
				(4)	(4)									75
				14	14				1	1	(4)	1		76
				143,438	143,438				(4)	(4)	(4)			77
				30	31	(4)		52	13	14	14			78
				32				35	20					79
				28				76	56					80
				45	45			(4)	(4)	(4)	(4)			81
				23	24	(4)		79	14	15	15			82

³Total capacity of all reservoirs regardless of size.

⁴Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — IDAHO

DRAINAGE BASIN TABLE II—ENTERPRISES AND IRRIGATION

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1930 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		COLUMBIA RIVER—Continued						
		Snake River—Continued						
		Lower Snake River—Continued						
		Salmon River—Continued						
		Lower Salmon River						
		Total	Direct (32)	North Fork Salmon River (33)	Panther Creek (34)	Middle Fork Salmon River (35)	South Fork Salmon River (36)	Little Salmon River (37)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
1	Enterprises.....1940..number.....	262	141	23	16	13	7	92
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	97	80	45	63	42	84	151
3	Diversion dams.....1940..total number.....	274	134	32	27	22	9	50
4	.....1930..total number.....							
5	.....1920..total number.....							
6	(a) Concrete and masonry.....1940..number.....	5						5
7	(b) Timber.....1940..number.....	32	15	2		2	3	10
8	(c) Earth and rock.....1940..number.....	170	108	8	26	20	3	5
9	(d) Other, mixed, and not reported.....1940..number.....	67	11	22	1		3	30
10	Main canals and laterals.....1940..total length, miles.....	355.0	150.3	31.3	18.0	12.0	9.2	128.2
11	.....1930..total length, miles.....							
12	.....1920..total length, miles.....							
13	(a) Earth.....1940..length, miles.....	345	150	29	18	12	9	127
14	(b) Lined.....1940..length, miles.....	10.0	6.3	2.3			0.2	1.2
15	.....1940..capacity, c.f.s. ¹	792	327	37	91	71	19	247
16	.....1930..capacity, c.f.s. ¹							
17	.....1920..capacity, c.f.s. ¹							
18	Pipe lines ².....1940..total length, miles.....	1.7	1.3		0.2			0.2
19	.....1930..total length, miles.....							
20	.....1920..total length, miles.....							
21	(a) Concrete.....1940..length, miles.....							
22	(b) Metal.....1940..length, miles.....	0.5	0.3					0.2
23	(c) Wood-stave.....1940..length, miles.....	1.2	1.0		0.2			
24	(d) Other.....1940..length, miles.....							
25	Storage dams.....1940..total number.....	8	3					5
26	.....1930..total number.....							
27	.....1920..total number.....							
28	(a) Concrete and masonry.....1940..number.....	1						1
29	(b) Earth and rock.....1940..number.....	3	1					2
30	(c) Other, mixed, and not reported.....1940..number.....	4	2					2
31	Reservoirs.....1940..total number.....	8	4					4
32	(a) 1-99 acre-feet capacity.....1940..number.....	6	3					3
33	(b) 100-999 acre-feet capacity.....1940..number.....							
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	2	1					1
35	.....1940..total capacity, ac.-ft. ³	7,216	3,212					4,004
36	.....1930..total number.....							
37	.....1920..total capacity, ac.-ft. ³							
38	Wells, flowing.....1940..number.....							
39	.....1930..number.....							
40	.....1920..number.....							
41	.....1940..yield, g.p.m.....							
42	.....1930..yield, g.p.m.....							
43	.....1920..yield, g.p.m.....							
44	Wells, pumped.....1940..number.....							
45	.....1930..number.....							
46	.....1920..number.....							
47	.....1940..yield, g.p.m.....							
48	.....1930..yield, g.p.m.....							
49	.....1920..yield, g.p.m.....							
50	Pumping plants.....1940..total number.....	3	2			1		
51	.....1930..total number.....							
52	Prime movers.....1940..capacity, hp.....	69	(4)			(4)		
53	.....1930..capacity, hp.....							
54	.....1920..capacity, hp.....							
55	(a) Electric.....1940..number.....	(4)	1			(4)	1	
56	.....1940..capacity, hp.....							
57	(b) Internal-combustion.....1940..number.....	(4)	2					
58	.....1940..capacity, hp.....		(4)					
59	(c) Other.....1940..number.....							
60	.....1940..capacity, hp.....							
61	Pumps.....1940..total number.....	3	2			1		
62	.....1930..number.....							
63	.....1920..number.....							
64	.....1940..capacity, g.p.m.....	650	(4)			(4)		
65	.....1930..capacity, g.p.m.....							
66	.....1920..capacity, g.p.m.....							
67	(a) Centrifugal.....1940..number.....	3	2			1		
68	.....1940..capacity, g.p.m.....	650	(4)			(4)		
69	.....1940..average capacity, g.p.m.....	217	(4)					
70	(b) Turbine.....1940..number.....							
71	.....1940..capacity, g.p.m.....							
72	.....1940..average capacity, g.p.m.....							
73	(c) Plunger.....1940..number.....							
74	.....1940..capacity, g.p.m.....							
75	.....1940..average capacity, g.p.m.....							
76	(d) Other.....1940..number.....							
77	.....1940..capacity, g.p.m.....							
78	Pumping lift, from all sources.....1940..average, feet.....	12	(4)			(4)		
79	.....1930..average, feet.....							
80	.....1920..average, feet.....							
81	from pumped wells.....1940..average, feet.....							
82	from surface sources.....1940..average, feet.....	12	(4)			(4)		

¹Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.²Includes siphons and farm pipe lines reported.

CENSUS OF IRRIGATION—IDAHO

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WORKS, 1940, 1930, AND 1920—Continued

COLUMBIA RIVER—Continued										GREAT SALT LAKE				
Snake River—Continued				Spokane River			Clark Fork			Kootenai River	Bear River			
Lower Snake River—Continued				Total	Direct	Coeur d'Alene River	Total	Direct	Priest River		Total	Direct	Thomas Creek	Malad River
Clearwater River														
Total	Direct	Selway River	South Fork Clearwater River											
(38)	(40)	(41)	(41)	(45)	(46)	(50)	(51)	(52)	(54)	(55)	(57)			
63	55	3	5	36	22	14	35	30	5	8	343	235	6	102
73	81	21	27	215	343	13	38	41	24	91	518	669	712	159
30	24	3	3	29	19	10	37	26	11	4	286	231	5	50
13											231	49	14	22
2											498	63	25	190
2	2			10	10		1	1			56	40	2	14
9	6	3		2	2		5	3	2		31	29		2
10	10			16	6	10	22	13	9	4	152	119	2	31
9	6		3	1	1		9	9			47	43	1	3
26.6	21.6	2.0	3.0	39.9	36.7	3.2	5.1	3.1	2.0	4.2	1,038.9	902.9	20.0	116.0
27											903	333	31	95
24											2,076	484	63	837
23	18	2	3	31	28	3	5	3	2	4	1,030	894	20	116
3.6	3.6			8.9	8.7	0.2	0.1	0.1		0.2	8.9	8.9		
110	97	4	9	540	526	14	55	46	9	48	3,646	3,340	85	221
194											3,315	1,848	54	152
69											5,030	2,121	203	400
55.7	55.7			69.1	65.5	2.6	2.0	1.8	0.2	1.2	11.6	9.4		2.2
50.9											5.7	1.2		
35.9											4.6	4.5		
1.8	1.8			31.5	31.5		0.1	0.1			1.9	1.9		
12.8	12.8			7.5	5.3	2.2	1.1	1.1		0.9	5.1	3.7		1.4
41.9	41.9			14.1	13.7	0.4	0.6	0.4	0.2	0.3	4.3	3.5		0.8
0.2	0.2			16.0	16.0		0.2	0.2			0.3	0.3		
2	2			3	3		2	2			40	31	2	7
4											21	3		5
2											80	6		58
				3	3		1	1			5	3		2
2	2						1	1			33	27	2	4
											2	1		1
6	6			4	3	1	4	3	1		42	30	1	11
4	4			2	1	1	4	3	1		22	15		7
				2	2						17	12	1	4
2	2										3	3		
5,004	5,004			902	901	(4)	4	3	(4)		27,143	26,268	(4)	1,775
3											20		1	9
9,000											28,751		40	410
											94			94
											21			21
											57			57
											5,035			5,035
											750			750
											7,468			7,468
20	20			2	2						14	7		7
19											5			5
28														
1,965	1,965			(4)	(4)						6,828	2,610		4,218
2,229											600			600
2,750														
31	31			13	12	1	1	1		1	29	23		6
33											9	1		1
681	681			1,316	1,315	(4)	(4)	(4)		(4)	2,689	2,532		166
791											2,341	1		6
394											573	530		
28	28			10	9	1					26	21		5
606	606			1,276	1,275	(4)					2,678	2,513		165
3	3			2	2			1			3	2		1
75	75			(4)	(4)		(4)	(4)		(4)	11	(4)		(4)
				(4)	(4)		(4)	(4)		(4)				
30	30			13	12	1	1	1		2	29	23		6
34											15	1		1
36											8	3		
4,475	4,475			45,567	45,517	(4)	(4)	(4)		(4)	110,238	105,960		4,278
15,024											117,500	50		600
9,945											14,915	5,180		
28	28			11	10	1				1	22	19		3
4,305	4,305			45,528	45,478	(4)				(4)	85,530	82,430		3,100
154	154			4,139	4,548	(4)				(4)	3,888	4,338		1,033
											3	1		2
											2,160	(4)		(4)
											720	(4)		(4)
(4)	(4)			2	2						(4)			(4)
(4)	(4)			(4)	(4)						(4)			(4)
(4)	(4)			(4)	(4)						(4)			(4)
(4)	(4)						(4)	(4)		(4)	3	3		
											22,530	22,530		
30	30			76	81	(4)	(4)	(4)		(4)	40	33		56
34											33	12		12
21											10	9		
27	27			(4)	(4)		(4)	(4)		(4)	41	22		66
37	37			52	54	(4)	(4)	(4)		(4)	38	42		6

*Total capacity of all reservoirs regardless of size.

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

CENSUS OF IRRIGATION — IDAHO

DRAINAGE BASIN TABLE II.—ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920—Continued

ITEM (For definitions and explanations, see text. Major-basin totals for 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)			INDEPENDENT BASINS														
			Mud Lake					Medicine Lodge Creek	Birch Creek	Little Lost River	Big Lost River	Deep Creek					
			Total	Direct	Camas Creek ¹												
					Total	Direct	Beaver Creek										
				(58)		(59)	(60)	(61)	(62)	(63)	(64)	(65)					
ENTERPRISES AND IRRIGATION WORKS JANUARY 1																	
1	Enterprises.....	1940..number.....	73	35	38	32	6	30	10	8	33	14					
2	Average size of enterprise based on area works were capable of supplying with water.....	1940..acres.....	556	898	240	246	213	144	213	1,965	1,173	225					
3	Diversion dams.....	1940..total number.....	41	.....	41	34	7	52	20	14	44	2				
4		1930..total number.....	46	.....	.....	.....	9	35	.....	27	110	.....				
5		1920..total number.....	108	.....	.....	.....	27	62	.....	33	88	.....				
6	(a) Concrete and masonry.....	1940..number.....	1	.....	1	1	.....	.....	7	13	10	1		
7	(b) Timber.....	1940..number.....	6	.....	6	5	1	11	1	.....	3	.....				
8	(c) Earth and rock.....	1940..number.....	24	.....	24	20	4	26	11	1	23	.....				
9	(d) Other, mixed, and not reported.....	1940..number.....	10	.....	10	8	2	15	1	.....	8	1			
10	Main canals and laterals.....	1940..total length, miles.....	91.1	42.1	49.0	37.0	12.0	45.0	41.0	58.1	243.0	40.0					
11		1930..total length, miles.....	165	.....	.....	.....	24	10	.....	48	347	.....				
12		1920..total length, miles.....	304	.....	.....	.....	27	105	.....	108	610	.....				
13	(a) Earth.....	1940..length, miles.....	91	42	49	37	12	45	41	58	243	40					
14	(b) Lined.....	1940..length, miles.....	0.1	0.1	.....	.....	.....	.....	.....	0.1	.....	.....			
15		1940..capacity, c.f.s. ²	510	320	190	161	29	115	113	316	1,367	101					
16		1930..capacity, c.f.s. ²	3,003	.....	.....	.....	33	44	.....	145	2,462	.....				
17		1920..capacity, c.f.s. ²	3,114	.....	.....	.....	72	266	.....	774	2,237	.....				
18	Pipe lines ³	1940..total length, miles.....	0.1	0.1	.....	.....	.....	.....	.....	.....	2.5	.....				
19		1930..total length, miles.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	.....				
20		1920..total length, miles.....	.....	.....	.....	.....	.....	0.4	.....	1.9	0.1	.....				
21	(a) Concrete.....	1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	(b) Metal.....	1940..length, miles.....	0.1	0.1	.....	.....	.....	.....	.....	.....	2.5	.....				
23	(c) Wood-stave.....	1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	(d) Other.....	1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	Storage dams.....	1940..total number.....	1	1	.....	.....	.....	.....	.....	.....	2	5
26		1930..total number.....	3	.....	.....	.....	1	.....	.....	.....	5	.....				
27		1920..total number.....	7	.....	.....	.....	1	1	.....	2	7	.....				
28	(a) Concrete and masonry.....	1940..number.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	(b) Earth and rock.....	1940..number.....	1	1	.....	.....	.....	.....	.....	.....	1	.....				
30	(c) Other, mixed, and not reported.....	1940..number.....	.....	.....	.....	.....	.....	.....	.....	.....	1	5
31	Reservoirs.....	1940..total number.....	1	1	.....	.....	.....	.....	.....	.....	2	6
32	(a) 1-99 acre-feet capacity.....	1940..number.....	1	1	.....	.....	.....	.....	.....	.....	1	6
33	(b) 100-999 acre-feet capacity.....	1940..number.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
34	(c) 1,000 and over acre-feet capacity.....	1940..number.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....				
35		1940..total capacity, ac.-ft. ⁴	(⁵)	(⁵)	.....	.....	.....	.....	.....	.....	(⁵)	50
36		1930..total capacity, ac.-ft. ⁴	1	.....	.....	.....	.....	.....	.....	.....	4	.....				
37		1920..total capacity, ac.-ft. ⁴	6,400	.....	.....	.....	.....	.....	.....	.....	49,013	.....				
38	Wells, flowing.....	1940..number.....	29	29	.....	.....	.....	.....	.....	.....	.....	1
39		1930..number.....	15	.....	.....	.....	.....	.....	.....	.....	.....	.....
40		1920..number.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
41		1940..yield, g.p.m.....	6,600	6,600	.....	.....	.....	.....	.....	.....	.....	(⁵)
42		1930..yield, g.p.m.....	5,400	.....	.....	.....	.....	.....	.....	.....	.....	.....
43		1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
44	Wells, pumped.....	1940..number.....	54	54	.....	.....	.....	.....	.....	.....	.....	3
45		1930..number.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
46		1920..number.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
47		1940..yield, g.p.m.....	98,190	98,190	.....	.....	.....	.....	.....	.....	.....	140
48		1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
49		1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
50	Pumping plants.....	1940..total number.....	51	51	.....	.....	.....	.....	.....	.....	.....	3
51		1930..total number.....	8	.....	.....	.....	.....	.....	.....	.....	2	.....				
52	Prime movers.....	1940..capacity, hp.....	1,843	1,843	.....	.....	.....	.....	.....	.....	.....	7
53		1930..capacity, hp.....	1,150	.....	.....	.....	.....	.....	.....	.....	8	.....				
54		1920..capacity, hp.....	328	.....	.....	.....	.....	.....	.....	.....	.....	.....
55	(a) Electric.....	1940..number.....	45	45	.....	.....	.....	.....	.....	.....	.....	.....
56		1940..capacity, hp.....	1,746	1,746	.....	.....	.....	.....	.....	.....	.....	.....
57	(b) Internal-combustion.....	1940..number.....	6	6	.....	.....	.....	.....	.....	.....	.....	1
58		1940..capacity, hp.....	97	97	.....	.....	.....	.....	.....	.....	.....	(⁵)
59	(c) Other.....	1940..number.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
60		1940..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(⁵)
61	Pumps.....	1940..total number.....	51	51	.....	.....	.....	.....	.....	.....	.....	3
62		1930..number.....	12	.....	.....	.....	.....	.....	.....	.....	2	.....				
63		1920..number.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....
64		1940..capacity, g.p.m.....	270,704	270,704	.....	.....	.....	.....	.....	.....	.....	140
65		1930..capacity, g.p.m.....	165,550	.....	.....	.....	.....	.....	.....	.....	100	.....				
66		1920..capacity, g.p.m.....	96,250	.....	.....	.....	.....	.....	.....	.....	.....	.....
67	(a) Centrifugal.....	1940..number.....	38	38	.....	.....	.....	.....	.....	.....	.....	1
68		1940..capacity, g.p.m.....	228,554	228,554	.....	.....	.....	.....	.....	.....	.....	(⁵)
69		1940..average capacity, g.p.m.....	6,015	6,015	.....	.....	.....	.....	.....	.....	.....	(⁵)
70	(b) Turbine.....	1940..number.....	13	13	.....	.....	.....	.....	.....	.....	.....	.....
71		1940..capacity, g.p.m.....	42,150	42,150	.....	.....	.....	.....	.....	.....	.....	.....
72		1940..average capacity, g.p.m.....	3,242	3,242	.....	.....	.....	.....	.....	.....	.....	.....
73	(c) Plunger.....	1940..number.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
74		1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(⁵)
75		1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(⁵)
76	(d) Other.....	1940..number.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
77		1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
78	Pumping lift, from all sources.....	1940..average, feet.....	17	17	.....	.....	.....	.....	.....	.....	.....	117
79		1930..average, feet.....	13	.....	.....	.....	.....	.....	.....	.....	15	.....				
80		1920..average, feet.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
81	from pumped wells.....	1940..average, feet.....	20	20	.....	.....	.....	.....	.....	.....	.....	117
82	from surface sources.....	1940..average, feet.....	11	11	.....	.....	.....	.....	.....	.....	.....	.....

¹ In the 1930 and 1920 reports, Camas Creek apparently included the area now designated as Mud Lake Direct (58) (number refers to separate map); therefore, no 1930 or 1920 figures for these basins can be shown separately. ² Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources. ³ Includes siphons and farm pipe lines reported. ⁴ Total capacity of all reservoirs regardless of size. ⁵ Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION - IDAHO

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COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, 1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, 1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920 irrigation data omitted from any of the counties listed are included under "All other counties"]

ITEM (For definitions and explanations, see text)		STATE TOTAL	Ada	Adams	Bannock
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*					
1 All farms.....	1940..number....	43,663	2,689	410	1,723
2	1930..number....	41,674	2,305	462	1,748
3 Irrigated farms.....	1940..number....	29,898	2,512	289	1,334
4	1930..number....	27,953	2,096	270	1,212
5 Increase or decrease (-), 1930-1940.....	percent.....	7.0	19.8	7.0	10.1
6 Operated by—(a) Owners and managers.....	1940..number....	21,773	1,781	245	1,083
7	1930..number....	20,486	1,386	238	1,030
8 (b) Tenants.....	1940..number....	8,125	731	44	241
9	1930..number....	7,467	710	32	182
10 Land in all farms.....	1940..acres....	10,297,745	259,072	218,079	472,115
11 Land in irrigated farms.....	1940..acres....	5,680,584	190,895	184,377	340,936
12 Average per farm.....	1940..acres....	190	76	638	256
13 (a) Operated by owners and managers.....	1940..acres....	4,721,461	140,586	173,275	300,809
14 Average per farm.....	1940..acres....	217	79	707	275
15 (b) Operated by tenants.....	1940..acres....	959,123	50,309	11,102	40,127
16 Average per farm.....	1940..acres....	118	68	252	157
17 Approximate land area.....	1940..acres....	162,897,120	729,600	881,290	1,164,800
IRRIGATED AND IRRIGABLE AREAS					
18 Area irrigated.....	1939..acres....	2,277,857	132,416	23,200	81,344
19 (a) Cropland harvested.....	1939..acres....	2,026,435	105,389	13,587	69,325
20 (b) Crop failure.....	1939..acres....	12,448	1,658	6	1,001
21 (c) Pasture.....	1939..acres....	238,974	25,368	9,607	11,018
22 Area irrigated.....	1929..acres....	2,181,250	122,640	20,536	97,726
23	1919..acres....	2,488,806	121,483	30,900	137,266
24 Increase or decrease (-), 1929-1939.....	percent.....	4.4	8.0	13.0	-16.8
25 Irrigable area in enterprises.....	1940..acres....	2,870,023	152,159	24,532	105,350
26	1930..acres....	2,814,048	143,760	25,280	126,840
27	1920 ² ..acres....	3,780,048	136,790	22,786	227,686
28 Excess of irrigable area over the area irrigated.....	1940..acres....	582,166	19,743	1,332	24,006
29	1930..acres....	632,798	21,120	4,744	29,114
30 Area works were capable of supplying with water.....	1940..acres....	2,593,534	148,247	23,721	98,167
31	1930..acres....	2,617,021	128,457	24,647	124,532
32	1920..acres....	3,092,810	133,768	32,676	165,515
33 Increase or decrease (-), 1930-1940.....	percent.....	-0.9	15.4	-3.8	-21.4
34 Excess, capability of works over area irrigated.....	1940..acres....	315,677	15,831	621	15,623
35	1930..acres....	435,771	5,817	4,111	27,106
36 Proportion which area irrigated is of all lands in irrigated farms.....	1939..percent....	40.1	69.4	12.6	23.9
37	1929..percent....	45.0	83.6	13.2	28.9
38 Proportion which area irrigated is of area works were capable of supplying with water.....	1939..percent....	57.8	89.3	97.8	82.9
39	1929..percent....	83.3	95.5	83.3	78.3
CAPITAL INVESTED TO JANUARY 1					
40 Total investment in all enterprises.....	1940..dollars....	102,585,768	6,314,776	304,261	2,040,827
41 (a) Cost of irrigation works and equipment.....	1940..dollars....	100,989,161	6,181,022	294,711	1,962,460
42 (b) Investment in water rights (reported).....	1940..dollars....	1,596,607	123,754	9,550	78,467
43 Total investment in all enterprises.....	1930..dollars....	84,500,354	4,655,786	105,433	1,660,749
44	1920..dollars....	91,501,009	5,669,338	394,060	3,106,000
45 Increase or decrease (-), 1930-1940.....	percent.....	21.4	35.6	188.6	22.9
46 Average investment, based on area works were capable of supplying with water, per acre.....	1940..dollars....	39.55	42.60	12.83	20.79
47	1930..dollars....	32.29	36.24	4.28	13.30
48	1920..dollars....	29.59	42.38	12.06	16.76
49 Average investment per acre irrigated.....	1939..dollars....	45.04	47.69	13.11	25.09
50 Estimated final investment in existing enterprises.....	1940..dollars....	109,513,311	6,356,457	304,861	2,262,242
51	1930..dollars....	101,350,250	7,069,586	106,033	1,665,249
52	1920..dollars....	97,018,717	5,669,338	385,910	3,573,940
53 Increase or decrease (-), 1930-1940.....	percent.....	8.1	-10.1	187.5	35.9
54 Average investment, based on estimated final investment and irrigable area, per acre.....	1940..dollars....	38.16	41.78	12.43	21.47
55	1930..dollars....	36.02	49.18	4.19	13.13
56	1920 ² ..dollars....	25.67	41.45	9.25	15.70
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
		Primary	Sup.	Primary	Sup.
		Enterprises	Enterprises	Enterprises	Enterprises
57 Enterprises reporting maintenance and operation.....	1939..number....	3,037	165	102	60
58 Area irrigated in these enterprises.....	1939..acres....	2,219,486	889,254	131,119	20,155
59 Cost of maintenance and operation.....	1939..dollars....	2,256,788	202,690	154,469	24,302
60 Average cost, per acre irrigated.....	1939..dollars....	1.02	0.23	1.18	1.21
61	1929..dollars....	1.44	0.23	1.58	0.36
62 Total annual charges (reported) ³	1939..dollars....	2,461,470	184,534	146,407	22,867
63 Average annual charge per acre irrigated.....	1939..dollars....	1.25	0.21	1.14	1.20
64 Area against which charges were assessed.....	1939..acres....	2,141,009	885,270	137,965	19,089
65 Average annual charge per acre assessed.....	1939..dollars....	1.15	0.21	1.05	1.20
66 Total charges collected ⁴	1939..dollars....	2,636,622	67,009	238,991	945
67 Indebtedness to December 31 (reported) ⁴	1939..dollars....	25,485,279	2,928,859	3,612,590	4,655
WATER DELIVERED TO IRRIGATORS					
		Primary	Sup.	Primary	Sup.
		Enterprises	Enterprises	Enterprises	Enterprises
68 Enterprises reporting water delivered.....	1939..number....	2,892	147	87	44
69 Area irrigated in these enterprises.....	1939..acres....	2,034,889	896,000	120,432	20,329
70 Water delivered in these enterprises.....	1939..acre-feet....	8,356,961	1,042,271	475,904	20,992
71 Average water delivered per acre irrigated.....	1939..acre-feet....	4.1	1.2	4.0	1.0
72 Average cost of water per acre irrigated.....	1939..dollars....	1.16	0.21	1.03	1.21
DRAINAGE OF IRRIGATED LAND					
		Primary	Sup.	Primary	Sup.
		Enterprises	Enterprises	Enterprises	Enterprises
73 Enterprises reporting land drained or needing drainage.....	1939..number....	200	26	.....	.....
74 Irrigable area in these enterprises.....	1939..acres....	943,810	133,941	.....	.....
75 Irrigated area in these enterprises.....	1939..acres....	731,717	115,746	.....	.....
76 Area for which drains have been installed.....	1939..acres....	238,907	58,630	.....	.....
77 Additional area needing drainage.....	1939..acres....	29,042	2,050	.....	.....

*Census of Agriculture. ¹Includes 37,120 acres in Yellowstone National Park (part of) not shown in detail. ²For 1920 relates to total area in enterprises. Irri-
gable area for that year was not reported. ³Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds,
notes, warrants, and for special reasons. ⁴Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, re-
late to those enterprises only.

CENSUS OF IRRIGATION — IDAHO

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS,

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		Bear Lake	Bingham	Blaine	Boise
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*					
1 All farms.....	1940...number.....	711	2,217	318	195
2	1930...number.....	915	2,311	382	214
3 Irrigated farms.....	1940...number.....	577	2,146	275	123
4	1930...number.....	729	2,197	309	134
5 Increase or decrease (-), 1930-1940.....	percent.....	-20.9	-2.3	-11.0	-8.2
6 Operated by—					
7 (a) Owners and managers.....	1940...number.....	513	1,515	196	101
8	1930...number.....	662	1,565	201	118
9 (b) Tenants.....	1940...number.....	64	631	79	22
10	1930...number.....	67	632	108	16
11 Land in all farms.....	1940...acres.....	259,934	426,278	137,343	71,261
12 Land in irrigated farms.....	1940...acres.....	218,897	284,353	119,475	48,183
13 Average per farm.....	1940...acres.....	379	139	434	392
14 (a) Operated by owners and managers.....	1940...acres.....	206,272	220,188	95,722	40,905
15 Average per farm.....	1940...acres.....	402	145	488	402
16 (b) Operated by tenants.....	1940...acres.....	12,625	64,155	23,753	7,588
17 Average per farm.....	1940...acres.....	197	102	301	345
17 Approximate land area.....	1940...acres.....	632,320	1,326,080	1,695,360	1,224,320
IRRIGATED AND IRRIGABLE AREAS					
18 Area irrigated.....	1939...acres.....	54,143	175,186	26,788	5,763
19 (a) Cropland harvested.....	1939...acres.....	45,385	160,276	23,591	5,499
20 (b) Crop failure.....	1939...acres.....	475	63	680	14
21 (c) Pasture.....	1939...acres.....	8,283	14,847	2,617	250
22 Area irrigated.....	1929...acres.....	54,635	163,814	33,731	6,636
23	1919...acres.....	87,202	177,295	52,090	7,508
24 Increase or decrease (-), 1929-1939.....	percent.....	-0.9	0.9	-20.6	-13.2
25 Irrigable area in enterprises.....	1940...acres.....	59,848	223,252	32,057	6,287
26	1930...acres.....	57,891	222,570	45,712	9,476
27	1920 ¹ ...acres.....	83,890	232,923	97,801	14,239
28 Excess of irrigable area over the area irrigated.....	1940...acres.....	5,705	48,076	5,269	624
29	1930...acres.....	3,366	58,656	11,981	2,840
30 Area works were capable of supplying with water.....	1940...acres.....	56,843	221,016	31,900	6,243
31	1930...acres.....	55,930	209,120	38,449	9,201
32	1920...acres.....	72,893	217,200	77,391	8,569
33 Increase or decrease (-), 1930-1940.....	percent.....	1.6	5.8	-17.0	-32.1
34 Excess, capability of works over area irrigated.....	1940...acres.....	2,700	46,130	5,112	480
35	1930...acres.....	1,305	45,206	4,718	2,565
36 Proportion which area irrigated is of all lands in irrigated farms.....	1939...percent.....	24.7	61.6	22.4	12.0
37	1929...percent.....	23.2	69.3	26.9	10.4
38 Proportion which area irrigated is of area works were capable of supplying with water.....	1939...percent.....	95.3	79.2	84.0	92.3
39	1929...percent.....	97.7	78.4	87.7	72.1
CAPITAL INVESTED TO JANUARY 1					
40 Total investment in all enterprises.....	1940...dollars.....	281,165	6,139,576	820,616	47,841
41 (a) Cost of irrigation works and equipment.....	1940...dollars.....	277,103	6,126,345	817,873	47,685
42 (b) Investment in water rights (reported).....	1940...dollars.....	14,062	13,231	2,943	156
43 Total investment in all enterprises.....	1930...dollars.....	293,760	2,672,528	3,870,572	4,885,966
44	1920...dollars.....	397,393	3,201,889	736,713	148,484
45 Increase or decrease (-), 1930-1940.....	percent.....	-0.9	129.7	-78.8	-89.0
46 Average investment, based on area works were capable of supplying with water, per acre.....	1940...dollars.....	5.12	27.74	25.72	7.65
47	1930...dollars.....	5.25	12.78	100.67	531.02
48	1920...dollars.....	5.45	14.74	9.52	17.33
49 Average investment per acre irrigated.....	1939...dollars.....	5.38	35.05	30.63	8.30
50 Estimated final investment in existing enterprises.....	1940...dollars.....	296,065	6,338,516	821,066	51,011
51	1930...dollars.....	298,760	2,736,648	3,870,772	4,886,283
52	1920...dollars.....	430,093	3,654,189	1,120,113	150,619
53 Increase or decrease (-), 1930-1940.....	percent.....	-0.2	131.4	-78.8	-89.0
54 Average investment, based on estimated final investment and irrigable area, per acre.....	1940...dollars.....	4.98	28.39	25.61	8.12
55	1930...dollars.....	5.15	12.30	84.68	516.70
56	1920 ¹ ...dollars.....	5.13	15.69	11.45	10.57
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
		Primary	Supplemental	Primary	Supplemental
		Enterprises		Enterprises	
57 Enterprises reporting maintenance and operation.....	1939...number.....	59	2	66	5
58 Area irrigated in these enterprises.....	1939...acres.....	48,447	(2)	172,874	155,769
59 Cost of maintenance and operation.....	1939...dollars.....	13,126	(2)	144,798	5,772
60 Average cost, per acre irrigated.....	1939...dollars.....	0.27	(2)	0.84	0.04
61	1929...dollars.....	0.51	.....	1.11	.....
62 Total annual charges (reported) ³ 4.....	1939...dollars.....	14,843	.....	174,658	5,198
63 Average annual charge per acre irrigated.....	1939...dollars.....	0.34	.....	1.02	0.03
64 Area against which charges were assessed.....	1939...acres.....	46,061	.....	187,964	155,370
65 Average annual charge per acre assessed.....	1939...dollars.....	0.32	.....	0.93	0.03
66 Total charges collected ⁵	1939...dollars.....	9,841	.....	174,532	5,074
67 Indebtedness to December 31 (reported) ⁴	1939...dollars.....	2,067	.....	1,538,107	861
WATER DELIVERED TO IRRIGATORS					
		Primary	Supplemental	Primary	Supplemental
		Enterprises		Enterprises	
68 Enterprises reporting water delivered.....	1939...number.....	59	2	65	4
69 Area irrigated in these enterprises.....	1939...acres.....	48,619	(2)	175,065	152,409
70 Water delivered in these enterprises.....	1939...acre-feet.....	95,943	(2)	887,510	183,393
71 Average water delivered per acre irrigated.....	1939...acre-feet.....	2.1	(2)	5.1	1.2
72 Average cost of water per acre irrigated.....	1939...dollars.....	0.33	(2)	1.03	0.03
DRAINAGE OF IRRIGATED LAND					
73 Enterprises reporting land drained or needing drainage.....	1939...number.....	6	.....	7	.....
74 Irrigable area in these enterprises.....	1939...acres.....	9,767	.....	59,702	.....
75 Irrigated area in these enterprises.....	1939...acres.....	9,762	.....	43,429	.....
76 Area for which drains have been installed.....	1939...acres.....	75	.....	2,953	.....
77 Additional area needing drainage.....	1939...acres.....	4,905	.....	3,090	.....

*Census of Agriculture.

¹For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.²Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION - IDAHO

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1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE
1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939-Continued
Irrigation data omitted from any of the counties listed are included under "All other counties"]

Donner	Bonneville	Boundary	Butte	Camas	Canyon	Caribou	Cassia	Clark	Custer	
1,551	1,672	768	264	193	3,631	247	1,296	113	365	1
1,010	1,577	426	235	261	3,379	357	1,407	124	368	2
56	1,426	3	241	73	3,497	102	1,199	82	337	3
54	1,306	8	213	62	3,138	95	1,267	89	331	4
3.7	9.2	-63.5	13.1	17.7	11.4	7.4	-5.4	-6.8	1.8	5
52	921	3	188	59	2,390	92	909	70	278	6
49	811	.....	147	55	2,170	85	913	74	291	7
4	505	.....	53	14	1,107	10	290	12	59	8
5	485	.....	66	7	968	10	354	14	40	9
245,068	427,371	112,566	65,139	164,791	244,777	162,671	287,175	151,516	108,765	10
16,180	235,456	990	60,877	58,749	238,595	84,365	233,576	110,734	103,174	11
289	165	310	253	805	68	827	195	1,350	306	12
15,600	180,523	930	50,483	52,928	157,659	79,565	192,642	104,408	86,418	13
298	196	310	209	897	66	865	212	1,492	311	14
680	54,933	.....	10,394	5,821	80,836	4,800	40,634	6,325	16,756	15
170	109	.....	196	416	73	480	141	527	284	16
1,111,040	1,181,440	816,000	1,433,600	676,480	371,200	752,000	1,623,160	1,120,640	3,157,120	17
1,571	122,287	228	27,562	8,545	180,511	12,407	84,689	11,808	33,635	18
1,453	117,489	122	23,939	8,203	143,800	9,797	78,047	8,897	26,670	19
10	.....	.....	3,202	.....	2,290	9	178	45	118	20
108	4,798	106	421	282	34,431	2,601	6,466	2,866	6,938	21
922	98,569	.....	27,416	7,108	186,449	14,692	79,374	16,292	39,346	22
.....	110,953	.....	39,563	13,272	201,718	23,825	113,537	18,951	80,141	23
70.4	24.1	.....	0.5	20.2	-8.1	-15.6	6.7	-27.5	-14.5	24
2,885	129,977	701	37,771	9,555	277,338	15,880	133,109	16,600	51,534	25
2,095	106,463	.....	54,434	10,368	236,620	16,690	117,855	20,053	69,143	26
.....	135,021	.....	184,899	21,284	294,682	29,102	149,035	45,794	144,041	27
1,414	7,690	533	10,209	1,010	96,827	3,179	48,420	4,792	17,899	28
1,173	7,894	.....	27,018	3,259	40,171	1,998	38,291	3,761	29,797	29
2,457	128,042	726	37,591	9,555	208,189	16,516	88,923	15,305	49,706	30
1,462	105,164	.....	32,768	10,308	202,474	16,240	104,494	20,023	61,673	31
.....	123,043	.....	66,140	14,518	228,032	25,908	129,619	26,467	112,244	32
68.1	21.8	.....	-28.8	-7.3	2.8	-4.5	-13.9	-23.6	-19.4	33
886	5,755	498	10,029	1,010	27,678	3,109	5,284	3,487	16,071	34
540	6,595	.....	25,352	3,198	6,025	1,548	25,120	3,731	22,327	35
9.7	51.9	24.5	45.3	14.5	75.7	14.7	36.3	10.7	32.6	36
8.7	49.7	.....	42.8	19.2	89.7	17.9	37.5	14.2	36.5	37
63.9	95.5	31.4	73.3	89.4	86.7	80.0	94.1	77.2	67.7	38
63.1	93.7	.....	52.0	69.0	87.0	90.5	76.0	81.4	63.6	39
15,901	4,947,094	5,350	565,298	54,670	11,742,448	50,409	5,213,762	66,249	437,536	40
15,136	4,905,171	5,280	565,108	54,660	11,636,949	48,789	4,943,252	44,295	431,182	41
765	41,923	70	190	10	105,489	1,620	270,510	21,954	6,354	42
21,122	1,845,745	.....	1,751,940	107,205	7,031,822	80,350	4,444,572	113,685	404,690	43
.....	3,045,291	.....	3,034,513	117,177	10,223,513	236,538	4,610,590	138,592	778,848	44
-24.7	168.0	.....	-67.7	-49.0	67.0	-37.3	17.3	-41.7	8.1	45
6.47	38.64	7.37	15.04	5.72	56.40	3.25	57.96	4.33	8.80	46
14.45	17.55	.....	33.20	10.40	34.73	4.95	42.53	5.68	6.56	47
.....	24.75	.....	45.88	8.07	44.83	9.13	35.57	5.24	6.94	48
10.12	40.45	23.46	20.51	6.40	65.05	4.06	61.66	5.61	13.01	49
25,341	4,948,244	5,470	565,564	54,670	14,948,644	51,039	5,683,447	71,759	441,234	50
26,072	1,911,745	.....	1,752,140	107,205	10,475,002	82,020	5,055,572	123,885	445,840	51
.....	3,130,001	.....	4,846,413	117,777	10,223,513	238,188	4,618,640	140,318	813,848	52
-2.8	158.8	.....	-67.7	-49.0	37.0	-37.8	11.8	-42.1	-1.0	53
8.40	38.07	7.19	14.97	5.72	51.74	3.27	42.47	4.32	8.56	54
12.44	17.96	.....	32.19	10.34	44.27	4.91	42.97	6.18	6.45	55
.....	23.18	.....	26.22	5.53	43.58	8.18	30.99	3.06	5.65	56
28	81	2	5	17	14	58	67	6	72	57
1,170	120,958	(8)	110	27,008	6,352	178,419	81,999	11,165	82,129	58
959	109,763	(8)	145	10,330	1,920	248,031	113,642	3,708	161,693	59
0.81	0.87	(8)	1.32	0.38	0.30	1.39	1.89	0.33	1.85	60
1.51	0.70	.....	0.76	0.34	0.34	1.46	1.95	0.42	1.85	61
150	121,630	2,856	27,448	1,700	237,811	97,022	455	139,625	300	62
0.31	1.07	0.03	1.08	0.42	1.35	1.20	0.67	1.81	3.00	63
480	115,146	98,451	37,157	4,000	192,420	80,852	800	80,532	100	64
0.31	1.03	0.03	0.74	0.42	1.24	1.20	0.67	1.73	3.00	65
.....	108,941	2,715	19,610	1,700	455,123	14,277	100	148,213	362	66
.....	168,431	.....	142,800	.....	6,369,274	70,312	437	1,890,670	.....	67
40	63	4	8	17	15	55	61	5	72	68
1,329	111,435	98,522	228	27,207	6,094	168,217	81,968	11,954	78,949	69
3,796	581,693	119,619	639	120,127	3,336	702,770	81,332	22,468	254,347	70
2.9	5.2	1.2	2.8	4.4	0.5	4.2	1.0	1.9	3.2	71
0.80	1.10	0.03	1.32	1.05	0.32	1.35	1.19	0.34	1.81	72
4	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	73
30	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	74
16	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	75
15	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	76
7	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	77

Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - IDAHO

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, [Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920

ITEM (For definitions and explanations, see text)		Elmore	Franklin	Fremont	Gem
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*					
1 All farms.....	1940...number....	476	996	967	900
2	1930...number....	333	1,131	1,056	768
3 Irrigated farms.....	1940...number....	361	850	716	774
4	1930...number....	216	900	686	649
5 Increase or decrease (-), 1930-1940.....	percent.....	81.0	-5.6	4.4	19.3
6 Operated by—					
7 (a) Owners and managers.....	1940...number....	302	777	530	639
8	1930...number....	172	816	473	496
9 (b) Tenants.....	1940...number....	89	73	186	135
10	1930...number....	44	84	213	153
11 Land in all farms.....	1940...acres....	148,383	199,535	277,201	132,301
12 Land in irrigated farms.....	1940...acres....	118,381	154,370	177,700	99,232
13 Average per farm.....	1940...acres....	295	182	248	128
14 (a) Operated by owners and managers.....	1940...acres....	102,764	144,638	144,162	85,370
15 Average per farm.....	1940...acres....	340	186	272	134
16 (b) Operated by tenants.....	1940...acres....	12,617	9,732	33,596	13,662
17 Average per farm.....	1940...acres....	142	133	181	103
17 Approximate land area.....	1940...acres....	1,890,520	348,240	1,164,160	355,200
IRRIGATED AND IRRIGABLE AREAS					
18 Area irrigated.....	1939...acres....	23,473	54,062	86,727	39,879
19 (a) Cropland harvested.....	1939...acres....	20,089	50,212	76,266	33,018
20 (b) Crop failure.....	1939...acres....	651	26	40	36
21 (c) Pasture.....	1939...acres....	2,733	3,824	8,421	6,825
22 Area irrigated.....	1929...acres....	22,183	52,798	96,273	47,051
23	1919...acres....	28,844	37,460	130,044	51,007
24 Increase or decrease (-), 1929-1939.....	percent.....	5.8	2.5	-11.7	-15.2
25 Irrigable area in enterprises.....	1940...acres....	28,314	62,284	101,620	48,644
26	1930...acres....	30,204	56,225	112,600	53,531
27	1920...acres....	60,252	54,967	222,235	59,852
28 Excess of irrigable area over the area irrigated.....	1940...acres....	4,841	8,222	14,893	8,765
29	1930...acres....	8,021	3,487	14,330	6,480
30 Area works were capable of supplying with water.....	1940...acres....	27,149	59,642	93,045	42,119
31	1930...acres....	29,015	56,060	111,103	51,574
32	1920...acres....	37,641	39,279	181,572	55,836
33 Increase or decrease (-), 1930-1940.....	percent.....	-6.4	6.4	-16.3	-18.3
34 Excess, capability of works over area irrigated.....	1940...acres....	3,676	5,580	6,318	2,240
35	1930...acres....	6,832	3,322	12,830	4,523
36 Proportion which area irrigated is of all lands in irrigated farms.....	1939...percent....	20.3	35.0	48.8	40.2
37	1929...percent....	38.8	36.4	76.9	47.0
38 Proportion which area irrigated is of area works were capable of supplying with water.....	1939...percent....	86.5	90.6	93.2	94.7
39	1929...percent....	76.5	94.1	86.5	81.2
CAPITAL INVESTED TO JANUARY 1					
40 Total investment in all enterprises.....	1940...dollars....	2,274,092	2,777,272	2,899,735	2,808,641
41 (a) Cost of irrigation works and equipment.....	1940...dollars....	2,271,472	2,686,190	2,876,271	2,779,661
42 (b) Investment in water rights (reported).....	1940...dollars....	2,620	91,082	23,464	28,180
43 Total investment in all enterprises.....	1930...dollars....	1,692,008	1,453,838	1,566,282	2,900,682
44	1920...dollars....	1,606,335	822,981	1,712,611	1,492,559
45 Increase or decrease (-), 1930-1940.....	percent.....	34.4	81.0	85.1	-6.1
46 Average investment, based on area works were capable of supplying with water, per acre.....	1940...dollars....	83.76	46.57	31.16	66.69
47	1930...dollars....	56.31	25.93	14.10	57.98
48	1920...dollars....	42.68	20.95	8.94	26.73
49 Average investment per acre irrigated.....	1939...dollars....	96.58	51.37	39.44	70.43
50 Estimated final investment in existing enterprises.....	1940...dollars....	2,286,467	2,826,272	2,914,855	3,411,219
51	1930...dollars....	1,692,008	1,453,838	1,605,282	3,021,167
52	1920...dollars....	1,576,777	894,781	1,964,211	1,695,558
53 Increase or decrease (-), 1930-1940.....	percent.....	35.1	84.4	79.3	12.9
54 Average investment, based on estimated final investment and irrigable area, per acre.....	1940...dollars....	80.75	45.38	28.68	70.13
55	1930...dollars....	56.02	25.86	14.43	56.44
56	1920...dollars....	31.15	15.19	8.84	28.33
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
		Primary	Sup.	Primary	Sup.
57 Enterprises reporting maintenance and operation.....	1939...number....	107	2	66	8
58 Area irrigated in these enterprises.....	1939...acres....	21,455	(5)	53,614	2,118
59 Cost of maintenance and operation.....	1939...dollars....	41,463	(5)	72,121	728
60 Average cost, per acre irrigated.....	1939...dollars....	1.93	(5)	1.34	0.34
61	1929...dollars....	2.33	.....	1.22	0.63
62 Total annual charges (reported) 4 5.....	1939...dollars....	50,418	.....	78,323	444
63 Average annual charge per acre irrigated.....	1939...dollars....	0.51	.....	1.52	0.23
64 Area against which charges were assessed.....	1939...acres....	15,211	.....	53,006	1,905
65 Average annual charge per acre assessed.....	1939...dollars....	0.31	.....	1.48	0.23
66 Total charges collected.....	1939...dollars....	36,147	.....	76,418	434
67 Indebtedness to December 31 (reported) 5.....	1939...dollars....	85,000	.....	110,960	.....
WATER DELIVERED TO IRRIGATORS					
68 Enterprises reporting water delivered.....	1939...number....	106	2	59	9
69 Area irrigated in these enterprises.....	1939...acres....	21,131	(5)	49,070	2,201
70 Water delivered in these enterprises.....	1939...acre-feet....	124,652	(5)	91,708	1,405
71 Average water delivered per acre irrigated.....	1939...acre-feet....	5.9	(5)	1.9	0.6
72 Average cost of water per acre irrigated.....	1939...dollars....	2.70	(5)	1.58	0.31
DRAINAGE OF IRRIGATED LAND					
73 Enterprises reporting land drained or needing drainage.....	1939...number....	4	.....	7	.....
74 Irrigable area in these enterprises.....	1939...acres....	9,497	.....	13,485	.....
75 Irrigated area in these enterprises.....	1939...acres....	8,401	.....	12,838	.....
76 Area for which drains have been installed.....	1939...acres....	1,000	.....	250	.....
77 Additional area needing drainage.....	1939...acres....	775	.....	514	.....

* Census of Agriculture.

1 For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

2 Data for less than 3 enterprises shown with permission of the enterprise involved.

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irrigation data omitted from any of the counties listed are included under "All other counties"

⁶ Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION — IDAHO

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, [Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		Nez Perce	Oneida	Owyhee			
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms.....1940..number....	1,282	644	873			
2	.....1930..number....	1,309	756	729		
3	Irrigated farms.....1940..number....	391	374	729			
4	.....1930..number....	332	352	623		
5	Increase or decrease (-), 1930-1940.....percent....	17.8	6.2	17.0			
Operated by—							
6	(a) Owners and managers.....1940..number....	341	332	570			
7	.....1930..number....	294	330	478		
8	(b) Tenants.....1940..number....	50	42	159			
9	.....1930..number....	38	22	145		
10	Land in all farms.....1940..acres....	409,051	301,545	480,460			
11	Land in irrigated farms.....1940..acres....	58,483	156,635	426,700			
12	Average per farm.....1940..acres....	150	419	585			
13	(a) Operated by owners and managers.....1940..acres....	57,558	147,767	400,018			
14	Average per farm.....1940..acres....	169	445	703			
15	(b) Operated by tenants.....1940..acres....	925	8,888	25,782			
16	Average per farm.....1940..acres....	18	212	162			
17	Approximate land area.....1940..acres....	542,080	762,240	4,894,720			
IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated.....1939..acres....	4,346	17,177	62,052			
19	(a) Cropland harvested.....1939..acres....	4,261	16,305	53,570			
20	(b) Crop failure.....1939..acres....	32	7	947			
21	(c) Pasture.....1939..acres....	53	865	7,535			
22	Area irrigated.....1929..acres....	5,038	13,450	57,608			
23	.....1919..acres....	5,018	20,314	62,833		
24	Increase or decrease (-), 1929-1939.....percent....	-13.7	27.7	7.7			
25	Irrigable area in enterprises.....1940..acres....	6,542	23,921	74,750			
26	.....1930..acres....	5,380	15,314	85,282		
27	.....1920 ^b ..acres....	6,135	48,782	119,061		
28	Excess of irrigable area over the area irrigated.....1940..acres....	2,196	6,744	12,608			
29	.....1930..acres....	342	1,964	27,674		
30	Area works were capable of supplying with water.....1940..acres....	4,522	19,389	72,829			
31	.....1930..acres....	5,268	15,094	71,275		
32	.....1920..acres....	5,901	21,625	74,494		
33	Increase or decrease (-), 1930-1940.....percent....	-14.2	28.5	2.3			
34	Excess, capability of works over area irrigated.....1940..acres....	176	2,212	10,877			
35	.....1930..acres....	230	1,644	13,667		
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent....	7.4	11.0	14.5			
37	.....1929..percent....	6.9	12.3	25.4		
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	96.1	88.6	85.1			
39	.....1929..percent....	95.6	89.1	80.8		
CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises.....1940..dollars....	424,901	224,093	6,306,426			
41	(a) Cost of irrigation works and equipment.....1940..dollars....	424,130	194,460	6,300,463			
42	(b) Investment in water rights (reported).....1940..dollars....	771	29,633	5,963			
43	Total investment in all enterprises.....1930..dollars....	436,114	107,567	2,907,387			
44	.....1920..dollars....	313,781	471,910	2,309,967		
45	Increase or decrease (-), 1930-1940.....percent....	-2.6	108.3	116.9			
46	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars....	63.86	11.56	86.47			
47	.....1930..dollars....	82.78	7.13	40.79		
48	.....1920..dollars....	53.17	21.82	31.01		
49	Average investment per acre irrigated.....1939..dollars....	97.77	13.05	101.63			
50	Estimated final investment in existing enterprises.....1940..dollars....	425,501	228,118	6,447,381			
51	.....1930..dollars....	439,164	107,567	3,284,187		
52	.....1920..dollars....	717,171	471,910	2,535,156		
53	Increase or decrease (-), 1930-1940.....percent....	-3.1	112.1	96.3			
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars....	65.04	9.54	86.25			
55	.....1930..dollars....	81.63	7.02	38.51		
56	.....1920 ^b ..dollars....	116.90	9.67	21.29		
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Supplemental	Primary	Supplemental	Primary	Supplemental
		Enterprises		Enterprises		Enterprises	
57	Enterprises reporting maintenance and operation.....1939..number....	37	3	69	4	227	5
58	Area irrigated in these enterprises.....1939..acres....	3,825	22	14,528	171	60,719	326
59	Cost of maintenance and operation.....1939..dollars....	28,934	262	11,399	36	115,634	233
60	Average cost, per acre irrigated.....1939..dollars....	7.37	11.91	0.78	0.21	1.91	0.71
611929..dollars....	6.50	0.86	3.59
62	Total annual charges (reported) ⁴.....1939..dollars....	34,748	9,694	129,631
63	Average annual charge per acre irrigated.....1939..dollars....	9.71	0.78	3.67
64	Area against which charges were assessed.....1939..acres....	4,439	14,013	39,165
65	Average annual charge per acre assessed.....1939..dollars....	7.83	0.69	3.31
66	Total charges collected.....1939..dollars....	31,256	12,128	109,647
67	Indebtedness to December 31 (reported) ⁵.....1939..dollars....	506,005	1,636	158,900
WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered.....1939..number....	52	3	102	5	224	7
69	Area irrigated in these enterprises.....1939..acres....	4,061	22	16,188	206	57,958	266
70	Water delivered in these enterprises.....1939..acre-feet....	6,916	50	37,638	226	228,829	702
71	Average water delivered per acre irrigated.....1939..acre-feet....	1.7	2.3	2.3	1.1	4.0	2.6
72	Average cost of water per acre irrigated.....1939..dollars....	9.30	11.91	0.86	0.21	2.51	0.75
DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage.....1939..number....	2	7
74	Irrigable area in these enterprises.....1939..acres....	(²)	30,526
75	Irrigated area in these enterprises.....1939..acres....	(²)	23,093
76	Area for which drains have been installed.....1939..acres....	(²)	9,702
77	Additional area needing drainage.....1939..acres....	(²)	1,110

* Census of Agriculture.

⁴ Data between census years not comparable (see headnote).⁵ Data are included only in State totals because less than 3 farms or less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — IDAHO

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1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE
1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

Irrigation data omitted from any of the counties listed are included under "All other counties"]

Payette	Power	Shoshone	Teton	Twin Falls	Valley	Washington	All other counties ¹	
922	505	192	482	2,717	361	976	3,497	1
820	573	173	470	2,785	307	1,064	3,324	2
817	216	17	359	2,640	258	630	3	3
773	242	9	296	2,683	164	649	14	4
5.7	-9.9	88.9	21.3	-1.6	57.3	-2.9	-78.6	5
589	153	16	273	1,603	206	472	2	6
593	176	.....	233	1,725	128	513	29	7
228	65	1	86	1,037	52	158	1	8
180	66	.....	63	958	36	136	2	9
108,790	391,691	24,495	153,220	370,033	123,480	433,068	656,721	10
94,591	82,583	1,892	97,930	316,394	101,182	212,639	59	11
116	379	111	273	120	392	338	20	12
76,922	71,273	(²)	83,205	207,259	86,765	192,562	(²)	13
131	466	(²)	305	129	421	408	(²)	14
17,669	11,310	(²)	14,725	109,075	14,417	20,077	(²)	15
77	174	(²)	171	105	277	127	(²)	16
257,820	903,040	1,669,760	293,760	1,242,880	2,360,160	944,000	3,123,840	17
40,039	10,405	151	42,044	237,850	45,649	31,645	.....	18
36,064	8,808	134	36,539	236,406	24,527	29,791	.....	19
.....	.....	.....	209	218	.....	133	.....	20
3,985	597	17	4,996	1,326	21,122	1,721	.....	21
37,536	10,708	.....	39,014	244,832	33,128	26,039	782	22
52,428	11,264	.....	41,365	261,622	15,591	41,423	1,185	23
6.7	-2.6	.....	7.8	-2.8	37.8	21.5	.....	24
64,879	15,974	172	50,974	254,978	51,248	40,118	.....	25
61,950	16,186	.....	58,145	296,556	37,039	32,601	530	26
71,455	19,496	.....	62,459	312,121	31,984	59,610	2,806	27
24,840	5,569	21	5,590	17,028	5,597	8,473	.....	28
24,414	5,478	.....	19,131	51,724	3,911	6,892	148	29
48,799	13,064	172	46,277	254,391	50,195	34,408	.....	30
45,086	14,914	.....	45,991	294,487	36,898	31,754	544	31
30,653	17,186	.....	57,422	271,443	24,148	52,065	2,221	32
8.2	-12.5	.....	0.6	-13.6	36.0	8.4	.....	33
8,760	2,649	21	4,233	16,441	4,546	2,763	.....	34
7,550	4,206	.....	6,977	49,655	3,770	5,715	62	35
423	12.6	8.0	42.9	75.2	45.1	14.9	.....	36
56.0	12.5	.....	50.3	89.0	58.5	13.2	9.4	37
82.0	79.7	87.8	90.9	93.5	90.9	92.0	.....	38
83.3	71.8	.....	84.8	83.1	89.8	82.0	82.7	39
2,080,328	201,530	3,400	188,763	9,525,034	370,867	1,198,954	.....	40
2,006,235	199,565	3,350	182,291	9,312,095	360,436	887,661	.....	41
74,093	1,965	50	6,462	212,939	10,431	311,293	.....	42
1,119,416	7,407,045	.....	96,824	6,286,750	494,395	1,178,049	37,594	43
1,209,175	270,888	.....	157,976	8,084,389	147,110	1,774,135	47,847	44
85.8	-97.3	.....	94.9	51.5	-25.0	1.8	.....	45
42.63	15.44	19.77	4.08	37.44	7.39	34.85	.....	46
24.83	496.65	2.10	2.10	21.35	13.40	37.10	44.54	47
39.45	15.76	.....	2.75	33.10	6.09	34.08	21.54	48
51.96	19.37	22.52	4.49	40.00	8.12	37.89	.....	49
3,477,975	241,530	3,400	190,368	9,531,273	392,402	1,405,045	.....	50
2,659,871	7,443,445	.....	99,124	6,286,750	584,395	1,183,149	37,594	51
1,209,375	287,138	.....	163,176	9,166,578	177,160	1,874,135	53,022	52
30.8	-96.8	.....	62.1	51.6	-32.9	18.8	.....	53
53.61	15.12	19.77	3.73	37.38	7.60	35.02	.....	54
42.94	459.87	.....	1.70	21.20	15.78	35.93	40.42	55
16.92	14.73	.....	2.61	29.37	5.54	31.44	18.90	56
Primary	Sup.		Primary	Sup.	Primary	Sup.	Primary	Sup.
Enterprises			Enterprises		Enterprises		Enterprises	
45	(²) 1	26	75	(²) 1	52	163	133	3
38,094	(²)	9,220	35,761	(²)	237,770	43,313	31,275	3,111
39,748	(²)	6,755	5,695	(²)	316,815	18,611	32,080	245
1.04	(²)	0.73	0.16	(²)	1.33	0.43	1.03	0.08
207	.....	1.18	0.15	.....	2.50	0.51	1.59	.....
48,800	1,504	6,520	7,829	.....	289,544	14,705	43,821	3,321
1.39	0.40	0.86	0.26	.....	1.25	0.33	1.84	1.09
35,068	3,751	9,353	31,308	.....	247,368	219,197	28,629	3,321
1.39	0.40	0.25	0.25	.....	1.17	0.03	1.82	1.00
41,575	2,507	6,176	7,263	.....	285,045	6,537	37,323	3,223
69,280	.....	25,212	200	.....	234,645	45,200	128,226	28,560
33	.....	30	78	(²) 1	43	170	115	3
32,418	.....	9,294	38,785	(²)	233,379	32,130	17,315	3,111
193,693	.....	34,348	78,778	(²)	577,023	263,411	55,476	6,394
5.9	.....	3.7	2.0	(²)	3.8	2.8	3.2	2.1
1.28	.....	0.85	0.25	(²)	1.19	0.50	0.96	1.09
8	(²) 2	.....	10	.....	9	.....	(²)	.....
23,355	(²)	2,179	199,176	(²)
19,817	(²)	1,153	199,110	(²)
15,781	(²)	980	5,708	(²)
1,515	(²)	300	522	(²)
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¹For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

²Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

³Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION — IDAHO

COUNTY TABLE II.—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS.

(Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920)

ITEM (For definitions and explanations, see text)		STATE TOTAL	Ada	Adams	Bannock	Bear Lake	Bingham	Blaine
FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	339,194,391	17,047,467	2,706,209	13,518,532	4,400,763	17,715,128	2,310,637
2	Land and buildings, irrigated farms.....dollars..	236,628,170	16,216,543	2,314,469	11,458,908	3,863,381	16,983,404	2,168,160
3	Operated by—							
4	(a) Owners and managers.....dollars..	173,588,977	11,136,939	2,098,059	9,627,578	3,518,079	12,140,519	1,680,709
5	(b) Tenants.....dollars..	63,038,193	5,079,604	216,410	1,831,330	345,302	4,852,885	485,460
6	Average, land and buildings, per farm.....dollars..	7,914.52	6,455.63	8,008.54	8,589.54	6,695.63	7,918.64	7,876.98
7	per acre in farms.....dollars..	41.86	84.95	12.55	33.61	17.65	59.76	18.13
8	Buildings, irrigated farms reporting value.....number..	28,943	2,468	286	1,287	515	2,079	270
9	Total reported.....dollars..	53,585,575	4,930,540	485,875	2,479,231	818,355	3,928,962	452,005
10	Average, per irrigated farm reporting.....dollars..	1,851.42	1,997.79	1,698.86	1,926.36	1,589.04	1,889.83	1,674.00
11	per acre on all irrigated farms.....dollars..	9.43	25.83	2.64	7.27	3.74	13.82	3.78
12	Buildings, nonirrigated farms reporting value.....number..	13,009	164	115	351	113	61	41
13	Total reported.....dollars..	18,705,158	260,375	100,775	409,916	124,405	59,175	39,465
14	Average, per nonirrigated farm reporting.....dollars..	1,437.86	1,687.65	876.30	1,167.85	1,100.83	970.08	962.56
15	per acre on all nonirrigated farms.....dollars..	4.05	3.82	2.99	3.12	3.03	0.42	2.21
16	Implements and machinery, irrigated farms reporting value.....number..	20,475	1,963	265	1,203	519	1,947	255
17	Total reported.....dollars..	28,819,293	1,424,167	207,222	1,400,388	390,158	2,435,209	324,293
18	Average, per irrigated farm reporting.....dollars..	1,088.61	725.51	781.07	1,104.08	751.75	1,250.75	1,271.74
19	per acre on all irrigated farms.....dollars..	5.07	7.46	1.12	4.11	1.78	8.55	2.71
20	Implements and machinery, nonirrigated farms reporting value.....number..	11,466	90	98	315	90	43	26
21	Total reported.....dollars..	13,326,972	46,735	49,685	380,930	82,528	43,770	20,855
22	Average, per acre, on all nonirrigated farms.....dollars..	2.89	0.69	1.47	2.90	2.01	0.81	1.13
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
23	Enterprises.....1940.....number.....	1 3,702	197	115	206	73	81	57
24	.....1930.....number.....	1 3,257	88	132	197	90	63	48
25	.....1920.....number.....	3,629	50	121	242	95	68	129
26	Average size of enterprise based on							
27	Irrigable area.....1940.....acres.....	775	772	213	511	820	2,756	562
28	.....1930.....acres.....	864	1,634	192	644	644	3,533	932
29	.....1920.....acres.....	1,042	2,736	354	940	883	3,425	768
30	Diversion dams.....1940.....number.....	3,209	71	99	180	122	38	58
31	Main canals and laterals.....1940.....length, miles.....	13,602.1	735.1	180.3	686.9	300.5	820.3	174.1
32	.....1930.....length, miles.....	14,344	769	182	625	298	926	196
33	.....1920.....length, miles.....	17,298	298	263	948	400	592	271
34	.....1940.....capacity, c.f.s. 3.....	71,510	5,439	717	1,845	1,391	5,306	1,629
35	.....1930.....capacity, c.f.s. 3.....	76,763	5,138	512	1,981	1,292	6,289	1,807
36	.....1920.....capacity, c.f.s. 3.....	86,273	2,567	1,015	3,038	1,522	5,688	2,710
37	Pipe lines.....1940.....length, miles.....	269.9	2.6	4.0	11.3	0.3	2.8	.....
38	Storage dams.....1940.....number.....	260	7	10	20	12	6	0
39	Reservoirs.....1940.....number.....	290	22	9	21	11	6	7
40	.....1930.....number.....	155	2	3	13	5	4	3
41	.....1920.....number.....	249	10	3	17	13	6	1
42	.....1940.....capacity, acre-feet.....	3,795,272	12,117	25,787	17,483	1,265	654	314,647
43	.....1930.....capacity, acre-feet.....	3,615,373	9,233	3,100	24,675	2,151	451,300	208,500
44	.....1920.....capacity, acre-feet.....	3,498,511	150,536	1,205	141,216	5,677	123,610	.....
45	Wells, flowing.....1940.....number.....	375	67	.....	.....	.....	1	.....
46	.....1930.....number.....	220	7	.....	.....	.....	.....	.....
47	.....1920.....number.....	142	7	.....	.....	.....	.....	.....
48	.....1940.....yield, g.p.m.....	40,165	7,305	.....	.....	.....	(^b)	.....
49	.....1930.....yield, g.p.m.....	30,108	2,828	.....	.....	.....	.....	.....
50	.....1920.....yield, g.p.m.....	15,133	45	.....	.....	.....	.....	.....
51	Wells, pumped.....1940.....number.....	309	64	.....	3	.....	1	7
52	.....1930.....number.....	121	23	.....	1	.....	2	1
53	.....1920.....number.....	53	2	.....	.....	.....	1	.....
54	.....1940.....yield, g.p.m.....	225,164	14,782	.....	2,045	.....	(^b)	5,900
55	.....1930.....yield, g.p.m.....	34,601	3,886	.....	900	.....	1,128	900
56	.....1920.....yield, g.p.m.....	17,749	900	.....	.....	.....	440	.....
57	Pumping plants.....1940.....number.....	665	102	1	25	1	23	7
58	.....1930.....number.....	393	46	1	4	.....	7	1
59	.....1920.....number.....	143	6	.....	2	.....	2	.....
60	Prime movers.....1940.....capacity, hp.....	44,537	2,731	(^c)	114	(^c)	733	54
61	.....1930.....capacity, hp.....	33,764	1,864	6	25	.....	103	5
62	.....1920.....capacity, hp.....	28,364	168	.....	23	.....	10	.....
63	Pumps.....1940.....capacity, g.p.m.....	2,719,905	96,340	(^c)	9,017	(^c)	68,330	5,050
64	.....1930.....capacity, g.p.m.....	2,113,513	202,210	1,000	2,236	.....	9,353	900
65	.....1920.....capacity, g.p.m.....	1,387,681	2,250	.....	.....	.....	1,440	.....
66	Pumping lift, from all sources.....1940.....average, feet.....	26	24	(^c)	14	(^c)	20	19
67	.....1930.....average, feet.....	32	24	12	24	.....	28	10
68	.....1920.....average, feet.....	29	32	.....	14	.....	18	.....
69	from pumped wells.....1940.....average, feet.....	29	25	.....	14	.....	(^c)	19
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁷								
70	Enterprises reporting pay roll.....number.....	456	25	14	25	29	40	9
71	Irrigated area in these enterprises.....acres.....	1,932,890	125,360	13,051	69,982	38,936	168,298	18,547
72	Wages and salaries paid and payable.....dollars..	1,316,975	84,586	4,733	23,581	9,684	82,680	7,021
73	Persons employed during week ending April 29.....number.....	2,275	126	11	95	91	204	16

* Census of Agriculture.

¹ Includes intercounty projects counted as independent enterprises for each county into which they extend. For actual number of enterprises see State table 1.² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.³ Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

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irrigation data omitted from any of the counties listed are included under "All other counties"

⁶Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — IDAHO

COUNTY TABLE II.—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940,
(Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920)

ITEM (For definitions and explanations, see text)		Gen	Gooding	Idaho	Jefferson	Jerome	Kootenai	Lemhi
FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	4,871,767	7,224,547	14,306,095	8,610,329	10,377,430	7,204,372	4,121,759
2	Land and buildings, irrigated farms.....dollars..	4,443,947	7,110,162	1,004,281	8,244,634	10,113,130	1,186,180	4,111,158
3	Operated by—							
4	(a) Owners and managers.....dollars..	3,788,425	4,407,962	966,056	6,287,669	5,906,618	1,063,230	3,542,116
5	(b) Tenants.....dollars..	654,922	2,702,200	38,225	1,957,265	4,206,512	122,950	599,042
6	Average, land and buildings, per farm.....dollars..	5,740.76	7,368.04	7,845.95	6,767.14	10,839.37	2,752.16	7,815.89
7	Average, per acre in farms.....dollars..	44.78	56.58	6.37	45.39	90.00	62.58	25.14
8	Buildings, irrigated farms reporting value.....number..	752	921	127	1,170	908	420	515
9	Total reported.....dollars..	1,140,356	1,478,415	161,525	1,858,517	1,900,881	599,860	832,283
10	Average, per irrigated farm reporting.....dollars..	1,516.43	1,605.23	1,271.85	1,588.48	2,093.59	1,428.24	1,616.10
11	per acre on all irrigated farms.....dollars..	11.49	11.77	1.02	10.23	16.92	31.64	5.09
12	Buildings, nonirrigated farms reporting value.....number..	116	31	1,294	71	35	1,282	4
13	Total reported.....dollars..	119,690	43,425	2,193,198	66,085	49,854	1,673,930	1,225
14	Average, per nonirrigated farm reporting.....dollars..	1,031.81	1,400.81	1,692.58	930.77	1,424.40	1,305.72	306.25
15	per acre on all nonirrigated farms.....dollars..	3.62	15.71	3.59	2.41	13.54	6.90	3.57
16	Implements and machinery, irrigated farms reporting value.....number..	672	870	110	1,084	753	391	482
17	Total reported.....dollars..	558,078	917,214	57,045	1,147,768	1,199,452	145,507	493,501
18	Average, per irrigated farm reporting.....dollars..	830.47	1,054.27	518.59	1,068.83	1,592.90	372.14	1,022.86
19	per acre, on all irrigated farms.....dollars..	5.62	7.30	0.36	6.32	10.67	7.68	3.02
20	Implements and machinery, nonirrigated farms reporting value.....number..	96	29	1,207	51	23	1,142	3
21	Total reported.....dollars..	37,805	16,935	1,572,997	36,100	26,824	694,543	570
22	Average, per acre, on all nonirrigated farms.....dollars..	1.15	6.12	2.58	1.32	7.29	2.82	1.66
ENTERPRISES AND IRRIGATION WORKS								
JANUARY 1								
23	Enterprises.....1940.....number.....	54	54	103	89	5	16	517
24	.....1930.....number.....	79	37	99	50	9	23	457
25	.....1920.....number.....	42	78	86	72	1	19	404
26	Average size of enterprise based on							
27	irrigable area.....1940.....acres.....	901	3,050	28	1,437	26,151	418	156
28	.....1930.....acres.....	678	2,961	27	3,999	15,664	464	155
29	.....1920.....acres.....	1,425	1,159	45	3,592	110,000	538	337
30	Diversion dams.....1940.....number.....	35	36	111	11	2	4	542
31	Main canals and laterals.....1940.....length, miles.....	224.8	747.6	111.5	308.2	549.5	31.7	859.9
32	.....1930.....length, miles.....	255	449	85	403	246	61	917
33	.....1920.....length, miles.....	254	449	103	935	507	37	1,069
34	.....1940.....capacity, c.f.s. ^b	1,749	715	144	7,557	7,212	344	2,792
35	.....1930.....capacity, c.f.s. ^b	1,099	1,893	86	8,152	2,000	89	2,540
36	.....1920.....capacity, c.f.s. ^b	2,109	2,756	151	8,364	2,072	98	2,691
37	Pipe lines ^c.....1940.....length, miles.....	23.1	9.9	1.6	0.1	1.1	67.2	1.3
38	Storage dams.....1940.....number.....	5	3	3	3	1	2	5
39	Reservoirs.....1940.....number.....	5	3	4	2	1	2	5
40	.....1930.....number.....	4	2	3	1	.....	.....	6
41	.....1920.....number.....	1	5	5	6	1	1	4
42	.....1940.....capacity, acre-feet.....	4,543	3,703	15	(²)	(²)	(²)	108
43	.....1930.....capacity, acre-feet.....	503	3,600	211	4,561	.....	.....	1,570
44	.....1920.....capacity, acre-feet.....	3	6,405	79	35,874	850,000	600	397
45	Wells, flowing.....1940.....number.....	.....	.....	.....	30	.....	.....	.....
46	.....1930.....number.....	.....	.....	.....	19	.....	.....	.....
47	.....1920.....number.....	1	.....	.....	.....	.....	.....	.....
48	.....1940.....yield, g.p.m.....	.....	.....	.....	11,100	.....	.....	.....
49	.....1930.....yield, g.p.m.....	.....	.....	.....	8,550	.....	.....	.....
50	.....1920.....yield, g.p.m.....	36	.....	.....	.....	.....	.....	.....
51	Wells, pumped.....1940.....number.....	.....	.....	.....	57	.....	2	.....
52	.....1930.....number.....	1	.....	.....	9	.....	1	.....
53	.....1920.....number.....	.....	.....	.....	.....	.....	.....	.....
54	.....1940.....yield, g.p.m.....	.....	.....	.....	101,540	.....	(²)	.....
55	.....1930.....yield, g.p.m.....	500	.....	.....	5,690	.....	100	.....
56	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
57	Pumping plants.....1940.....number.....	16	.....	1	56	14	13	3
58	.....1930.....number.....	36	.....	2	13	8	11	4
59	.....1920.....number.....	.....	3	.....	11	3	6	1
60	Prime movers.....1940.....capacity, hp.....	2,147	.....	(²)	1,894	1,945	1,316	85
61	.....1930.....capacity, hp.....	996	.....	24	1,227	1,722	1,054	8
62	.....1920.....capacity, hp.....	.....	706	.....	926	1,290	992	5
63	Pumps.....1940.....capacity, g.p.m.....	164,781	.....	(²)	280,214	98,100	45,567	3,420
64	.....1930.....capacity, g.p.m.....	141,746	.....	600	171,840	94,190	33,770	365
65	.....1920.....capacity, g.p.m.....	.....	33,794	.....	96,250	62,956	50,041	76
66	Pumping lift, from all sources.....1940.....average, feet.....	14	.....	(²)	16	53	76	14
67	.....1930.....average, feet.....	31	.....	35	15	30	72	18
68	.....1920.....average, feet.....	.....	50	.....	11	50	51	19
69	from pumped wells.....1940.....average, feet.....	.....	.....	.....	18	.....	(²)	.....
PAY ROLL AND NUMBER OF EMPLOYEES								
1939⁷								
70	Enterprises reporting pay roll.....number.....	16	9	.....	32	2	7	12
71	Irrigated area in these enterprises.....acres.....	37,718	107,291	.....	94,930	(²)	5,255	9,680
72	Wages and salaries paid and payable.....dollars..	19,884	56,443	.....	25,576	(²)	13,821	2,759
73	Persons employed during week ending April 29.....number..	26	76	.....	122	(²)	24	19

* Census of Agriculture.

¹ Data between census years not comparable (see headnote).² Data are included only in State totals because less than 3 farms or less than 3 enterprises reported in the 1940 Census.³ Data for less than 3 enterprises shown with permission of the enterprise involved.

1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939--Continued
irrigation data omitted from any of the counties listed are included under "All other counties"]

[illegible]

¹For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

⁵Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

⁶ Includes siphons and farm pipe lines reported.

⁷ Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION—KANSAS

STATE TABLE 1.—IRRIGATION SUMMARY FOR THE STATE: 1890 TO 1940

ITEM (For definitions and explanations, see text)	CENSUS OF—						
	1940	1935	1930	1920	1910	1900	1890
Approximate land area of State.....acres....	^c 52,552,320	52,335,360	52,335,360	52,335,360	52,335,360	52,335,360	52,335,360
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number...	156,327	174,589	166,042	165,286	177,841	173,088	165,617
Land in all farms.....acres....	48,173,635	48,009,770	46,976,647	45,425,179	43,384,799	41,662,970	30,214,456
Farms irrigated: ¹							
Farms.....number...	1,578	1,331	693	504	1,006	929	519
Increase or decrease (-) over preceding census.....percent...	² 131.0	.....	35.5	-49.9	8.3	79.0	.....
Proportion of all farms.....percent...	1.0	0.8	0.4	0.3	0.6	0.5	0.3
Land in farms.....acres....	871,189	(³)	311,174	(³)	(³)	(³)	(³)
Proportion of all farm land.....percent...	1.8	(³)	0.7	(³)	(³)	(³)	(³)
Area irrigated.....acres....	⁴ 82,872	⁵ 44,835	⁶ 56,939	(⁷)	(⁷)	23,620	20,818
Increase or decrease (-) over preceding census.....percent...	² 45.5	.....	.....	.....	.....	13.5	.....
Proportion of total land area of State.....percent...	0.2	0.1	0.1	.....	.....	(⁸)	(⁸)
Proportion of all farm land.....percent...	0.2	0.1	0.1	.....	.....	0.1	0.1
Value of irrigated farms (land and buildings).....dollars..	22,721,369	(³)	12,294,425	(³)	(³)	(³)	(³)
Average per farm.....dollars..	14,398.85	(³)	18,000.62	(³)	(³)	(³)	(³)
Average per acre.....dollars..	26.08	(³)	39.51	(³)	(³)	(³)	(³)
Value of farm implements and machinery ⁹.....dollars..	1,992,911	(³)	800,644	(³)	(³)	(³)	(³)
Average per farm.....dollars..	1,262.93	(³)	1,172.25	(³)	(³)	(³)	(³)
Average per acre ⁹.....dollars..	2.29	(³)	2.57	(³)	(³)	(³)	(³)
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number...	1,066	(³)	300	209	716	(³)	(³)
Farms irrigated.....number...	1,513	(³)	(³)	(³)	(³)	(³)	(³)
Area irrigated.....acres....	99,990	(³)	71,200	47,312	37,479	(³)	(³)
Area existing works were capable of supplying with water.....acres....	142,409	(³)	83,589	67,853	139,995	(³)	(³)
Area irrigable.....acres....	147,226	(³)	95,719	¹⁰ 102,562	¹¹ 161,300	(³)	(³)
Additional area existing works were capable of supplying with water.....acres....	42,429	(³)	12,293	20,541	102,516	(³)	(³)
Additional irrigable area in enterprises not supplied with water.....acres....	47,246	(³)	24,429	¹² 55,250	¹³ 123,821	(³)	(³)
Investment in irrigation enterprises.....dollars..	2,153,686	(³)	1,685,652	2,067,381	1,365,563	529,755	84,729
Increase or decrease (-) over preceding census.....percent...	² 27.8	(³)	-18.5	51.4	187.8	525.2	.....
Average per acre based on area works were capable of supplying with water.....dollars..	15.12	(³)	20.17	30.47	9.75	(³)	(³)
Increase or decrease (-) over preceding census.....percent...	² -25.0	(³)	-33.8	212.5	.....	.....	.....
Estimated completed cost of existing enterprises.....dollars..	2,225,579	(³)	1,723,872	2,195,081	1,365,563	(³)	(³)
Average per acre based on irrigable area in enterprises.....dollars..	15.32	(³)	18.01	¹⁴ 21.41	¹⁵ 8.47	(³)	(³)
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	2.59	(³)	1.53	3.29	1.59	(³)	(³)

¹ Relates to farms reporting irrigated cropland harvested and or irrigated pasture, 1940 Census; farms reporting irrigated cropland harvested, 1935 Census; farms reporting irrigated crops, 1930, 1920, and 1910 Censuses; and farms reporting irrigated land, 1900 and 1890 Censuses. ² Increase or decrease represented by 1940 figures are with reference to 1930 figures, not 1935. ³ Not available. ⁴ Irrigated land from which crops were harvested plus 3,227 acres of irrigated land used only for pasture. ⁵ Irrigated land from which crops were harvested. ⁶ Acreage of irrigated crops including some duplication where 2 or more crops were harvested from same land. ⁷ Data were secured for crops irrigated but the returns were considered relatively incomplete. ⁸ Total is for irrigated farms reporting this item. Averages are based on all irrigated farms. ⁹ For 1920 and 1910 relates to total area in enterprises. Irrigable areas for those years were not reported. ¹⁰ The land area shown for 1940 represents recalculations by the Bureau of the Census and, therefore, differs from that shown for earlier years.

STATE TABLE 2.—CENSUS OF AGRICULTURE—NUMBER OF FARMS, FARM ACREAGE ACCORDING TO USE, AND SPECIFIED FARM VALUES FOR IRRIGATED AND NONIRRIGATED FARMS, BY TENURE OF OPERATOR, 1940

ITEM (For definitions and explanations, see text)	Farms	Land in farms	CROPLAND HARVESTED 1939		Irrigated pasture 1939	VALUE OF FARMS (land and buildings)		VALUE OF BUILDINGS		VALUE OF IMPLEMENTS AND MACHINERY	
			Total	Irrigated ¹		Total	Aver- age per acre ²	Total	Aver- age per acre ²	Total	Aver- age per acre ²
All farms.....	Number 156,327	Acres 48,173,635	Acres 17,816,498	Acres 79,645	Acres 3,227	Dollars 1,421,387,464	Dollars 29.51	Dollars 257,831,772	Dollars 5.35	Dollars 115,262,686	Dollars 2.38
Owners and managers.....	86,105	28,983,678	10,028,004	45,206	2,477	863,324,926	29.79	170,844,017	5.89	69,516,450	2.40
Tenants.....	70,222	19,189,957	7,788,494	34,439	750	558,062,538	29.08	86,987,755	4.53	45,746,236	2.38
Irrigated farms, total.....	1,578	871,189	202,911	79,645	3,227	22,721,389	26.08	3,942,540	4.53	1,932,911	2.29
Owners and managers.....	1,031	656,836	139,391	45,202	2,477	16,409,622	24.98	3,122,435	4.75	1,441,795	2.20
Tenants.....	547	214,353	64,520	34,443	750	6,311,767	29.45	820,105	3.83	551,116	2.57
Wholly irrigated farms.....	639	177,112	45,151	45,151	2,007	5,925,660	33.46	1,209,160	6.83	553,711	3.13
Owners and managers.....	352	104,390	21,870	21,870	1,643	3,625,873	34.73	891,605	8.54	331,396	3.17
Tenants.....	287	72,722	23,281	23,281	364	2,299,787	31.62	317,555	4.37	222,315	3.06
Partly irrigated farms.....	939	694,077	157,760	34,494	1,220	16,795,729	24.20	2,733,380	3.94	1,439,200	2.07
Owners and managers.....	679	552,446	116,521	23,332	834	12,783,749	23.14	2,230,890	4.04	1,110,399	2.01
Tenants.....	260	141,631	41,239	11,162	386	4,011,980	28.33	502,550	3.55	328,801	2.12
Nonirrigated farms, total.....	154,749	47,302,446	17,613,587	.....	.....	1,398,666,075	29.57	253,889,232	5.37	113,269,775	2.39

¹ Does not include irrigated fallow land or land in young irrigated crops not harvested or in irrigated crops that failed.

² Based on all land in farms for each tenure group.

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STATE TABLE 3.—NUMBER OF ENTERPRISES, IRRIGABLE AREA, AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1940; IRRIGATED AREA, 1939, 1929, AND 1919; WATER DELIVERED TO IRRIGATORS, 1939; BY SOURCE OF WATER SUPPLY

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	1940			IRRIGATED AREA				DELIVERY OF WATER TO IRRIGATORS, 1939						
	Enter- prises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Irrigated area reporting—			Quantity delivered per acre ¹	Cost ¹		
								Quantity	Cost	Quantity and cost		Per acre	Per acre- foot	
Total.....	Number 1,066	Acres 147,226	Acres 142,409	Acres 99,980	Acres 71,290	Acres 47,312	Percent 40.2	Acres 93,008	Acres 96,933	Acres 92,315	Acres-foot 1.7	Dollars 2.71	Dollars 1.57	
Primary sources:														
Streams, gravity.....	15	57,558	57,558	40,802	53,196	30,807	-23.1	38,747	40,862	38,747	1.2	0.93	0.80	
Streams, pumped.....	310	13,540	12,344	8,279	3,216	730	157.4	7,176	8,032	7,079	1.4	3.66	2.57	
Streams, gravity and pumped.....	1	(²)	(²)	(²)	(²)	600	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
Wells, pumped.....	706	67,162	63,876	44,972	11,648	13,235	286.1	44,136	44,432	43,660	1.6	3.34	2.09	
Wells, flowing.....	5	53	53	26	3	(²)	766.7	26	26	26	1.0	5.77	5.56	
Wells, pumped and flowing.....	2	(²)	(²)	(²)	(²)	50	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
Lakes, gravity.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
Lakes, pumped.....	3	78	78	38	(²)	(²)	(²)	38	38	38	0.4	5.26	11.76	
Springs.....	1	(²)	(²)	(²)	155	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
Springs and streams.....	(²)	(²)	(²)	(²)	225	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
Stored storm water.....	2	(²)	(²)	(²)	225	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
City water.....	4	837	837	32	31	(²)	3.2	32	29	29	1.4	17.83	13.61	
Sewage.....	3	153	153	136	(²)	(²)	(²)	43	138	43	4.5	0.47	0.10	
Streams, gravity; wells, pumped...	8	3,183	3,183	2,443	405	1,540	503.2	61	2,413	31	1.3	4.06	3.05	
Streams, gravity; wells, flowing.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
Streams, pumped; wells, pumped.....	19	3,474	3,419	2,632	(²)	(²)	(²)	2,532	2,565	2,465	2.8	4.71	1.69	
Waste water, seepage or drainage.....	2	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
Other mixed.....	7	348	288	146	53	350	175.5	108	146	108	0.6	4.09	6.41	
Other and not reported.....	(²)	(²)	(²)	(²)	2,358	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
Supplemental sources: ³														
Streams, gravity and/or storage...	1	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(²)	(²)	(²)	
Streams, pumped.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
Wells, pumped.....	77	19,058	18,926	13,429	1,080	(²)	1,179.0	13,081	13,391	13,031	2.0	2.19	1.08	
Wells, flowing.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	

¹ Based on enterprises reporting both quantity and cost of water, assuming (a) that for enterprises serving 1 to 4 farms, the cost of water is cost of maintenance and operation, and for enterprises serving 5 or more farms it is total annual charges, and (b) that enterprises reporting cost and quantity of water had used the same quantity of water per acre as all enterprises which reported water delivered. ² Data are included only in totals because less than 3 enterprises reported in the 1940 Census. ³ Areas included under "Supplemental sources" are parts of areas included under "Primary sources" and therefore are not again added into the totals (see text). ⁴ Data are not shown because less than 3 enterprises reported in the 1940 Census.

STATE TABLE 4.—INVESTMENT, 1940 AND 1930; AND COST OF MAINTENANCE AND OPERATION, 1939, 1929, AND 1919; BY SOURCE OF WATER SUPPLY

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	INVESTMENT							COST OF MAINTENANCE AND OPERATION ¹						
	1940			1930			Average per acre increase or decrease (-) 1930-40	1939		1929		Average per acre increase or decrease (-) 1930-40	1919	
	Amount	Pro- por- tion of total	Aver- age per acre ²	Amount	Pro- por- tion of total	Aver- age per acre ²		Irrigated area reporting	Aver- age per acre	Irrigated area reporting	Aver- age per acre		Irrigated area reporting	Aver- age per acre
Total	Dollars 2,153,886	Percent 100.0	Dollars 15.12	Dollars 1,685,652	Percent 100.0	Dollars 20.17	Dollars -5.05	Acres 99,033	Dollars 2.59	Acres 64,983	Dollars 1.53	Dollars 1.06	Acres 28,593	Dollars 3.29
Primary sources:														
Streams, gravity.....	596,206	27.7	10.36	746,401	44.3	12.96	-2.62	40,862	0.80	50,805	0.84	-0.04	17,957	0.92
Streams, pumped.....	167,340	7.8	13.56	176,378	10.5	13.98	-30.42	9,032	3.60	2,613	3.43	0.17	645	7.57
Streams, gravity and pumped.....	(³)	(³)	(³)	.....	.....	.....	.....	(³)	(³)	.....	.....	.....	600	20.00
Wells, pumped.....	1,015,070	47.1	15.89	604,328	35.9	33.44	-17.55	44,432	3.35	10,954	3.69	-0.34	8,481	6.96
Wells, flowing.....	2,250	0.1	42.45	800	(⁴)	266.67	-224.22	26	5.77	3	16.67	-10.90	.....	.....
Wells, pumped and flowing.....	(³)	(³)	(³)	.....	.....	.....	.....	(³)	(³)	.....	.....	.....	.....	.....
Lakes, gravity.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	1.00
Lakes, pumped.....	2,375	0.1	30.45	.....	.....	.....	.....	38	5.26	.....	.....	.....	.....	.....
Springs.....	(³)	(³)	(³)	5,100	0.3	30.36	(³)	(³)	(³)	150	1.33	(³)	.....	.....
Springs and streams.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stored storm water.....	(³)	(³)	(³)	20,000	1.2	33.33	(³)	(³)	(³)	.....	.....	.....	.....	.....
City water.....	17,150	0.8	20.49	3,675	0.2	118.55	-98.06	29	17.83	.....	.....	.....	.....	.....
Sewage.....	1,000	(⁴)	6.54	.....	.....	.....	.....	138	1.41	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped...	15,622	0.7	4.91	30,010	1.8	37.51	-32.60	2,413	1.00	405	10.12	-9.12	620	1.55
Streams, gravity; wells, flowing...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped; wells, pumped...	59,003	2.7	17.26	.....	.....	.....	.....	2,565	4.72	.....	.....	.....	.....	.....
Waste water, seepage or drainage...	(³)	(³)	(³)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other mixed.....	17,400	0.8	60.42	1,400	0.1	26.42	34.00	146	4.75	53	4.72	0.03	230	1.63
Other and not reported.....	.....	.....	.....	54,450	3.2	23.09	.....	.....	.....	.....	.....	.....	.....	.....
Supplemental sources: ⁵														
Streams, gravity and/or storage..	(³)	(³)	(³)	.....	.....	.....	.....	(⁶)	(³)	.....	.....	.....	.....	.....
Streams, pumped.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped.....	256,095	11.9	13.53	43,110	2.5	37.10	-23.57	13,391	2.21	1,060	2.40	-0.19	.....	.....
Wells, flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Based on irrigated area in enterprises reporting cost of maintenance and operation. ² Based on area works were capable of supplying with water. ³ Data are included only in totals because less than 3 enterprises reported in the 1940 Census. ⁴ Less than one-tenth of 1 percent. ⁵ Areas included under "Supplemental sources" are parts of areas included under "Primary sources" and therefore are not again added into the totals (see text). ⁶ Data are not shown because less than 3 enterprises reported in the 1940 Census.

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STATE TABLE 5.—AREAS, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920

ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF—				Increase or decrease (-) 1930-40 primary enter- prises	ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF—				Increase or decrease (-) 1930-40 primary enter- prises
	1940		1930	1920			1940		1930	1920	
	Primary enter- prises	Supple- mental enter- prises ¹	Primary enter- prises	Primary enter- prises			Primary enter- prises	Supple- mental enter- prises ¹	Primary enter- prises	Primary enter- prises	
AREA IRRIGATED						AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER—Continued					
Total.....	Acres 99,980	Acres 13,666	Acres 71,290	Acres 47,312	Percent 40.2		Acres (²)	Acres (²)	Acres 17,000	Acres 320	Percent
Individual and partnership....	58,255	12,751	16,689	14,546	249.1	Commercial.....	(²)	.....	.....	.....	.....
Cooperative, incorporated.....	39,328	915	37,871	32,516	3.8	Bureau of Reclamation ³	640	.....	780	200	-17.9
Cooperative, unincorporated....	(²)	.....	16,000	150	.....	State.....	(²)	.....	.....	.....	.....
Commercial.....	(²)	.....	.....	.....	.....	City and/or sewage.....	(²)	.....	.....	.....	.....
Bureau of Reclamation ³	538	.....	730	100	-26.3	Other.....	(²)	.....	.....	.....	.....
State.....	(²)	.....	.....	.....	.....	IRRIGABLE AREA ⁴					
City and/or sewage.....	(²)	.....	.....	.....	.....	Total.....	147,226	19,377	95,719	102,562	53.8
Other.....	(²)	.....	.....	.....	.....	Individual and partnership....	88,300	18,110	26,830	36,643	229.0
AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER						Cooperative, incorporated.....	55,923	1,267	50,600	65,399	10.5
Total.....	142,409	19,163	83,583	67,853	70.4	Cooperative, unincorporated....	(²)	.....	17,000	320	.....
Individual and partnership....	83,483	17,078	23,812	26,611	250.6	Bureau of Reclamation ³	(²)	.....	.....	.....	.....
Cooperative, incorporated.....	55,923	1,185	41,991	40,719	33.2	State.....	640	.....	1,280	200	-50.0
Cooperative, unincorporated....	.....	.....	.....	.....	.....	City and/or sewage.....	(²)	.....	.....	.....	.....
	.....	.....	.....	.....	.....	Other.....	(²)	.....	.....	.....	.....

¹ Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text). ² Data for 1 "Commercial" and 1 "City and/or sewage" enterprises are included with "Other" enterprises in the 1940 Census. ³ U. S. Dept. of the Interior. ⁴ For 1920 relates to total area. Irrigable area for that year was not reported. ⁵ For explanation of areas, see text, p. 273.

STATE TABLE 6.—ENTERPRISES, AREAS, AVERAGE COSTS, 1940, AND AREA IRRIGATED, 1939,
BY TYPE OF ENTERPRISE

TYPE OF ENTERPRISE (For definitions and explanations, see text)	ENTERPRISES		AREAS		AVERAGE COST				AREA IRRIGATED, 1939 ¹				
	Total	Serving 5 or more farms	Irrigable	Works were capable of supplying with water	Primary enterprises		Supplemental enterprises		Farms served	Total area	Cropland		Irrigated pasture
					Works and equipment per acre ²	Maintenance and operation per acre ³	Works and equipment per acre ²	Maintenance and operation per acre ³			From which crops were harvested	On which crops failed	
Total.....	Number 1,086	Number 9	Acres 147,226	Acres 142,409	Dollars 12.72	Dollars 2.29	Dollars 13.38	Dollars 2.18	Number 1,513	Acres 99,980	Acres 85,139	Acres 11,386	Acres 3,455
Individual and partnership.....	1,044	.....	88,300	83,483	15.02	3.34	13.24	1.98	980	58,255	50,952	4,254	3,049
Cooperative, incorporated.....	13	8	55,923	55,923	9.03	0.84	15.44	4.88	507	39,328	32,441	6,807	80
Cooperative, unincorporated.....	2	.....										
Commercial.....	1	1	(⁴)	(⁴)	(⁴)	(⁴)	.....	.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
U. S. Bureau of Reclamation ³ .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
State.....	4	.....	640	640	38.29	3.26	.....	.....	4	538	487	25	26
City and/or sewage.....	1	.....	(⁴)	(⁴)	(⁴)	(⁴)	.....	.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Other.....	1	.....	2,363	2,363	11.38	0.66	.....	.....	22	1,659	1,259	300	300

¹ Reported by enterprises in the Census of Irrigation, 1940, not by the Census of Agriculture. ² Based on area works were capable of supplying with water and cost of works and equipment exclusive of water right investment. ³ Based on irrigated area in enterprises reporting maintenance and operation in 1939. ⁴ Data for 1 "Commercial" and 1 "City and/or sewage" enterprises are included with "Other" enterprises in the 1940 Census. ⁵ For explanation of areas and investment, see text, p. 273.

STATE TABLE 7.—INVESTMENT IN IRRIGATION ENTERPRISES, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920

TYPE OF ENTERPRISE (For definitions and explanations, see text)	TOTAL INVESTMENT, TO JANUARY 1								AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER		Capital expend- itures during 1939 ¹	Estimated invest- ment re- quired to complete works
	1940					1830	1920	Increase or decrease (-) 1930-40	Primary enter- prises	Supple- mental enter- prises		
	Total	Primary enter- prises	Supple- mental enter- prises	Total cost of works and equipment	Invest- ment in water rights							
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Percent	Dollars	Dollars	Dollars	Dollars
Total.....	2,153,886	1,696,991	256,895	2,067,284	86,602	1,685,652	2,067,381	27.8	13.32	13.41	2,235	101,693
Individual and partnership.....	1,494,396	1,256,301	238,095	1,492,314	2,082	875,951	775,095	70.6	15.05	13.24	2,235	100,993
Cooperative, incorporated.....	600,082	581,282	18,800	623,562	76,520	242,001	1,289,737	148.0	10.40	15.86		700
Cooperative, unincorporated.....	(²)	(²)		(²)	(²)	520,000	1,549		(²)			
Commercial.....												
U. S. Bureau of Reclamation.....												
State.....	24,508	24,508		24,508		47,700	1,000	-48.6	38.29			
City and/or sewage.....	(²)	(²)		(²)	(²)				(²)			
Other.....	² 34,900	² 34,900		² 26,800	² 8,000				² 14.77			

¹ Only for enterprises serving 5 or more farms. ² Data for 1 "Commercial" and 1 "City and/or sewage" enterprises are included with "Other" enterprises in the 1940 Census. ³ For explanation of investment, see text, p. 273.

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STATE TABLE 8.—INDEBTEDNESS, ARREARAGE, AND CHARGES, BY TYPE OF ENTERPRISE: CENSUS OF 1940

TYPE OF ENTERPRISE (For definitions and explanations, see text)	INDEBTEDNESS OF ENTERPRISES REPORTING						ARREARAGES OF ENTERPRISES REPORTING ²				CHARGES OF ENTERPRISES REPORTING		
	Enter- prises 1940	Area		Total indebted- ness 1940	Average per acre assessed 1939	Average per acre works were capable of supplying with water 1940	Enter- prises 1940	Total arrearages		Average per acre assessed 1939	Area assessed 1939	Charges made 1939	Charges collected 1939
		Irriga- ble 1940	Works were capable of supplying with water 1940					Dec. 31 1939	Dec. 31 1939				
Total.....	Number 7	Acres 40,423	Acres 40,423	Dollars 43,775	Dollars 1.10	Dollars 1.08	Number 1	Dollars (³)	Dollars (³)	Dollars (³)	Acres 56,719	Dollars 43,163	Dollars 31,340
Partnership.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cooperative, incorporated....	6	40,423	40,423	43,775	1.10	1.08	1	(³)	(³)	(³)	56,719	43,163	31,340
Cooperative, unincorporated....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Commercial.....	1	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	.....	.....	.....	.....	(⁴)	(⁴)	(⁴)
Bureau of Reclamation ⁵.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
State.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Only for enterprises serving 5 or more farms. No supplemental enterprises reported indebtedness, arrearage, or charges in this State. ²In payment of principal, interest, and/or other funded obligations. ³Data are not shown because less than 3 enterprises reported. ⁴Data for 1 "Commercial" enterprise are included with "Cooperative, incorporated" enterprises in the 1940 Census. ⁵U. S. Dept. of the Interior. ⁶For explanation of areas and investment, see text, p. 273.

STATE TABLE 9.—COST OF MAINTENANCE AND OPERATION, AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939, BY TYPE OF ENTERPRISE

TYPE OF ENTERPRISE (For definitions and explanations, see text)	COST OF MAINTENANCE AND OPERATION						PAY ROLL AND EMPLOYEES, 1939 ¹		
	Primary enterprises		Supplemental enterprises		Average cost per irrigated acre		Enterprises reporting pay roll	Wages and salaries paid and payable	Employees during week ending April 29
	Irrigated area reporting 1939	Reported cost 1939	Irrigated area reporting 1939	Reported cost 1939	Primary enterprises 1939	Supplemental enterprises 1939			
Total.....	Acres 99,033	Dollars 227,076	Acres 13,628	Dollars 29,689	Dollars 2.29	Dollars 2.18	Number 9	Dollars 16,235	Number 75
Individual and partnership.....	57,308	191,450	12,713	25,228	3.34	1.98	.....	.....	.....
Cooperative, incorporated.....	38,328	32,839	915	4,461	0.84	4.88	8	13,235	76
Cooperative, unincorporated....	(²)	(²)	.....	.....	(²)	.....	1	(²)	(²)
Commercial.....	(²)	(²)	.....	.....	(²)	.....	.....	.....	.....
U. S. Bureau of Reclamation ³.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
State.....	538	1,752	.....	.....	3.26	.....	.....	.....	.....
City and/or sewage.....	(²)	(²)	.....	.....	(²)	.....	.....	.....	.....
Other.....	1,859	1,035	.....	.....	0.56	.....	.....	.....	.....

¹Only for enterprises serving 5 or more farms. ²Data for 1 "Commercial" enterprise are included with "Cooperative, incorporated" enterprises in the 1940 Census. ³Data for 1 "Commercial and 1 "City and/or sewage" enterprises are included with "Other enterprises in the 1940 Census. ⁴For explanation of areas and investment, see text, p. 273.

STATE TABLE 10.—IRRIGATION WORKS, BY TYPE OF ENTERPRISE, 1940

TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	DAMS		CANALS			RESERVOIRS		PIPE LINES	FLOWING WELLS		PUMPED WELLS		PUMPING PLANTS			
	Diver- sion	Stor- age	Capacity at main head- ing	Length ¹		Num- ber	Capacity	Length	Num- ber	Yield	Number	Yield	Prime movers		Pumps	
				Earth	Lined ²								Number	Rated capac- ity	Number	Rated capac- ity
Total.....	Number 102	Number 40	Sec.-ft. 3,347	Miles 202	Miles 0.5	80	Ac.-ft. 32,584	Miles 24.1	24	G.p.m. 1,453	³ 1,638	G.p.m. 863,663	1,222	Hp. 23,796	1,259	G.p.m. 1,231,482
Individual and partnership....	94	38	1,085	59	0.5	76	7,479	22.7	24	1,453	1,617	846,113	1,203	25,824	1,239	1,208,282
Cooperative, incorporated.....	8	1	2,186	220	.....	1	25,000	.....	.....	.....	9	12,950	9	530	9	12,950
Cooperative, unincorporated....	.....	.....	4	1	.....	.....	.....	1.2	.....	.....	.....	.....	.....	.....	.....	.....
Commercial.....	.....	.....	60	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bureau of Reclamation ⁴.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
State.....	.....	1	11	5	.....	3	105	0.2	.....	.....	9	3,800	6	302	7	9,200
City and/or sewage.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	10	1	250
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	800	3	30	3	800

¹Includes main and lateral canals but not farm ditches. ²Includes flumes. ³Includes batteries of wells pumped by one pump. ⁴U. S. Dept. of the Interior. ⁵For explanation of areas and investment, see text, p. 273.

BUREAU OF RECLAMATION ACTIVITIES

The United States Bureau of Reclamation constructed the Garden City Project to serve 10,677 acres of irrigable land in Finney and Kearny Counties in 1906-08. Pumped shallow wells near the Arkansas River and the natural flow of that stream served as the sources of water supply. Due to a series of wet years, interest in irrigation dwindled and the project was abandoned as a Federal undertaking in 1910.

With the droughts of the decade from 1930 to 1939 seriously affecting agricultural production in Kansas and other States of the high plains, much of the area of the former

Garden City Project has been irrigated through rehabilitated works. The demand for water conservation and irrigation has extended to other parts of western Kansas. Therefore, the Bureau of Reclamation is at this time engaged in extensive investigations of potential projects in the drainage basins of the Arkansas, Republican, Smoky Hill, and Solomon Rivers.

The Land-Use Committee of the National Resources Board in 1934 estimated that, if adequately conserved, sufficient water could be made available for the irrigation of 1,250,000 acres of land in Kansas.

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STATE TABLE 11.—DAMS, BY MATERIAL: 1940 AND 1930

MATERIAL	1940		1930	
	Diversion	Storage	Diversion	Storage
	Number	Number	Number	Number
Total.....	102	40	27	7
Concrete or masonry.....	16	8	14	2
Timber.....	4	1	3	.....
Earth and rock.....	65	22	.....	3
Other and mixed.....	15	1	19	1
Not reported.....	2	8	1	1

¹ Principally temporary dams, replaced annually.

STATE TABLE 12.—PUMPING PLANTS, BY KIND OF MOTIVE POWER AND TYPE OF PUMP, 1940, AND TOTAL NUMBER AND CAPACITY, 1930

PUMPS BY KIND OF POWER EMPLOYED	Pumps		Rated capacity of pumps	Proportion of total capacity	Average lift of pumps	MOTIVE POWER BY TYPE OF PUMP EMPLOYED	Prime movers	Proportion of total number	Rated capacity of movers	Proportion of total capacity
	Number	Percent								
Total, 1940.....	1,259	100.0	1,231,482	100.0	35	Total, 1940.....	1,232	100.0	26,796	100.0
Electric motor.....	407	32.3	421,100	34.2	33	Centrifugal pump.....	853	69.8	15,499	57.8
Centrifugal.....	313	24.9	326,300	26.6	24	Electric.....	320	26.2	4,902	18.3
Turbine.....	84	6.7	89,470	7.3	69	Internal-combustion.....	529	43.3	10,512	39.2
Plunger.....	8	0.6	1,230	0.1	32	Other.....	4	0.3	85	0.3
Other.....	2	0.1	2,100	0.2	30	Turbine pump.....	258	21.1	9,060	33.8
Internal-combustion engine.....	785	62.3	770,807	62.6	36	Electric.....	80	6.5	2,941	11.0
Centrifugal.....	577	45.8	557,927	45.3	27	Internal-combustion.....	177	14.5	6,094	22.7
Turbine.....	200	15.9	207,765	16.9	61	Other.....	1	0.1	25	0.1
Plunger.....	4	0.3	235	(¹)	25	Plunger pump.....	26	2.1	87	0.4
Other.....	4	0.3	4,850	0.4	20	Electric.....	8	0.7	50	0.2
Other kinds of motive power.....	21	1.7	7,060	0.6	41	Internal-combustion.....	4	0.3	20	0.1
Centrifugal.....	4	0.3	4,300	0.3	23	Other.....	14	1.1	17	0.1
Turbine.....	1	0.1	1,500	0.1	45	Other and mixed types of pumps.....	85	7.0	2,150	8.0
Plunger.....	15	1.2	360	(¹)	54	Electric.....	20	1.7	275	1.0
Other.....	1	0.1	900	0.1	15	Internal-combustion.....	60	4.9	1,810	6.8
Mixed kinds of motive power.....	46	3.7	32,515	2.6	30	Other.....	5	0.4	65	0.2
Centrifugal.....	37	3.0	26,650	2.2	27	Total, 1930.....	² 281	.....	6,221	.....
Turbine.....	5	0.4	5,450	0.4	44	Increase or decrease (-) 1930-1940.....	941	.....	20,575	.....
Plunger.....	4	0.3	415	(¹)	34					
Other.....	.....	.....	.....	.....	.....
Total, 1930.....	312	.....	393,526	.....	26					
Increase or decrease (-) 1930-1940..	947	.....	837,956	.....	9					

¹ Less than one-tenth of 1 percent.² Number of pumping plants.

STATE TABLE 13.—PIPE LINES, BY MATERIAL, SIZE, AND LENGTH: 1940 AND 1930

MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940
	1940 ¹	1930	
Total.....	Miles 24.1	Miles 16.1	Percent 49.7
Concrete:			
1 to 12 inches.....	0.6	.....	.....
13 to 24 inches.....	.....	.....	.....
Over 24 inches.....	0.5	.....	.....
Metal:			
1 to 12 inches.....	20.8	16.1	29.2
13 to 24 inches.....	0.9	.....	.....
Over 24 inches.....	.....	.....	.....
Wood-stave:			
1 to 12 inches.....	.....	.....	.....
13 to 24 inches.....	.....	.....	.....
Over 24 inches.....	.....	.....	.....
Clay and other:			
1 to 12 inches.....	0.5	.....	.....
13 to 24 inches.....	0.2
Over 24 inches.....	0.6

¹ Includes siphons and farm pipe lines reported.

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STATE TABLE 14.—AREA WITHIN IRRIGATION ENTERPRISES FOR WHICH DRAINS HAVE BEEN INSTALLED, AND ADDITIONAL AREA IN NEED OF DRAINAGE: 1940, 1930, AND 1920

ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number...	44	11	5
Area irrigable in these enterprises.....acres....	3,507	651	13,610
Area irrigated in these enterprises.....acres....	2,093	(2)	(2)
Area for which drains have been installed.....acres....	2,552	336	250
Additional area needing drainage.....acres....	240	157	1,320
Ratio of area drained to area irrigated in—			
(a) Enterprises reporting lands drained and/or needing drainage.....percent..	121.9	51.6	16.9
(b) All irrigation enterprises.....percent..	2.6	0.5	0.5
Ratio of area drained plus area needing drainage to—			
(a) Irrigable area reporting.....percent..	79.6	75.7	143.5
(b) Irrigated area reporting.....percent..	133.4	(2)	(2)

¹For 1920 relates to total area in enterprises. Irrigable area was not reported and irrigated area in enterprises reporting drainage was not reported separately for the 1920 Census. ²Not available. ³Based on irrigable area for 1930, area irrigated in enterprises reporting land drained or needing drainage not available.

STATE TABLE 15.—WATER USED, BY SOURCE OF SUPPLY: 1939, 1929, AND 1919

ITEM (For definitions and explanations, see text)	TOTAL			MEASURED			NOT MEASURED		
	1939	1929 ¹	1919 ²	1939 ²	1929 ¹	1919 ²	1939	1929 ¹	1919 ²
PRIMARY ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	51,979	35,139	20,453	18,402	30,926	16,737			
Area irrigated by these enterprises.....acres....	36,879	21,210	17,062	20,235	19,817	975			
Average water per acre irrigated.....acre-feet..	1.4	1.7	1.2	0.9	1.6	17.2			
Total water delivered to irrigators.....acre-feet..	60,055	14,275	37,073	13,718	22,982	557			
Area irrigated by these enterprises.....acres....	47,469	20,855	28,079	20,055	19,404	800			
Average water per acre irrigated.....acre-feet..	1.3	0.7	1.3	0.7	1.2	0.7			
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	73,986						73,986		
Area irrigated by these enterprises.....acres....	45,525						45,525		
Average water per acre irrigated.....acre-feet..	1.6						1.6		
SUPPLEMENTAL ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..									
Area irrigated by these enterprises.....acres....									
Average water per acre irrigated.....acre-feet..									
Total water delivered to irrigators.....acre-feet..	40						40		
Area irrigated by these enterprises.....acres....	237						237		
Average water per acre irrigated.....acre-feet..	0.2						0.2		
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	26,424						26,424		
Area irrigated by these enterprises.....acres....	13,031						13,031		
Average water per acre irrigated.....acre-feet..	2.0						2.0		

¹Not reported. ²Data only for enterprises serving 5 or more farms. Water and area for surface and underground sources and water and area for primary and supplemental enterprises were not segregated for 1919.

STATE TABLE 16.—AREA IRRIGATED, BY TYPE OF RIGHTS UNDER WHICH WATER WAS DELIVERED: 1939, 1929, AND 1919

TYPE OF WATER RIGHTS (For definitions and explanations, see text)	1939			1929		1919	
	Area irrigated			Area irrigated	Proportion of total	Area irrigated	Proportion of total
	Primary enterprises	Proportion of total	Supplemental enterprises ¹				
	Acres	Percent	Acres	Acres	Percent	Acres	Percent
Total.....	98,980	100.0	13,666	71,290	100.0	47,312	100.0
Appropriation ²	15,440	15.4	237	40,540	56.9	30,653	64.8
Riparian.....	2,662	2.7		46	0.1	30	0.1
Appropriation and riparian.....	1,903	1.9					
Underground.....	44,763	44.8	13,429	11,644	16.3	13,480	28.5
Appropriation and underground.....	427	0.4					
Riparian and underground.....	248	0.2					
Adjudicated by court.....	28,079	28.1		12,660	17.7	458	0.9
Other mixed and not reported...	6,458	6.5		6,400	9.0	2,691	5.7

¹Irrigated areas shown under "Supplemental enterprises" are parks or irrigated areas in "Primary enterprises" (see text). ²"Appropriation" includes water rights published in the 1930 and 1920 Census reports as "Appropriation and use," "Notice filed and posted," "Permit from State," and "Certificate or license from State."

CENSUS OF IRRIGATION — KANSAS

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

PRIMARY ENTERPRISES (For definitions and explanations, see text)		TOTAL	IRRIGATED FARMS					
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms
1	Enterprises, 1940.....number...	988	33	911	35	3	4	2
2	Irrigated farms, 1939.....number...	1,513	.....	911	77	45	247	239
3	Area irrigated, 1939.....acres...	99,980	.....	53,867	4,997	6,354	34,762	.....
4	(a) From which crops were harvested.....acres...	85,139	.....	46,972	4,528	5,289	28,350	.....
5	(b) On which crops failed.....acres...	13,986	.....	3,907	372	745	6,362	.....
6	(c) Irrigated pasture.....acres...	3,455	.....	2,988	97	320	60	.....
CAPITAL INVESTMENT, 1940								
7	Total capital investment in all enterprises.....dollars..	1,896,991	25,064	1,189,513	81,102	62,180	539,102	.....
8	(a) Cost of irrigation works and equipment.....dollars..	1,810,689	25,064	1,167,489	81,044	53,160	404,102	.....
9	(b) Investment in water rights.....dollars..	86,302	.....	2,024	58	9,020	75,000	.....
10	Area works were capable of supplying with water.....acres...	142,406	2,343	75,843	8,800	7,317	50,106	.....
11	Average investment per acre irrigated.....dollars..	18.97	.....	22.00	16.23	9.79	15.51	.....
12	Average investment per acre which the works could supply with water.....dollars..	13.32	10.71	15.62	11.93	8.50	10.76	.....
MAINTENANCE AND OPERATION, AND CHARGES, 1939								
13	Enterprises reporting maintenance and operation.....number...	935	19	873	35	3	6	.....
14	(a) Area irrigated in these enterprises.....acres...	92,033	.....	52,920	4,997	6,354	34,762	.....
15	(b) Cost of maintenance and operation.....dollars..	237,076	176	181,788	11,745	2,675	30,492	.....
16	(c) Average cost per irrigated acre reporting.....dollars..	2.29	.....	3.41	2.35	0.42	0.88	.....
17	Total annual charges ².....dollars..	43,166	.....	.....	.....	4,260	38,906	.....
18	Average charge per irrigated acre reporting.....dollars..	1.05	.....	.....	.....	0.67	1.12	.....
19	Area against which charges were assessed.....acres...	50,719	.....	.....	.....	6,817	48,902	.....
20	Average annual charge per acre assessed.....dollars..	0.76	.....	.....	.....	0.62	0.78	.....
21	Total charges collected ².....dollars..	31,346	.....	.....	.....	4,494	26,852	.....
INDEBTEDNESS AND ARREARAGE, 1939								
22	Enterprises reporting indebtedness ³.....number...	7	.....	.....	.....	2	4	1
23	(a) Area irrigated in these enterprises.....acres...	31,579	.....	.....	.....	(4)	17,700	(4)
24	(b) Indebtedness.....dollars..	43,775	.....	.....	.....	(4)	14,300	(4)
25	(c) Average indebtedness per acre irrigated.....dollars..	1.39	.....	.....	.....	(4)	0.81	(4)
26	(d) Cost of irrigation works and equipment.....dollars..	464,611	.....	.....	.....	(4)	92,201	(4)
27	(e) Investment in water rights.....dollars..	84,000	.....	.....	.....	(4)	.....	(4)
28	(f) Total investment.....dollars..	548,611	.....	.....	.....	(4)	92,201	(4)
29	(g) Maintenance and operation.....dollars..	22,481	.....	.....	.....	(4)	13,306	(4)
30	(h) Total annual charges ².....dollars..	35,766	.....	.....	.....	(4)	18,005	(4)
31	(i) Total charges collected ².....dollars..	15,246	.....	.....	.....	(4)	11,252	(4)
32	(j) Area against which annual charges were assessed.....acres...	39,719	.....	.....	.....	(4)	24,902	(4)
33	(k) Average indebtedness per acre assessed.....dollars..	1.10	.....	.....	.....	(4)	0.67	(4)
34	(l) Average charges per acre assessed.....dollars..	0.90	.....	.....	.....	(4)	0.72	(4)
35	(m) Average charges per acre irrigated.....dollars..	1.13	.....	.....	.....	(4)	1.02	(4)
36	Enterprises reporting arrearage ³.....number...	51	.....	.....	.....	61	.....	.....
TYPE, 1940								
37	Individual and partnership.....number...	972	33	904	35	.....	.....	.....
38	Cooperative (incorporated and unincorporated).....number...	9	.....	1	.....	2	4	2
39	Commercial.....number...	1	.....	.....	.....	1	.....	.....
40	All other.....number...	6	.....	6	.....	.....	.....	.....
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939								
41	Enterprises reporting pay roll.....number...	9	.....	.....	.....	3	6	.....
42	Wages and salaries paid and payable for 1939.....dollars..	16,295	.....	.....	.....	1,942	14,293	68
43	Persons employed during week ending April 29, 1939.....number...	75	.....	.....	.....	7	.....	.....
SOURCE OF WATER SUPPLY, 1939								
44	Streams, gravity.....number...	15	.....	8	.....	2	3	2
45	Streams, pumped.....number...	210	1	207	2	.....	.....	.....
46	Wells, pumped.....number...	706	30	645	31	.....	.....	.....
47	Wells, pumped and flowing; or wells flowing.....number...	7	.....	7	.....	.....	.....	.....
48	Lakes, gravity or pumped.....number...	3	.....	3	.....	.....	.....	.....
49	Streams and springs; or springs.....number...	1	.....	.....	1	.....	.....	.....
50	Mixed, streams and wells.....number...	28	.....	26	.....	1	1	.....
51	Other mixed or stored storm water.....number...	18	2	15	1	.....	.....	.....
SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)		TOTAL	IRRIGATED FARMS					
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms
1	Enterprises, 1940.....number...	78	5	55	18	.....	.....	.....
2	Irrigated farms, 1939.....number...	94	.....	55	39	.....	.....	.....
3	Area irrigated, 1939.....acres...	13,666	.....	8,556	5,110	.....	.....	.....
CAPITAL INVESTMENT, 1940								
4	Total capital investment in all enterprises.....dollars..	256,895	9,610	184,485	62,800	.....	.....	.....
5	(a) Cost of irrigation works and equipment.....dollars..	256,385	9,610	184,485	62,300	.....	.....	.....
6	(b) Investment in water rights.....dollars..	500	.....	.....	500	.....	.....	.....
7	Area works were capable of supplying with water.....acres...	19,183	815	11,917	6,431	.....	.....	.....
8	Average investment per acre irrigated.....dollars..	18.80	.....	21.56	12.29	.....	.....	.....
9	Average investment per acre which the works could supply with water.....dollars..	13.41	11.79	15.48	9.77	.....	.....	.....

¹Relates to enterprises reporting no irrigation in 1939 but having works capable of supplying water in 1940.²Annual charges, reported only by enterprises serving 5 or more farms, may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

CENSUS OF IRRIGATION - KANSAS

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CHARGES, INDEBTEDNESS AND ARREARAGE, TYPE OF ENTERPRISE, PAY ROLL, NUMBER OF EMPLOYEES, FARMS, AREAS IRRIGATED, AND COST OF WORKS: CENSUS OF 1940

ACRES IRRIGATED						COST OF IRRIGATION WORKS AND EQUIPMENT				
No acres ¹	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	Less than \$5,000	\$5,000 to \$14,999	\$15,000 to \$99,999	\$100,000 to \$1,499,999	
33	778	138	32	4	3	938	42	7	1	1
.....	799	151	103	128	331	943	143	327	100	2
.....	22,453	22,415	10,333	13,717	25,062	47,853	13,474	38,653		3
.....	20,352	19,594	13,320	11,917	19,950	41,414	11,784	31,941		4
.....	1,510	1,783	1,531	1,500	5,062	3,822	1,202	6,362		5
.....	581	1,038	1,476	300	50	2,617	488	350		6
25,094	710,366	379,275	193,505	111,850	476,901	973,084	288,598	635,311		7
25,094	708,755	378,862	193,427	102,850	401,901	971,053	288,525	551,311		8
.....	1,611	413	78	9,000	75,000	2,031	71	84,000		9
2,343	35,575	29,221	20,847	17,423	37,000	69,340	18,132	54,937		10
.....	31.64	16.92	11.85	8.15	19.03	20.33	21.42	16.44		11
10.71	20.00	12.98	9.28	6.42	12.89	14.03	15.92	11.56		12
18	742	136	32	4	3	885	42	8		13
.....	21,796	22,125	16,333	13,717	25,062	46,906	13,474	38,653		14
176	94,175	61,984	39,680	9,575	21,586	153,889	35,920	37,261		15
.....	4.32	2.80	2.42	0.70	0.86	3.28	2.67	0.90		16
.....	.....	.....	2,000	16,066	25,100	.....	8,306	34,860		17
.....	.....	.....	0.86	1.17	1.00	.....	1.96	0.95		18
.....	.....	.....	2,800	16,919	37,000	.....	4,902	51,817		19
.....	.....	.....	0.71	0.95	0.68	.....	1.69	0.67		20
.....	.....	.....	1,552	9,894	19,800	.....	1,552	29,704		21
.....	.....	.....	(4)	13,717	(4)	.....	(4)	19,817	(4)	22
.....	.....	.....	(4)	3,675	(4)	.....	(4)	15,075	(4)	23
.....	.....	.....	(4)	0.27	(4)	.....	(4)	0.76	(4)	24
.....	.....	.....	(4)	102,850	(4)	.....	(4)	127,410	(4)	25
.....	.....	.....	(4)	9,000	(4)	.....	(4)	8,000	(4)	26
.....	.....	.....	(4)	111,850	(4)	.....	(4)	136,410	(4)	27
.....	.....	.....	(4)	9,575	(4)	.....	(4)	12,375	(4)	28
.....	.....	.....	(4)	16,066	(4)	.....	(4)	13,960	(4)	29
.....	.....	.....	(4)	9,994	(4)	.....	(4)	14,194	(4)	30
.....	.....	.....	(4)	16,919	(4)	.....	(4)	26,817	(4)	31
.....	.....	.....	(4)	0.22	(4)	.....	(4)	0.56	(4)	32
.....	.....	.....	(4)	0.95	(4)	.....	(4)	0.52	(4)	33
.....	.....	.....	(4)	1.17	(4)	.....	(4)	0.70	(4)	34
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36
33	774	135	30	.....	.....	935	35	2	.....	37
.....	1	.....	2	.....	3	.....	4	4	1	38
.....	3	3	.....	1	.....	.....	.....	1	.....	39
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
1	3	4	1	4	3	8	1	5	1	45
30	191	15	3	.....	.....	204	6	.....	.....	46
.....	541	110	25	.....	.....	675	30	1	.....	47
.....	7	.....	.....	.....	.....	7	.....	.....	.....	48
.....	3	.....	.....	.....	.....	3	.....	.....	.....	49
.....	17	8	3	.....	.....	1	2	1	.....	50
2	16	.....	.....	.....	.....	15	3	.....	.....	51
5	21	39	13	.....	.....	62	15	1	.....	1
24	24	49	21	.....	.....	72	21	1	.....	2
.....	992	6,475	6,199	.....	.....	8,241	.....	5,425	.....	3
9,610	35,085	122,050	90,150	.....	.....	140,945	115,950	.....	.....	4
9,610	35,085	121,650	90,150	.....	.....	140,445	115,950	.....	.....	5
.....	.....	500	.....	.....	.....	500	.....	.....	.....	6
815	2,230	8,729	7,389	.....	.....	12,457	6,706	.....	.....	7
.....	45.06	18.85	14.54	.....	.....	17.10	21.37	.....	.....	8
11.79	15.73	13.98	12.20	.....	.....	11.31	17.29	.....	.....	9

¹Indebtedness and arrearage were reported only by enterprises serving 5 or more farms.
²Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
³Data are not shown because less than 3 enterprises reported.

CENSUS OF IRRIGATION — KANSAS

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

SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)		TOTAL	IRRIGATED FARMS					
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms
MAINTENANCE AND OPERATION, AND CHARGES, 1939								
10	Enterprises reporting maintenance and operation.....number....	76	4	51	18			
11	(a) Area irrigated in these enterprises.....acres.....	13,628		8,518	5,110			
12	(b) Cost of maintenance and operation.....dollars.....	29,689	33	21,621	8,035			
13	(c) Average cost per irrigated acre reporting.....dollars.....	2.18		2.54	1.57			
TYPE, 1940								
14	Individual and partnership.....number.....	72	5	51	16			
15	Cooperative (incorporated and unincorporated).....number.....	6		4	2			
SOURCE OF SUPPLEMENTAL WATER SUPPLY, 1939								
16	Streams, pumped.....number.....							
17	Wells, pumped or flowing.....number.....	77	5	55	17			
18	Streams, gravity or storage.....number.....	1			1			

¹Relates to enterprises reporting no irrigation in 1939 but having works capable of supplying water in 1940.

STATE TABLE 18.—CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES, 1939

DRAINAGE BASIN AND STATION	County	Elevation of station	PRECIPITATION, OCTOBER 1938—SEPTEMBER 1939										TEMPERATURES, 1939	
			Water year		Oct.—Dec.		Jan.—Mar.		Apr.—June		July—Sept.		Annual mean	Departure ¹
			Amount	Depart- ture ¹	Amount	Depart- ture ¹	Amount	Depart- ture ¹	Amount	Depart- ture ¹	Amount	Depart- ture ¹		
Kansas River			Feet	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Degrees F.	Degrees F.
Wray, Colo.....	Yuma.....	3,512	13.02	-5.35	0.25	-1.67	3.18	+1.59	5.81	-2.20	3.75	-2.87	50.9	(²)
Goodland.....	Sherman.....	3,685	16.16	-2.64	0.45	-2.20	4.90	+3.22	6.16	-1.55	4.65	-2.01	55.0	+3.6
McCook, Nebr.....	Red Willow.....	2,506	13.90	-5.74	0.17	-2.32	2.65	+0.77	7.76	-0.12	3.30	-4.07	55.5	+3.4
Hays.....	Ellis.....	2,000	15.19	-8.50	0.33	-2.65	2.51	+0.43	7.36	-2.49	4.99	-3.59	57.0	+3.1
Smith Center.....	Smith.....	1,800	14.03	-7.00	0.60	-2.29	3.36	+1.46	8.53	-0.63	2.44	-5.54	(²)	(²)
Salina.....	Saline.....	1,227	17.51	-9.75	1.67	-2.53	3.75	+0.66	6.05	-4.79	6.04	-3.10	60.0	+4.6
Blus Rapids.....	Marshall.....	1,105	27.48	-1.68	2.62	-1.56	3.02	+0.23	15.76	+3.92	5.85	-4.57	(²)	(²)
Lawrence.....	Douglas.....	1,018	30.02	-5.81	3.25	-2.96	3.23	-1.54	14.99	+2.23	9.45	-3.54	58.8	+3.8
Arkansas River														
Salida, Colo.....	Chaffee.....	7,035	8.08	-4.25	3.37	+0.62	2.11	+0.13	0.79	-2.20	1.81	-3.01	(²)	(²)
Rocky Ford, Colo.....	Otero.....	4,177	8.83	-3.30	0.92	-0.78	3.22	+2.25	2.70	-2.39	1.99	-2.38	53.5	+1.3
Syracuse.....	Hamilton.....	3,227	7.63	-10.04	1.12	-1.16	2.69	+1.02	2.64	-4.05	1.18	-5.64	56.3	(²)
Elkhart.....	Norton.....	3,595	11.42	-6.09	1.58	-1.16	2.63	+0.94	5.17	-0.70	1.74	-5.17	57.6	+1.4
Ness City.....	Ness.....	2,260	13.72	-7.52	0.33	-2.40	3.94	+1.94	6.31	-2.46	3.14	-4.60	(²)	(²)
Ashland.....	Clark.....	1,951	17.01	-7.15	0.77	-3.19	4.14	+1.89	8.54	-0.73	3.56	-5.06	59.6	+2.5
Great Bend.....	Barton.....	1,693	18.64	-5.39	0.25	-3.57	3.73	+1.30	8.28	-0.93	6.37	-2.19	(²)	(²)
Winfield.....	Cowley.....	1,124	21.50	-11.92	2.65	-3.02	4.11	-0.05	11.08	-1.86	3.46	-6.99	60.9	+3.3
Emporia.....	Iyon.....	1,138	22.93	-11.04	2.05	-3.56	4.36	+0.31	9.79	-3.21	6.76	-4.55	56.7	+3.0
Parsons.....	Labette.....	898	31.78	-8.85	3.46	-4.09	5.58	-0.56	18.39	+2.54	4.35	-6.70	61.5	+3.2

¹Departure from normal.²Data not available.

CENSUS OF IRRIGATION - KANSAS

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

ACRES IRRIGATED						COST OF IRRIGATION WORKS AND EQUIPMENT				
No acres ¹	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	Less than \$5,000	\$5,000 to \$14,999	\$15,000 to \$99,999	\$100,000 to \$1,499,999	
4	20	39	13	.....	.....	60	18	.....	.....	10
.....	954	6,475	6,199	.....	.....	8,203	5,425	.....	.....	11
33	4,271	14,619	10,772	.....	.....	18,014	11,675	.....	.....	12
.....	4.48	2.25	1.74	.....	.....	2.20	2.15	.....	.....	13
5	19	35	13	.....	.....	57	14	1	.....	14
.....	2	4	.....	.....	.....	5	1	.....	.....	15
5	21	38	13	.....	.....	61	15	1	.....	16
.....	.....	1	.....	.....	.....	1	.....	.....	.....	17
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

The year of 1939 was the third mildest and fifth driest year Kansas had experienced in the 53 years State-wide records have been kept. Only two months averaged below normal in temperature and a prolonged drought occurred from the latter part of August until the closing days of December that was the most severe on record for the time of year.

Favorable amounts of moisture, mostly in the form of snow, fell during the first three months. The dry weather the latter part of April and during May was detrimental to the growing wheat. Corn planting and early cultivation of the crop made good progress. The wet weather of June hindered progress of harvest and caused some damage to wheat. Hot, dry winds in July burnt early corn considerably and only the more favorable weather the early part of August produced sufficient development in late corn to produce a crop in eastern Kansas. Corn dried out well during the warm weather in the fall and was cribbed in good condition. Wheat, however, was adversely affected by the extreme dryness and many fields failed to germinate.

The average temperature, 57.8°, was 2.9° above normal and lacked only 0.1° of the average for the year previous and was 0.7° cooler than the warmest year of record, 1934. New high temperature records for the State were established during the months of May, September, October, and December.

The only severely cold weather was on February 7-10 and 19-20, the first two days of March, and the closing week of the year. The highest temperature, 116°, was recorded at Burlington on July 21 and the lowest, 18° below zero, occurred at Oberlin on February 10.

Practically every section of Kansas received less than normal precipitation in 1939. The average for the eastern third was 26.54 inches; the middle third, 20.91 inches; the western third, 12.79 inches; and for the State as a whole, 20.08 inches, which is 6.35 inches below normal and 7.21 inches less than was received in 1938. The greatest annual total was 38.33 inches at Oswego and the least, 8.07 inches at Syracuse.

Run-off from the watershed of the Arkansas River in Colorado during the water year 1939 averaged about 71 per cent of normal as indicated by the discharges measured by the United States Geological Survey at Canon City and Trinidad, Colorado. The average discharge of the Arkansas River at Syracuse, Kansas, over a period of 18 years (1921-39) is 314 second-feet from a drainage area of 25,000 square miles. The mean discharge at the Syracuse station for the water year 1939 was 112 second-feet or 35.6 per cent of the 18-year average. The maximum mean monthly flow was 296 second-feet during March and the minimum was 1.7 second-feet during August at Syracuse, Kansas.

CENSUS OF IRRIGATION—KANSAS

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND
AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drain- age basin)		STATE TOTAL	MISSISSIPPI RIVER					
			Total	Missouri River				Kansas River
				Total	Direct ¹ (1)	Total	Direct ² (7)	
IRRIGATED FARMS AND AREAS								
1	Irrigated farms.....	1939..number.....	1,513	1,470	179	3	176	45
2	Area irrigated.....	1939..acres.....	99,980	92,712	4,516	44	4,472	737
3	(a) Cropland harvested.....	1939..acres.....	85,139	78,176	3,948	44	3,904	637
4	(b) Crop failure.....	1939..acres.....	11,366	11,149	236		236	14
5	(c) Pasture.....	1939..acres.....	3,455	3,387	332		332	86
6	Area irrigated.....	1929..acres.....	71,290	71,290	1,411		1,394	
7		1919..acres.....	47,312	47,312	773		773	
8	Increase or decrease (-), 1929-1939.....	percent.....	40.2	30.0	220.1		220.6	
9	Irrigable area in enterprises.....	1940..acres.....	147,226	136,650	8,700	262	8,438	1,442
10		1930..acres.....	95,719	95,719	4,358		4,325	
11		1920 ³ ..acres.....	102,562	102,562	3,580		3,580	
12	Excess of irrigable area over the area irrigated.....	1940..acres.....	47,246	43,938	4,194	218	3,966	705
13		1930..acres.....	24,429	24,429	2,947		2,931	
14		1920 ³ ..acres.....	55,250	55,250	2,807		2,807	
15	Area works were capable of supplying with water.....	1940..acres.....	142,409	131,993	7,293	67	7,226	1,312
16		1930..acres.....	83,583	83,583	2,406		2,376	
17		1920..acres.....	67,853	67,853	3,396		3,396	
18	Increase or decrease (-), 1930-1940.....	percent.....	70.4	57.9	203.1		204.1	
19	Excess of area works were capable of supplying with water over area irrigated.....	1940..acres.....	42,429	39,281	2,777	23	2,754	575
20		1930..acres.....	12,293	12,293	995		982	
21		1920..acres.....	20,541	20,541	2,623		2,623	
22	Proportion which area irrigated is of area works were capable of supplying with water.....	1939..percent.....	70.2	70.2	61.9	65.7	61.9	56.2
23		1929..percent.....	85.3	85.3	58.6		58.7	
24		1919..percent.....	69.7	69.7	22.8		22.8	
CAPITAL INVESTED TO JANUARY 1								
25	Total investment in irrigation enterprises.....	1940..dollars.....	2,153,886	2,053,368	154,280	890	153,400	34,206
26	(a) Cost of irrigation works and equipment.....	1940..dollars.....	2,067,284	1,966,774	152,671	880	151,991	33,296
27	(b) Investment in water rights (reported).....	1940..dollars.....	86,602	86,594	1,409		1,409	910
28	Total investment in irrigation enterprises.....	1930..dollars.....	1,685,652	1,685,652	72,573		72,173	
29		1920..dollars.....	2,067,381	2,067,381	50,311		50,311	
30	Increase or decrease (-), 1930-1940.....	percent.....	27.8	21.8	112.6		112.5	
31	Average investment based on area works were capable of supplying with water, per acre.....	1940..dollars.....	15.12	15.66	21.15	13.13	21.23	26.07
32		1930..dollars.....	20.17	20.17	30.16		30.38	
33		1920..dollars.....	30.47	30.47	14.81		14.81	
34	Average investment per acre irrigated.....	1939..dollars.....	21.54	22.15	34.16	20.00	34.30	46.41
35	Estimated final investment in existing enterprises.....	1940..dollars.....	2,255,579	2,151,151	173,210	890	172,390	42,456
36	Average investment based on estimated final investment and irrigable area, per acre.....	1940..dollars.....	15.32	15.74	19.91	3.36	20.42	29.44
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS			Primary	Sup.	Primary	Sup.	Primary	Sup.
			Enterprises		Enterprises			
37	Enterprises reporting maintenance and operation.....	1939..number.....	935	76	899	76	162	3
38	Area irrigated in these enterprises.....	1939..acres.....	99,033	13,628	91,915	13,628	4,138	44
39	Cost of maintenance and operation.....	1939..dollars.....	227,076	29,689	208,486	29,689	17,222	270
40	Average cost, per acre irrigated.....	1939..dollars.....	2.29	2.18	2.27	2.18	4.16	6.14
41	Total annual charges (reported) ⁴	1939..dollars.....	43,166		43,166			
42	Average annual charge per acre irrigated.....	1939..dollars.....	1.05		1.05			
43	Area against which charges were assessed.....	1939..acres.....	56,719		56,719			
44	Average annual charge per acre assessed.....	1939..dollars.....	0.76		0.76			
45	Total charges collected ⁴	1939..dollars.....	31,346		31,346			
46	Indebtedness to December 31 (reported) ⁵	1939..dollars.....	43,775		43,775			
WATER DELIVERED TO IRRIGATORS, 1939								
47	Enterprises reporting water delivered.....	1939..number.....	901	70	866	70	169	3
48	Area irrigated by these enterprises.....	1939..acres.....	93,008	13,268	85,740	13,268	4,284	44
49	Water delivered.....	1939..acre-feet.....	134,041	26,464	122,849	26,464	5,591	77
50	Average water delivered per acre irrigated.....	1939..acre-feet.....	1.4	2.0	1.4	2.0	1.3	1.8
51	Average cost of water per acre irrigated.....	1939..dollars.....	2.40	2.16	2.38	2.16	4.20	6.14
52	Average cost of water per acre-foot delivered.....	1939..dollars.....	1.95	1.08	1.66	1.08	3.23	3.51
DRAINAGE OF IRRIGATED LAND								
53	Enterprises reporting land drained or needing drainage.....	1939..number.....	44		44		16	
54	Irrigable area in these enterprises.....	1939..acres.....	3,507		3,507		616	
55	Irrigated area in these enterprises.....	1939..acres.....	2,093		2,093		389	
56	Area for which drains have been installed.....	1939..acres.....	2,552		2,552		303	
57	Additional area needing drainage.....	1939..acres.....	240		240		168	

¹Data for 2 enterprises in Osage River Drainage Basin (8) (number refers to separate map) are included with Missouri River "Direct" Drainage Basin (1).

²Data for 2 enterprises in Saline River Drainage Basin (6) (number refers to separate map) are included with Kansas River "Direct" Drainage Basin (7).

³For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION - KANSAS

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IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE
IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939

MISSISSIPPI RIVER—Continued												White Woman Creek (independent stream)	
Missouri River—Continued				Arkansas River									
Kansas River—Continued				Total	Direct	Two Butte and Bear Creeks	Pawnee River	Salt Fork Arkansas River	Cimarron River	Neosho River			
Smoky Hill River (5)	Solomon River (4)	Republican River (3)	Big Blue River (2)								(10)			(13)	(11)	(16)	(14)	(9)	(12)
39	22	58	12	1,291	1,067	3	188	5	22	6	43	1	
1,181	905	1,935	314	88,196	73,253	295	12,774	428	1,400	46	7,288	2	
1,028	669	1,258	314	74,228	61,209	295	11,272	428	988	36	6,963	3	
150	20	52	.....	10,913	9,231	.....	1,290	.....	392	.....	237	4
5	216	25	.....	3,055	2,813	.....	212	.....	20	10	68	5
111	.....	489	.....	69,879	52,988	.....	.....	.....	1,098	.....	.....	6
248	.....	510	.....	46,539	30,130	.....	.....	.....	.....	.....	.....	7
964.0	.....	173.0	.....	26.2	38.2	.....	.....	.....	27.5	.....	.....	8
2,428	1,433	2,644	491	127,850	103,906	1,100	19,043	875	2,161	865	10,576	9	
361	.....	2,776	.....	91,361	65,761	.....	.....	.....	1,115	.....	.....	10
1,420	.....	2,090	.....	98,982	38,533	.....	.....	.....	210	.....	.....	11
1,247	528	1,309	177	39,764	30,653	805	6,269	447	761	819	3,308	12	
250	.....	2,287	.....	21,482	12,763	.....	.....	.....	17	.....	.....	13
1,172	.....	1,680	.....	52,443	8,403	.....	.....	.....	210	.....	.....	14
2,093	1,308	2,107	406	124,700	102,216	1,100	17,513	845	2,161	865	10,416	15	
296	.....	1,080	.....	81,177	57,109	.....	.....	.....	1,115	.....	.....	16
1,236	.....	2,090	.....	64,457	38,533	.....	.....	.....	210	.....	.....	17
607.1	.....	95.1	.....	53.6	79.0	.....	.....	.....	93.8	.....	.....	18
912	403	772	92	36,504	28,963	805	4,739	417	761	819	3,148	19	
185	.....	591	.....	11,298	4,121	.....	.....	.....	17	.....	.....	20
988	.....	1,580	.....	17,918	8,403	.....	.....	.....	210	.....	.....	21
56.4	69.2	63.4	77.3	70.7	71.7	26.8	72.9	50.7	64.8	5.3	69.8	22	
37.5	.....	45.3	.....	86.1	92.8	.....	.....	.....	98.5	.....	.....	23
20.1	.....	24.4	.....	72.2	78.2	.....	.....	.....	.....	.....	.....	24
38,268	20,377	54,541	6,008	1,899,088	1,577,413	11,175	248,630	10,600	31,745	19,525	100,518	25	
38,224	20,344	54,120	6,007	1,813,903	1,492,655	11,175	248,598	10,300	31,700	19,475	100,510	26	
44	33	421	1	85,185	84,758	.....	32	300	45	50	8	27
12,210	.....	23,655	.....	1,613,079	748,901	.....	.....	.....	29,250	.....	.....	28
33,753	.....	15,816	.....	2,017,070	1,153,805	.....	.....	.....	15,000	.....	.....	29
213.4	.....	130.6	.....	17.7	110.7	.....	.....	.....	8.5	.....	.....	30
18.28	15.68	25.89	14.80	15.23	15.43	10.16	14.20	12.54	14.69	22.57	9.65	31	
41.25	.....	21.90	.....	19.87	13.11	.....	.....	.....	26.23	.....	.....	32
27.31	.....	7.57	.....	31.29	29.93	.....	.....	.....	71.43	.....	.....	33
32.40	22.52	40.85	19.13	21.53	21.53	37.88	19.46	24.77	22.68	424.46	13.83	34	
42,468	22,352	59,046	6,008	1,877,941	1,624,471	13,275	272,850	10,600	37,220	19,525	104,428	35	
17.49	15.60	22.33	12.24	15.46	15.63	12.07	14.33	12.11	17.22	22.57	9.87	36	
35	22	50	12	737	76	525	76	3	178	5	21	37	
1,027	905	1,207	314	87,777	13,628	72,999	13,628	295	12,612	428	1,400	38	
3,224	3,023	6,575	1,119	191,274	29,689	132,973	29,689	435	52,833	1,125	3,246	39	
3.14	3.34	5.45	3.56	2.18	2.18	1.82	2.18	1.47	4.20	2.63	13.07	40	
.....	.....	.....	.....	43,166	.....	43,166	.....	.....	.....	.....	.....	41
.....	.....	.....	.....	1.05	.....	1.05	.....	.....	.....	.....	.....	42
.....	.....	.....	.....	56,719	.....	56,719	.....	.....	.....	.....	.....	43
.....	.....	.....	.....	0.76	.....	0.76	.....	.....	.....	.....	.....	44
.....	.....	.....	.....	31,346	.....	31,346	.....	.....	.....	.....	.....	45
.....	.....	.....	.....	43,775	.....	43,775	.....	.....	.....	.....	.....	46
37	21	54	12	697	70	487	70	3	176	5	20	47	
1,111	875	1,282	314	81,456	13,268	67,629	13,268	295	11,921	428	1,137	48	
1,555	1,385	1,638	223	117,258	26,464	94,987	26,464	171	20,643	502	909	49	
1.4	1.6	1.3	0.7	1.4	2.0	1.4	2.0	0.6	1.7	1.2	0.8	50	
3.18	3.34	5.66	3.56	2.29	2.16	1.93	2.16	1.47	4.28	2.63	2.85	51	
2.28	2.11	4.35	5.02	1.59	1.08	1.38	1.08	2.54	2.47	2.24	3.66	52	
(e) 2	(e) 1	7	(e) 1	28	.....	9	.....	15	(e) 1	3	.....	53
(e)	(e)	236	(e)	2,891	.....	576	.....	1,897	(e)	318	.....	54
(e)	(e)	111	(e)	1,704	.....	359	.....	1,004	(e)	318	.....	55
(e)	(e)	156	(e)	2,249	.....	471	.....	1,437	(e)	318	.....	56
(e)	.....	80	.....	72	.....	42	.....	5	(e)	.....	.....	57

* Annual charges may include costs of maintenance and operation, and assessments for payment on principal and interest on bonds, notes, warrants, and for special reasons.

* Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

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

CENSUS OF IRRIGATION - KANSAS

DRAINAGE BASIN TABLE II.—ENTERPRISES AND IRRIGATION

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		STATE TOTAL	MISSISSIPPI RIVER				
			Total	Missouri River			
				Total	Direct ¹	Kansas River	
						Total	Direct ²
ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1	Enterprises.....1940..number.....	3 1,066	1,029	182	3	179	46
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	134	128	40	22	40	29
3	Diversion dams.....1940..total number.....	102	102	14		14	
4	1930..total number.....	27	27	3		3	
5	1920..total number.....	10	10	5		5	
6	(a) Concrete and masonry.....1940..number.....	16	16	2		2	
7	(b) Timber.....1940..number.....	4	4				
8	(c) Earth and rock.....1940..number.....	65	65	12		12	
9	(d) Other, mixed, and not reported.....1940..number.....	17	17				
10	Main canals and laterals.....1940..total length, miles.....	292.5	292.5	8.1		8.1	
11	1930..total length, miles.....	285	285	14		14	
12	1920..total length, miles.....	418	418	19		19	
13	(a) Earth.....1940..length, miles.....	292	292	8		8	
14	(b) Lined.....1940..length, miles.....	0.5	0.5	0.1		0.1	
15	1940..capacity, c.f.s. ⁴	3,347	3,347	151	4	147	9
16	1930..capacity, c.f.s. ⁴	2,079	2,079	56		56	
17	1920..capacity, c.f.s. ⁴	1,667	1,667	50		50	
18	Pipe lines ⁵.....1940..total length, miles.....	24.1	24.1	12.4		12.4	5.7
19	1930..total length, miles.....	16.1	16.1	3.2		3.1	
20	1920..total length, miles.....	2.8	2.8				
21	(a) Concrete.....1940..length, miles.....	1.1	1.1	0.3		0.3	
22	(b) Metal.....1940..length, miles.....	21.7	21.7	11.0		11.0	4.8
23	(c) Wood-stave.....1940..length, miles.....						
24	(d) Other.....1940..length, miles.....	1.3	1.3	1.1		1.1	0.0
25	Storage dams.....1940..total number.....	40	40	7		7	
26	1930..total number.....	7	7				
27	1920..total number.....	13	13	1		1	
28	(a) Concrete and masonry.....1940..number.....	8	8				
29	(b) Earth and rock.....1940..number.....	22	22	3		3	
30	(c) Other, mixed, and not reported.....1940..number.....	10	10	4		4	
31	Reservoirs.....1940..total number.....	80	78	9		9	
32	(a) 1-99 acre-feet capacity.....1940..number.....	69	67	9		9	
33	(b) 100-999 acre-feet capacity.....1940..number.....	9	9				
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	2	2				
35	1940..total capacity, ac.-ft. ⁶	32,584	32,576	188		188	
36	1930..total number.....	19	19	2		2	
37	1930..total capacity, ac.-ft.....	66,293	66,293	1		1	
38	Wells, flowing.....1940..number.....	24	24				
39	1930..number.....	1	1				
40	1920..number.....	6	6				
41	1940..yield, g.p.m.....	1,453	1,453				
42	1930..yield, g.p.m.....	75	75				
43	1920..yield, g.p.m.....	500	500				
44	Wells, pumped.....1940..number.....	1,638	1,597	137		137	44
45	1930..number.....	772	772	36		36	
46	1920..number.....	710	710	32		32	
47	1940..yield, g.p.m.....	863,663	819,558	64,165		64,165	19,690
48	1930..yield, g.p.m.....	323,500	323,500	8,385		8,385	
49	1920..yield, g.p.m.....	266,797	266,797	2,600		2,600	
50	Pumping plants.....1940..total number.....	1,222	1,181	202	3	199	51
51	1930..total number.....	281	281	35		35	
52	Prime movers.....1940..capacity, hp.....	26,796	25,160	3,291	31	3,260	467
53	1930..capacity, hp.....	6,221	6,221	568		568	
54	1920..capacity, hp.....	6,946	6,946	383		383	
55	(a) Electric.....1940..number.....	428	413	20		20	15
56	1940..capacity, hp.....	8,168	7,602	135		135	114
57	(b) Internal-combustion.....1940..number.....	770	744	173	3	170	36
58	1940..capacity, hp.....	18,436	17,366	3,056	31	3,025	353
59	(c) Other.....1940..number.....	24	24	9		9	
60	1940..capacity, hp.....	192	192	100		100	
61	Pumps.....1940..total number.....	1,289	1,218	218	3	215	52
62	1930..number.....	312	312	38		38	
63	1920..number.....	288	288	23		23	
64	1940..capacity, g.p.m.....	1,231,482	1,186,577	145,800	2,500	143,300	24,360
65	1930..capacity, g.p.m.....	393,526	393,526	24,491		24,491	
66	1920..capacity, g.p.m.....	297,975	297,975	6,700		6,700	
67	(a) Centrifugal.....1940..number.....	931	931	157	3	154	39
68	1940..capacity, g.p.m.....	917,177	917,177	104,710	2,500	102,210	17,845
69	1940..average capacity, g.p.m.....	985	985	667	893	664	458
70	(b) Turbine.....1940..number.....	290	249	46		46	7
71	1940..capacity, g.p.m.....	304,185	259,280	40,220		40,220	5,650
72	1940..average capacity, g.p.m.....	1,049	1,041	874		874	836
73	(c) Plunger.....1940..number.....	31	31	15		15	6
74	1940..capacity, g.p.m.....	2,270	2,270	870		870	665
75	1940..average capacity, g.p.m.....	73	73	58		58	111
76	(d) Other.....1940..number.....	7	7				
77	1940..capacity, g.p.m.....	7,850	7,850				
78	Pumping lift, from all sources.....1940..average, feet.....	35	34	34	15	34	27
79	1930..average, feet.....	26	26	36		36	
80	1920..average, feet.....	30	30	37		37	
81	from pumped wells.....1940..average, feet.....	38	36	41		41	27
82	from surface sources.....1940..average, feet.....	27	27	25	15	25	21

¹ Data for 2 enterprises in Osage River Drainage Basin (8) (number refers to separate map) are included with Missouri River "Direct" Drainage Basin (1).

² Data for 2 enterprises in Saline River Drainage Basin (6) (number refers to separate map) are included with Kansas River "Direct" Drainage Basin (7).

³ Includes interdrainage basin projects counted as independent enterprises in each basin into which they extend. For actual number of enterprises see State table 1.

CENSUS OF IRRIGATION - KANSAS

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WORKS, 1940, 1930, AND 1920

MISSISSIPPI RIVER—Continued											
Missouri River—Continued				Arkansas River							White Woman Creek (independent stream)
Kansas River—Continued				Total	Direct	Two Butte and Bear Creeks	Pawnee River	Salt Fork Arkansas River	Cimarron River	Neosho River	
Sandy Hill River (5)	Solomon River (4)	Republican River (3)	Big Blue River (2)								
(5)	(4)	(3)	(2)		(10)	(13)	(11)	(16)	(14)	(9)	(12)
40	23	58	12	847	623	4	186	5	23	6	37
52	57	36	34	147	164	275	94	160	94	144	282
4		8	2	88	35		48	2	3		3
1		1		24	5						4
5				5	3						5
		2		14	5		6	1	2		6
				4	2		2				7
4		6	2	53	18		33	1	1		8
				17	10		7				9
2.0	3.1	1.0	2.0	284.4	264.3	1.0	14.0	4.1	1.0		10
2		9		271	186						11
7		12		309	202				6		12
2	3	1	2	284	264	1	14	4	1		13
	0.1			0.4	0.3			0.1			14
38	44	37	19	3,196	2,692	6	399	72	26	1	15
8		38		2,023	1,885						16
15		34		1,617	774				8		17
0.5	2.2	3.8	0.2	11.7	5.4		1.2	0.1		5.0	18
0.3				12.9							19
				2.8							20
		0.3		0.8	0.5		0.3				21
0.5	2.0	3.5	0.2	10.7	4.9		0.7	0.1		5.0	22
	0.2			0.2			0.2				23
											24
	5	2		33	8		23		2		25
				7							26
1				12					1		27
				8	1		6		1		28
	1	2		19	3		16				29
	4			6	4		1		1		30
	6	3		69	37		28		4		31
	6	3		58	36		19		3		32
				9			8		1		33
				2	1		1				34
	162	26		32,368	25,178		7,101		109	(?)	35
				17	1						36
				66,292	30,000						37
				24			4		20		38
				1							39
				6					6		40
				1,453			1,030		423		41
				75							42
				500					500		43
31	11	51		1,460	1,283	4	159	2	12		44
18		8		736	3				1		45
31		1		678	1				5		46
18,675	4,900	20,900		755,393	612,770	3,100	126,173	(?)	10,350		47
2,600		2,550		315,115	1,230				800		48
2,100		500		264,197					2,800		49
47	28	63	12	979	729	5	221	4	16	4	50
3		7		246	4				1		51
964	536	1,177	116	21,869	14,678	223	6,274	85	524	85	52
110		102		5,653	31				15		53
303		60		6,563	10				156		54
2	1	2		393	370		19	2		2	55
(?)	(?)	(?)		7,467	6,999		405	(?)		(?)	56
43	24	55	12	571	345	5	202	2	15	2	57
886	502	1,168	116	14,310	7,602	223	5,669	(?)	509	(?)	58
2	1	6		15	14				1		59
(?)	(?)	8		92	77				(?)		60
47	28	76	12	1,000	738	5	233	4	16	4	61
3		7		274	4				1		62
21		1		265	1				3		63
40,380	24,775	43,685	10,100	1,040,777	725,907	5,600	282,440	8,200	18,450	180	64
6,200		5,820		369,035	2,580				800		65
5,350		500		291,275					2,800		66
33	21	49	12	774	590	1	173	2	5	3	67
26,430	19,975	27,880	10,100	812,467	586,237	(?)	211,170	(?)	6,900	160	68
801	951	569	842	1,050	994	(?)	1,221	(?)	1,380	53	69
14	7	18		203	129	4	57	2	11		70
13,950	4,800	15,620		219,060	134,040	3,100	67,670	(?)	11,550		71
996	686	868		1,079	1,039	775	1,187	(?)	1,050		72
		9		16	15					1	73
		205		1,400	1,380					(?)	74
		23		88	92					(?)	75
				7	4		3				76
				7,850	4,250		3,600				77
34	37	42	21	34	31	93	39	28	54	15	78
20		27		25	20				80		79
29		100		29	12				12		80
46	37	54		35	32	109	47	(?)	68		81
21	37	23	21	27	28	68	28	10	14	15	82

¹Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

²Includes siphons and farm pipe lines reported.

³Total capacity of all reservoirs regardless of size.

⁴Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — KANSAS

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, [Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920

ITEM (For definitions and explanations, see text)			STATE TOTAL	Barber	Barton	Cheyenne	Cloud	Cowley	Crawford
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*									
1	All farms.....	1940..number.....	156,327	1,030	1,723	949	1,938	2,489	2,461
2		1930..number.....	166,042	1,057	1,693	1,001	2,076	2,594	2,568
3	Irrigated farms.....	1940..number.....	1,578	8	41	5	7	5	6
4		1930..number.....	683	1	1	8	1	4	1
5	Increase or decrease (-), 1930-1940.....	percent.....	131.0			-37.5			
6	Operated by—								
7	(a) Owners and managers.....	1940..number.....	1,031	8	28	5	5	5	5
8		1930..number.....	391			6			
9	(b) Tenants.....	1940..number.....	547		13		2		1
10		1930..number.....	292			2			
11	Land in all farms.....	1940..acres.....	48,173,635	707,085	563,885	624,976	421,118	614,735	328,368
12	Land in irrigated farms.....	1940..acres.....	871,189	17,437	17,498	6,850	684	1,891	297
13	Average per farm.....	1940..acres.....	552	2,180	427	1,370	98	378	50
14	(a) Operated by owners and managers.....	1940..acres.....	658,836	17,437	12,634	6,850	555	1,691	279
15	Average per farm.....	1940..acres.....	637	2,180	451	1,370	113	378	56
16	(b) Operated by tenants.....	1940..acres.....	214,353	4,804			(2)		(2)
	Average per farm.....	1940..acres.....	392	374			(2)		(2)
17	Approximate land area.....	1940..acres.....	52,552,320	733,440	570,880	657,280	455,040	727,040	382,720
IRRIGATED AND IRRIGABLE AREAS									
18	Area irrigated.....	1939..acres.....	99,980	155	988	312	26	58	40
19	(a) Cropland harvested.....	1939..acres.....	85,139	155	875	268	26	53	30
20	(b) Crop failure.....	1939..acres.....	11,386		10	19			
21	(c) Pasture.....	1939..acres.....	3,455		103	25		5	10
22	Area irrigated.....	1929..acres.....	71,290			389			
23		1919..acres.....	47,312			500			
24	Increase or decrease (-), 1929-1939.....	percent.....	40.2			-19.8			
25	Irrigable area in enterprises.....	1940..acres.....	147,226	315	1,753	517	28	95	865
26		1930..acres.....	95,719			2,450			
27		1920 ² ..acres.....	102,562			2,080			
28	Excess of irrigable area over the area irrigated.....	1940..acres.....	47,246	160	765	205	2	37	819
29		1930..acres.....	24,429			2,061			
30	Area works were capable of supplying with water.....	1940..acres.....	142,400	285	1,568	487	28	95	865
31		1930..acres.....	83,583			754			
32		1920..acres.....	67,853			2,080			
33	Increase or decrease (-), 1930-1940.....	percent.....	70.4			-35.4			
34	Excess, capability of works over area irrigated.....	1940..acres.....	42,429	130	560	175	2	37	819
35		1930..acres.....	12,293			365			
36	Proportion which area irrigated is of all lands in irrigated farms.....	1939..percent.....	11.5	0.9	5.6	4.6	3.8	3.1	15.5
37		1929..percent.....	22.9			7.3			
38	Proportion which area irrigated is of area works were capable of supplying with water.....	1939..percent.....	70.2	54.4	69.0	64.1	92.9	61.1	5.3
39		1929..percent.....	85.3			51.8			
CAPITAL INVESTED TO JANUARY 1									
40	Total investment in all enterprises.....	1940..dollars.....	2,153,880	6,000	23,938	18,060	2,350	2,325	19,525
41	(a) Cost of irrigation works and equipment.....	1940..dollars.....	2,067,284	6,000	23,938	18,060	2,350	2,325	19,475
42	(b) Investment in water rights (reported).....	1940..dollars.....	86,596						50
43	Total investment in all enterprises.....	1930..dollars.....	1,685,682			10,600			
44		1920..dollars.....	2,067,381			11,816			
45	Increase or decrease (-), 1930-1940.....	percent.....	27.8			70.4			
46	Average investment, based on area works were capable of supplying with water, per acre.....	1940..dollars.....	15.12	21.05	15.27	37.08	83.93	24.47	22.57
47		1930..dollars.....	20.17			14.06			
48		1920..dollars.....	30.47			5.68			
49	Average investment per acre irrigated.....	1939..dollars.....	21.54	38.71	24.23	57.88	90.38	40.09	424.46
50	Estimated final investment in existing enterprises.....	1940..dollars.....	2,255,579	6,000	26,338	18,940	2,350	2,800	19,525
51		1930..dollars.....	1,723,872			11,600			
52		1920..dollars.....	2,195,961			11,816			
53	Increase or decrease (-), 1930-1940.....	percent.....	30.8			63.3			
54	Average investment, based on estimated final investment and irrigable area, per acre.....	1940..dollars.....	15.32	19.05	15.02	36.63	83.93	29.47	22.57
55		1930..dollars.....	18.01			4.73			
56		1920 ² ..dollars.....	21.41			5.68			
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS									
			Primary	Sup.					
			Enterprises						
57	Enterprises reporting maintenance and operation.....	1939..number.....	936	76	3	27	7	4	5
58	Area irrigated in these enterprises.....	1939..acres.....	99,033	13,628	155	988	312	26	43
59	Cost of maintenance and operation.....	1939..dollars.....	227,076	29,689	375	3,722	1,131	320	585
60	Average cost, per acre irrigated.....	1939..dollars.....	2.29	2.16	2.42	3.77	3.62	12.31	13.07
61		1929..dollars.....	1.53				2.57		
62	Total annual charges (reported) ⁴	1939..dollars.....	43,166						
63	Average annual charge per acre irrigated.....	1939..dollars.....	1.05						
64	Area against which charges were assessed.....	1939..acres.....	56,719						
65	Average annual charge per acre assessed.....	1939..dollars.....	0.76						
66	Total charges collected ⁴	1939..dollars.....	31,346						
67	Indebtedness to December 31 (reported) ⁵	1939..dollars.....	43,775						
WATER DELIVERED TO IRRIGATORS									
68	Enterprises reporting water delivered.....	1939..number.....	902	70	3	26	7	4	6
69	Area irrigated in these enterprises.....	1939..acres.....	93,008	13,268	155	988	312	26	46
70	Water delivered in these enterprises.....	1939..acre-feet.....	194,041	26,464	225	2,028	272	47	66
71	Average water delivered per acre irrigated.....	1939..acre-feet.....	1.4	2.0	1.5	2.1	0.9	1.8	1.0
72	Average cost of water per acre irrigated.....	1939..dollars.....	2.40	2.16	2.42	3.76	3.62	12.31	13.07
DRAINAGE OF IRRIGATED LAND									
73	Enterprises reporting land drained or needing drainage.....	1939..number.....	44						
74	Irrigable area in these enterprises.....	1939..acres.....	3,507						
75	Irrigated area in these enterprises.....	1939..acres.....	2,093						
76	Area for which drains have been installed.....	1939..acres.....	2,552						
77	Additional area needing drainage.....	1939..acres.....	240						

* Census of Agriculture.

¹ The excess of farm acreage over approximate land area is due to the fact that the entire acreage of a farm is tabulated as in the county in which the headquarters are located, even though a part of the farm may be situated in an adjoining county.² Data are included only in State totals because less than 3 farms or enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — KANSAS

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1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE 1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939

Irrigation data omitted from any of the counties listed are included under "All other counties"]

Decatur	Douglas	Edwards	Ellis	Finney	Ford	Gray	Hamilton	Hodgeman	Johnson	Kearny	Marshall	
1,174	1,854	827	1,235	879	1,485	866	379	759	2,092	471	2,686	1
1,340	1,852	823	1,314	971	1,338	828	440	732	2,376	462	2,952	2
31	11	31	10	307	167	22	59	80	3	112	4	3
5	2	4	1	273	23	2	56	6		113		4
				12.5			5.4			-0.9		5
19	9	24	10	139	118	14	33	54	3	51	2	6
				108			41			57		7
12	2	7		188	39	8	26	26		61		8
				165			15			58		9
562,148	277,921	405,496	556,777	682,558	711,655	545,714	413,687	528,612	263,204	387,005	551,709	10
12,531	1,786	28,961	4,214	114,394	47,553	16,603	29,067	70,365	103	64,892	682	11
404	162	934	421	873	303	855	493	880	34	579	170	12
8,063	1,780	24,771	4,214	73,745	33,778	14,478	18,604	52,500	103	46,827	(²)	13
424	192	1,052	421	531	286	1,034	504	972	34	918	(²)	14
4,468	(²)	4,190		40,649	13,775	4,325	10,463	17,865		18,065	(²)	15
372	(²)	599		242	353	541	402	688		298	(²)	16
575,300	299,520	392,960	576,000	833,280	693,120	556,160	634,880	550,400	304,640	545,920	583,040	17
633	155	924	50	32,644	4,034	3,729	6,431	5,100	48	17,286	76	18
626	125	864	45	29,628	3,607	1,868	4,896	4,285	48	12,492	76	19
7		36		2,358	371	553	1,207	666		4,716		20
	30	24	5	658	56	1,308	328	119		58		21
				34,876			3,821			21,375		22
				15,221			3,463			21,076		23
				-6.4			68.3			-19.2		24
917	251	1,398	117	42,715	5,415	5,640	8,360	7,230	89	27,402	80	25
				44,047			5,218			27,599		26
				19,209			9,266			37,897		27
264	96	474	67	10,071	1,381	1,911	1,929	2,130	41	10,136	4	28
				9,171			1,397			6,224		29
832	251	1,377	117	42,536	5,032	5,610	8,287	6,382	89	27,242	80	30
				36,378			4,045			27,574		31
				18,655			6,266			29,367		32
				16.9			104.9			-1.2		33
199	96	453	67	9,692	998	1,881	1,856	1,282	41	9,976	4	34
				1,502			224			6,190		35
5.1	8.7	3.2	1.2	28.5	8.5	19.8	22.1	7.2	46.6	26.6	11.1	36
				44.2			16.7			25.7		37
76.1	61.8	67.1	42.7	76.7	80.2	66.5	77.6	79.9	53.9	63.4	65.0	38
				95.9			94.5			77.5		39
20,595	9,800	23,216	1,700	849,492	86,824	41,950	69,955	96,315	1,310	290,886	1,210	40
20,575	9,800	23,216	1,700	773,490	86,822	41,950	61,365	90,289	1,310	290,886	1,210	41
10				76,002	2		8,590	26				42
				930,457			33,800			216,896		43
				237,064			38,065			296,700		44
				-8.7			107.0			34.1		45
24.74	39.04	16.86	14.53	19.07	17.25	7.48	8.44	15.09	14.72	10.68	15.12	46
				25.58			8.36			7.87		47
				12.71			6.07			10.10		48
32.52	63.23	25.13	34.00	26.02	21.52	11.25	10.88	18.69	27.29	16.85	15.92	49
22,285	12,600	23,336	3,200	865,999	89,900	41,950	70,990	114,235	1,310	297,168	1,210	50
				930,467			33,800			218,616		51
				237,064			38,065			296,700		52
				-6.9			109.8			35.9		53
24.30	51.00	16.69	27.35	20.27	16.60	7.44	8.48	15.80	14.72	10.84	15.12	54
				21.12			6.48			7.92		55
				12.34			6.07			7.83		56
25	9	33	6	169	25	109	27	28	4	83	3	57
629	115	810	50	32,640	4,419	4,009	3,729	6,431	376	4,958	48	58
3,943	850	3,903	485	52,811	12,063	13,287	7,523	5,154	198	25,729	105	59
6.27	5.65	4.29	0.70	1.62	2.93	3.31	2.02	0.80	0.52	5.19	2.19	60
				1.28				0.84				61
				22,552		1,500		7,534				62
				1.18		1.88		1.44				63
				25,017		800		5,902				64
				0.90		1.88		1.28				65
				15,746		1,052		1,228				66
				28,725		600		1,350				67
23	9	31	6	152	23	95	26	26	3	84	2	68
580	115	829	50	31,674	4,059	2,949	3,514	2,994	376	5,100	(²)	69
862	88	1,261	41	43,646	7,283	5,647	3,433	4,824	95	7,647	(²)	70
1.5	0.8	1.5	0.8	1.4	1.8	1.9	1.0	1.6	0.3	1.5	(²)	71
6.57	5.65	3.92	9.70	1.78	2.95	3.37	2.13	1.08	0.52	5.16	(²)	72
(²)	2	(²)	1	5						(²)	1	73
(²)		(²)		371						(²)		74
(²)		(²)		273						(²)		75
(²)		(²)		371						(²)		76
												77

³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

⁴ Annual charges may include costs of maintenance and operation, and assessments or payments on principal and interest on bonds, notes, warrants, and for special reasons.

⁵ Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - KANSAS

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, [Counties for which 1933 data were not shown may have had irrigation in that year; 1930 and 1929]

ITEM (For definitions and explanations, see text)		Meade	Ness	Norton	Osborne	Pawnee	Phillips	Rawlins
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*								
1 All farms.....	1940..number.....	750	1,059	1,437	1,468	1,102	1,657	1,154
2	1930..number.....	933	1,108	1,705	1,652	1,192	1,979	1,176
3 Irrigated farms.....	1940..number.....	16	48	15	4	77	3	12
4	1930..number.....	2	3	5	3	27	1	2
5	Increase or decrease (-), 1930-1940.....					185.2		
6	Operated by—							
7	(a) Owners and managers.....	12	39	12	3	47	1	11
8	1930..number.....					19		
9	(b) Tenants.....	4	9	3	1	30	2	1
10	1930..number.....					8		
11 Land in all farms.....	1940..acres.....	561,694	659,851	547,308	546,576	482,710	555,237	692,131
12	1930..acres.....	14,253	41,568	10,395	1,453	38,808	950	2,883
13	Average per farm.....	891	866	683	363	504	317	238
14	(a) Operated by owners and managers.....	9,333	34,453	9,932	1,358	22,672	(3)	2,648
15	Average per farm.....	778	883	828	453	482	(3)	241
16	(b) Operated by tenants.....	4,920	7,115	463	(3)	16,136	(3)	(3)
	Average per farm.....	1,230	791	154	(3)	538	(3)	(3)
17	Approximate land area.....	624,640	691,840	563,200	574,720	479,360	579,840	689,920
IRRIGATED AND IRRIGABLE AREAS								
18	Area irrigated.....	962	2,023	420	125	5,205	73	89
19	(a) Cropland harvested.....	942	1,828	226	125	4,636	73	89
20	(b) Crop failure.....		188			493		
21	(c) Pasture.....	20	27	194		76		
22	Area irrigated.....					3,191		
23	1919..acres.....					1,117		
24	Increase or decrease (-), 1929-1939.....					63.1		
25	Irrigable area in enterprises.....	1,201	3,899	599	200	7,695	141	212
26	1930..acres.....					5,109		
27	1929..acres.....					2,630		
28	Excess of irrigable area over the area irrigated.....	239	1,666	179	75	2,490	68	123
29	1930..acres.....					1,918		
30	Area works were capable of supplying with water.....	1,201	3,138	556	190	7,398	141	145
31	1930..acres.....					4,502		
32	1929..acres.....					2,366		
33	Increase or decrease (-), 1930-1940.....					64.3		
34	Excess, capability of works over area irrigated.....	239	1,115	136	65	2,193	68	56
35	1930..acres.....					1,311		
36	Proportion which area irrigated is of all lands in irrigated farms.....	6.7	4.9	4.0	8.6	13.4	7.7	3.1
37	1929..percent.....					26.1		
38	Proportion which area irrigated is of area works were capable of supplying with water.....	90.1	64.5	75.5	65.8	70.4	51.8	61.4
39	1929..percent.....					70.9		
CAPITAL INVESTED TO JANUARY 1								
40	Total investment in all enterprises.....	23,245	28,330	8,469	4,660	112,238	1,400	2,690
41	(a) Cost of irrigation works and equipment.....	23,200	28,325	8,465	4,660	112,234	1,400	2,675
42	(b) Investment in water rights (reported).....	45	5	4	10	4		5
43	Total investment in all enterprises.....					136,400		
44	1930..dollars.....					32,450		
45	1920..dollars.....					-17.7		
46	Increase or decrease (-), 1930-1940.....							
47	Average investment, based on area works were capable of supplying with water, per acre.....	19.35	9.03	15.23	24.63	15.17	9.93	18.48
48	1930..dollars.....					30.30		
49	1920..dollars.....					13.72		
50	Average investment per acre irrigated.....	24.16	14.00	20.16	37.28	21.56	19.18	30.11
51	Estimated final investment in existing enterprises.....	25,820	31,650	10,519	4,810	114,708	2,400	2,805
52	1930..dollars.....					146,400		
53	1920..dollars.....					35,750		
54	Increase or decrease (-), 1930-1940.....					-21.6		
55	Average investment, based on estimated final investment and irrigable area, per acre.....	21.50	8.58	17.56	24.05	14.91	17.02	13.23
56	1930..dollars.....					28.66		
	1920..dollars.....					13.59		
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS								
57	Enterprises reporting maintenance and operation.....	18	43	9	3	69	4	5
58	Area irrigated in these enterprises.....	962	2,003	420	125	5,199	73	85
59	Cost of maintenance and operation.....	1,666	6,179	1,527	475	19,481	265	535
60	Average cost, per acre irrigated.....	1.84	3.08	3.64	3.80	3.75	3.63	6.29
61	1929..dollars.....					3.60		
62	Total annual charges (reported).....							
63	Average annual charge per acre irrigated.....							
64	Area against which charges were assessed.....							
65	Average annual charge per acre assessed.....							
66	Total charges collected.....							
67	Indebtedness to December 31 (reported).....							
WATER DELIVERED TO IRRIGATORS								
68	Enterprises reporting water delivered.....	17	43	9	2	68	4	6
69	Area irrigated in these enterprises.....	699	1,985	420	(3)	4,835	73	89
70	Water delivered in these enterprises.....	687	2,663	894	(3)	10,256	85	112
71	Average water delivered per acre irrigated.....	1.0	1.3	2.1	(3)	2.1	1.2	1.3
72	Average cost of water per acre irrigated.....	2.66	3.02	3.64	(3)	3.58	3.63	6.29
DRAINAGE OF IRRIGATED LAND								
73	Enterprises reporting land drained or needing drainage.....	3	6			11	3	
74	Irrigable area in these enterprises.....	318	645			1,242	129	
75	Irrigated area in these enterprises.....	318	234			761	61	
76	Area for which drains have been installed.....	318	242			1,230	79	
77	Additional area needing drainage.....		45				50	

* Census of Agriculture.

† Data between census years not comparable (see headnote).

‡ The excess of farm acreage over approximate land area is due to the fact that the entire acreage of a farm is tabulated as in the county in which the headquarters are located, even though a part of the farm may be situated in an adjoining county.

CENSUS OF IRRIGATION - KANSAS

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1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE 1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939-Continued
Irrigation data omitted from any of the counties listed are included under "All other counties"]

Rush	Saline	Scott	Shawnee	Sheridan	Stafford	Stanton	Trego	Wallace	Washington	Wichita	All other counties ¹	
1,128	1,667	528	2,200	929	1,312	223	884	328	2,630	395	110,182	1
1,174	1,839	479	2,173	1,049	1,359	315	960	410	2,793	373	116,626	2
49	8	94	24	8	13	4	5	7	10	9	273	3
2	2	16	1	2	3			19	2	1	91	4
		487.5									43.7	5
34	6	54	22	5	9	4	4	6	8	7	215	6
		6									154	7
15	2	40	2	3	4		1	1	2	2	58	8
		10									36	9
456,062	414,137	434,451	308,553	549,554	486,708	332,618	541,394	468,016	546,181	408,215	30,045,390	10
21,034	1,011	78,387	2,352	5,681	6,300	4,946	2,500	10,330	4,403	9,733	176,204	11
429	126	834	98	710	485	1,236	500	1,476	440	1,081	645	12
15,763	596	51,626	2,336	3,441	4,877	4,946	1,860	6,880	4,107	8,253	151,237	13
464	99	960	106	688	542	1,236	465	1,147	513	1,322	703	14
5,271	(³)	26,561	(³)	2,240	1,423		(³)	(³)	(³)	(³)	24,967	15
351	(³)	664	(³)	747	356			(³)	(³)	(³)	430	16
463,360	460,800	462,720	348,800	571,520	508,160	432,640	576,640	583,040	570,240	463,300	32,835,840	17
1,529	175	13,389	493	70	110	319	93	365	257	448	1,220	18
1,485	175	12,620	363	60	90	319	93	260	257	428	1,117	19
31		476	14		20			105		15	91	20
33		293	56	10						5	12	21
		3,432									4,206	22
		3,047									1,988	23
		290.1									-71.0	24
2,032	221	19,661	777	196	156	1,180	200	630	490	1,400	3,369	25
		5,160									6,136	26
		30,163									4,317	27
503	46	6,272	344	126	46	861	107	265	223	952	2,149	28
		1,725									1,830	29
2,032	221	19,328	772	154	155	1,180	185	550	345	1,095	2,459	30
		5,087									5,243	31
		5,045									4,074	32
		279.9									-53.1	33
503	46	5,939	339	84	46	861	92	185	88	647	1,239	34
		1,655									1,037	35
7.3	17.3	17.1	18.4	1.2	1.7	6.4	3.7	3.5	5.8	4.6	0.7	36
		14.7									4.9	37
75.2	79.2	89.3	56.1	45.5	70.5	27.0	50.3	66.4	74.5	40.9	49.6	38
		67.5									80.2	39
46,615	3,800	236,224	17,656	4,230	1,400	12,175	5,531	16,620	5,198	16,815	41,059	40
46,563	3,800	236,110	17,656	4,230	1,400	12,175	5,489	16,620	5,197	16,815	39,418	41
52		114					42		1		1,810	42
		124,600									232,689	43
		299,500									1,151,786	44
		89.6									-82.4	45
22.94	17.19	12.22	22.87	27.47	8.97	10.32	29.90	30.22	15.07	15.45	16.70	46
		24.49									44.42	47
		59.37									252.72	48
30.49	21.71	17.64	40.78	60.43	12.73	38.17	59.47	45.53	20.23	37.76	33.65	49
49,305	3,800	253,859	20,006	4,755	1,400	12,775	5,531	16,920	5,198	20,665	48,408	50
		124,600									258,389	51
		416,000									1,160,586	52
		103.7									-81.3	53
24.26	17.19	12.91	25.75	24.26	8.97	10.83	27.66	26.86	10.83	14.76	14.37	54
		24.15									42.11	55
		13.79									268.84	56
50	6	68	23	3	3	4	4	7	8	11	34	57
1,529	161	13,194	427	56	110	319	93	325	217	348	1,084	58
10,027	297	39,979	1,880	201	165	550	388	1,013	360	1,341	3,854	59
6.56	1.84	3.03	4.42	3.59	1.50	1.72	4.17	3.12	1.66	3.85	3.56	60
		3.62									8.13	61
												62
												63
												64
												65
												66
												67
49	7	66	24	5	2	4	4	7	9	11	39	68
1,472	175	13,248	433	70	(³)	319	93	325	257	418	1,210	69
3,143	174	23,317	535	76	(³)	231	142	709	190	531	1,252	70
2.1	1.0	1.8	1.2	1.1	(³)	0.7	1.6	2.2	0.7	1.3	1.0	71
6.61	1.84	3.02	4.42	3.59	(³)	1.72	4.17	3.12	1.66	4.06	3.56	72
(³)	1											73
(³)	(³)		(³)					(³)			369	74
(³)	(³)		(³)					(³)			101	75
(³)	(³)		(³)					(³)			129	76
(³)	(³)		(³)					(³)			108	77

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

⁴For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

⁵Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

⁶Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - KANSAS

COUNTY TABLE II.—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS.

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)	STATE TOTAL	Barber	Barton	Cheyenne	Cloud	Cowley	Crawford
FARM VALUES, 1940*							
1 Land and buildings, all farms.....dollars..	1,421,387,464	16,064,982	29,364,910	10,335,709	15,993,188	21,353,378	8,341,548
2 Land and buildings, irrigated farms.....dollars..	22,721,980	307,500	1,076,900	112,700	60,800	95,643	82,540
3 Operated by—							
4 (a) Owners and managers.....dollars..	16,409,622	307,500	745,800	112,700	55,600	95,643	79,040
5 (b) Tenants.....dollars..	6,311,767	.....	331,100	.....	(1)	.....	(1)
6 Average, land and buildings, per farm.....dollars..	14,398.85	38,437.50	26,265.85	22,540.00	8,657.14	19,128.60	13,756.67
7 per acre in farms.....dollars..	26.08	17.63	61.54	16.45	88.60	50.58	277.91
8 Buildings, irrigated farms reporting value.....number..	1,487	8	40	4	7	5	6
9 Total reported.....dollars..	3,942,540	33,350	156,750	19,700	16,850	16,182	55,600
10 Average, per irrigated farm reporting.....dollars..	2,633.63	4,168.75	3,913.75	4,925.00	2,407.14	3,236.40	9,266.67
11 per acre on all irrigated farms.....dollars..	4.53	1.91	8.98	2.88	24.63	8.56	187.21
12 Buildings, nonirrigated farms reporting value.....number..	144,152	968	1,532	884	1,766	2,453	2,389
13 Total reported.....dollars..	253,889,232	1,693,060	3,944,380	1,532,655	2,748,631	4,189,144	2,374,920
14 Average, per nonirrigated farm reporting.....dollars..	1,761.26	1,955.64	2,574.66	1,733.77	1,556.42	1,707.76	994.11
15 per acre on all nonirrigated farms.....dollars..	5.37	2.74	7.22	2.48	6.54	6.84	7.24
16 Implements and machinery, irrigated farms reporting value.....number..	1,464	8	40	5	4	4	6
17 Total reported.....dollars..	1,992,911	22,300	78,128	8,850	8,800	15,491	13,400
18 Average, per irrigated farm reporting.....dollars..	1,361.28	2,787.50	1,953.20	1,770.00	2,200.00	3,872.75	2,233.33
19 per acre, on all irrigated farms.....dollars..	2.29	1.28	4.46	1.29	12.87	8.19	45.12
20 Implements and machinery, nonirrigated farms reporting value.....number..	136,732	865	1,552	875	1,734	2,277	2,026
21 Total reported.....dollars..	113,269,775	1,216,983	1,682,354	1,046,287	1,445,119	1,651,325	889,678
22 Average, per acre, on all nonirrigated farms.....dollars..	2.39	1.76	3.41	1.69	3.44	2.69	2.71
ENTERPRISES AND IRRIGATION WORKS							
JANUARY 1							
23 Enterprises.....1940.....number.....	21,067	3	27	7	4	4	6
24 .....1930.....number.....	2,302	1	2	5	2	1	1
25 .....1920.....number.....	209	.....	.....	3	.....	.....	.....
26 Average size of enterprise based on							
27 irrigable area.....1940.....acres.....	138	105	65	74	7	24	144
28 .....1930.....acres.....	317	.....	.....	490	.....	.....	.....
29 .....1920.....acres.....	491	.....	.....	693	.....	.....	.....
30 Diversion dams.....1940.....number.....	102	.....	.....	.....	.....	.....	.....
31 Main canals and laterals.....1940.....length, miles.....	292.5	.....	.....	.....	.....	.....	.....
32 .....1930.....length, miles.....	285	.....	.....	9	.....	.....	.....
33 .....1920.....length, miles.....	418	.....	.....	12	.....	.....	.....
34 .....1940.....capacity, c.f.s. ⁴	3,347	10	22	.....	3	1	1
35 .....1930.....capacity, c.f.s. ⁴	2,079	.....	.....	38	.....	.....	.....
36 .....1920.....capacity, c.f.s. ⁴	1,667	.....	.....	34	.....	.....	.....
37 Pipe lines ⁵.....1940.....length, miles.....	24.1	0.1	0.5	0.4	.....	0.8	5.0
38 Storage dams.....1940.....number.....	40	.....	.....	1	.....	2	.....
39 Reservoirs.....1940.....number.....	80	.....	.....	1	.....	2	.....
40 .....1930.....number.....	19	.....	.....	.....	.....	.....	.....
41 .....1920.....number.....	36	.....	.....	.....	.....	.....	.....
42 .....1940.....capacity, acre-feet.....	32,584	.....	.....	(1)	.....	(1)	.....
43 .....1930.....capacity, acre-feet.....	56,293	.....	.....	.....	.....	.....	.....
44 .....1920.....capacity, acre-feet.....	391	.....	.....	.....	.....	.....	.....
45 Wells, flowing.....1940.....number.....	24	.....	.....	.....	.....	.....	.....
46 .....1930.....number.....	1	.....	.....	.....	.....	.....	.....
47 .....1920.....number.....	6	.....	.....	.....	.....	.....	.....
48 .....1940.....yield, g.p.m.....	1,453	.....	.....	.....	.....	.....	.....
49 .....1930.....yield, g.p.m.....	75	.....	.....	.....	.....	.....	.....
50 .....1920.....yield, g.p.m.....	500	.....	.....	.....	.....	.....	.....
51 Wells, pumped.....1940.....number.....	1,638	2	21	21	4	3	.....
52 .....1930.....number.....	772	.....	.....	8	.....	.....	.....
53 .....1920.....number.....	710	.....	.....	.....	.....	.....	.....
54 .....1940.....yield, g.p.m.....	863,663	(1)	20,375	6,010	500	1,600	.....
55 .....1930.....yield, g.p.m.....	323,500	.....	.....	2,550	.....	.....	.....
56 .....1920.....yield, g.p.m.....	266,797	.....	.....	.....	.....	.....	.....
57 Pumping plants.....1940.....number.....	1,222	3	30	7	5	4	4
58 .....1930.....number.....	281	.....	.....	3	.....	.....	.....
59 .....1920.....number.....	198	.....	.....	.....	.....	.....	.....
60 Prime movers.....1940.....capacity, hp.....	26,796	77	658	287	68	88	85
61 .....1930.....capacity, hp.....	6,221	.....	.....	45	.....	.....	.....
62 .....1920.....capacity, hp.....	6,946	.....	.....	.....	.....	.....	.....
63 Pumps.....1940.....capacity, g.p.m.....	1,231,482	7,200	31,625	6,460	2,605	1,622	180
64 .....1930.....capacity, g.p.m.....	393,526	.....	.....	2,850	.....	.....	.....
65 .....1920.....capacity, g.p.m.....	297,975	.....	.....	.....	.....	.....	.....
66 Pumping lift, from all sources.....1940.....average, feet.....	35	34	34	77	32	42	15
67 .....1930.....average, feet.....	28	.....	.....	35	.....	.....	.....
68 .....1920.....average, feet.....	30	.....	.....	.....	.....	.....	.....
69 from pumped wells.....1940.....average, feet.....	38	(1)	38	77	38	31	.....
PAY ROLL AND NUMBER OF EMPLOYEES							
1939⁶							
70 Enterprises reporting pay roll.....number.....	10	.....	.....	.....	.....	.....	.....
71 Irrigated area in these enterprises.....acres.....	41,116	.....	.....	.....	.....	.....	.....
72 Wages and salaries paid and payable.....dollars..	16,235	.....	.....	.....	.....	.....	.....
73 Persons employed during week ending April 29.....number..	75	.....	.....	.....	.....	.....	.....

* Census of Agriculture.

¹ Data are included only in State totals because less than 3 farms or 3 enterprises reported in the 1940 Census.² Includes intercounty projects counted as independent enterprises for each county into which they extend. For actual number of enterprises see State table 1.³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION — KANSAS

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1940, 1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939

irrigation data omitted from any of the counties listed are included under "All other counties"

Decatur	Douglas	Edwards	Ellis	Finney	Ford	Gray	Hamilton	Hodgeman	Johnson	Kearny	Marshall	
8,722,637	13,215,518	13,440,157	13,203,402	9,274,846	18,674,356	10,994,738	2,823,249	8,010,450	19,744,326	4,324,775	23,543,418	1
247,280	155,950	818,665	150,460	3,354,890	1,591,848	384,905	372,105	1,412,230	24,040	1,339,870	45,500	2
170,780	146,950	692,895	150,460	1,842,170	1,177,283	298,040	230,070	1,047,060	24,040	898,170	(1)	3
76,500	(1)	125,770	.....	1,512,520	414,565	86,885	141,435	363,170	.....	530,700	(1)	4
7,976.77	14,177.27	26,406.55	15,046.00	10,927.33	10,139.16	17,495.68	6,306.86	17,652.88	8,013.33	11,993.12	11,375.00	5
19.73	87.32	28.27	35.70	29.33	33.48	20.47	12.80	20.06	233.40	20.65	66.72	6
28	11	30	10	297	151	21	47	77	3	98	3	7
57,650	35,650	112,150	50,300	561,460	387,150	45,450	61,450	204,175	10,400	191,425	6,600	8
2,059.93	3,240.91	3,738.33	5,030.00	1,890.44	2,563.91	2,164.29	1,307.45	2,651.62	3,466.67	1,953.32	2,200.00	9
4.80	19.96	8.87	11.94	4.91	8.14	2.42	2.11	2.90	100.97	2.95	9.68	10
1,037	1,765	681	1,093	449	1,092	674	247	516	2,028	268	2,560	11
1,440,300	3,588,836	1,402,017	1,476,794	574,795	2,438,180	1,060,955	248,115	966,775	5,031,578	352,990	5,257,800	12
1,398.91	2,010.55	2,058.76	1,351.14	1,280.17	2,232.77	1,574.12	1,004.61	1,873.59	2,481.05	1,317.13	2,030.04	13
2.62	13.00	3.72	2.67	1.05	3.67	2.01	0.65	2.11	19.12	1.06	9.54	14
26	11	30	10	281	146	21	50	74	3	104	4	15
24,095	14,960	60,405	13,200	299,225	123,870	24,995	35,030	99,335	1,300	166,105	2,740	16
926.73	1,360.00	2,013.50	1,320.00	1,064.86	848.42	1,190.24	700.60	1,942.36	433.33	1,597.16	685.00	17
1.92	8.38	2.09	3.13	2.62	2.60	1.33	1.21	1.41	12.62	2.56	4.02	18
1,012	1,696	699	1,116	468	1,101	686	246	532	1,922	315	2,431	19
826,048	1,164,592	824,201	981,486	500,184	1,231,494	670,098	342,313	476,863	1,172,328	344,095	1,868,524	20
1.50	4.22	2.19	1.78	0.91	1.85	1.27	0.89	1.04	4.46	1.04	3.39	21
27	10	34	6	195	119	29	33	88	3	71	3	22
3	1	4	1	90	7	5	9	6	.....	28	.....	23
.....	.....	.....	.....	85	.....	.....	9	.....	.....	31	.....	24
34	25	41	20	219	46	194	253	82	30	386	27	25
.....	.....	.....	.....	489	.....	.....	580	.....	.....	986	.....	26
4	.....	.....	.....	226	.....	.....	696	.....	.....	1,222	.....	27
1.0	.....	.....	.....	15	6	3	2	22	.....	3	.....	28
.....	.....	.....	.....	84.0	7.0	6.0	29.0	1.0	.....	125.0	.....	29
.....	.....	.....	.....	118	.....	.....	21	.....	.....	53	.....	30
20	1	1	6	91	.....	.....	34	.....	.....	98	.....	31
.....	.....	.....	.....	432	160	129	230	66	2	1,608	4	32
.....	.....	.....	.....	1,288	.....	.....	53	.....	.....	600	.....	33
2.9	1.6	.....	.....	666	.....	.....	1	.....	.....	742	.....	34
.....	.....	.....	.....	0.9	0.1	.....	.....	1.0	0.2	0.1	.....	35
.....	.....	.....	.....	7	.....	.....	.....	12	.....	3	.....	36
.....	.....	.....	.....	22	1	2	3	14	.....	8	.....	37
.....	.....	.....	.....	4	.....	.....	1	.....	.....	.....	.....	38
.....	.....	.....	.....	13	.....	.....	2	.....	.....	1	.....	39
.....	.....	.....	.....	6,385	(1)	(1)	9	555	.....	25,056	.....	40
.....	.....	.....	.....	65,003	.....	.....	40	.....	.....	.....	.....	41
.....	.....	.....	.....	237	.....	.....	41	.....	.....	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	43
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
.....	.....	.....	.....	.....	.....	.....	.....	1,030	.....	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
15	8	43	.....	617	144	34	59	78	3	251	.....	48
.....	.....	.....	.....	404	.....	.....	19	.....	.....	173	.....	49
.....	.....	.....	.....	368	.....	.....	11	.....	.....	165	.....	50
9,550	3,180	35,550	.....	227,310	76,535	24,880	36,840	59,613	1,600	98,675	.....	51
.....	.....	.....	.....	141,860	.....	.....	8,430	.....	.....	92,960	.....	52
.....	.....	.....	.....	102,611	.....	.....	8,500	.....	.....	98,515	.....	53
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
27	10	41	7	236	133	30	34	101	3	76	3	55
.....	.....	.....	.....	83	.....	.....	6	.....	.....	31	.....	56
.....	.....	.....	.....	81	.....	.....	8	.....	.....	30	.....	57
572	159	741	105	4,680	1,951	654	400	3,240	12	1,760	30	58
.....	.....	.....	.....	1,789	.....	.....	111	.....	.....	1,123	.....	59
.....	.....	.....	.....	1,493	.....	.....	126	.....	.....	2,085	.....	60
19,830	5,030	36,350	3,680	259,115	98,285	28,180	38,640	118,680	1,600	103,475	2,400	61
.....	.....	.....	.....	141,010	.....	.....	8,430	.....	.....	92,960	.....	62
.....	.....	.....	.....	107,311	.....	.....	9,200	.....	.....	97,615	.....	63
40	20	22	26	29	26	36	20	45	14	35	25	64
.....	.....	.....	.....	19	.....	.....	16	.....	.....	27	.....	65
.....	.....	.....	.....	26	.....	.....	20	.....	.....	32	.....	66
54	23	22	.....	29	27	37	20	53	14	36	.....	67
.....	.....	.....	.....	3	1	.....	3	.....	.....	3	.....	68
.....	.....	.....	.....	19,079	(1)	.....	5,237	.....	.....	16,000	.....	69
.....	.....	.....	.....	7,519	(1)	.....	1,505	.....	.....	6,052	.....	70
.....	.....	.....	.....	20	(1)	.....	40	.....	.....	14	.....	71

⁴Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

⁵Includes siphons and farm pipe lines reported.

⁶Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION - KANSAS

COUNTY TABLE II—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940,

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		Meade	Ness	Norton	Osborne	Pawnee	Phillips	Rawlins
FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	10,629,488	11,285,684	9,179,873	11,684,324	19,550,472	9,691,596	13,407,388
2	Land and buildings, irrigated farms.....dollars..	335,400	716,135	177,900	53,110	1,890,694	23,200	73,637
3	Operated by—							
4	(a) Owners and managers.....dollars..	251,000	594,335	164,400	48,110	1,011,734	(²)	69,837
5	(b) Tenants.....dollars..	84,400	121,800	13,500	(²)	868,960	(²)	(²)
6	Average, land and buildings, per farm.....dollars..	20,962.50	14,919.48	11,860.00	13,277.50	24,424.80	7,733.33	6,153.08
6	per acre in farms.....dollars..	23.53	17.23	17.11	36.55	48.46	24.42	25.88
7	Buildings, irrigated farms reporting value.....number..	15	48	14	3	72	2	11
8	Total reported.....dollars..	37,200	119,360	41,300	3,160	283,914	(²)	22,250
9	Average, per irrigated farm reporting.....dollars..	2,480.00	2,487.29	2,950.00	1,053.33	3,943.25	(²)	2,022.73
10	per acre on all irrigated farms.....dollars..	2.61	2.87	3.97	2.17	7.32	(²)	7.50
11	Buildings, nonirrigated farms reporting value.....number..	655	903	1,285	1,336	938	1,509	962
12	Total reported.....dollars..	1,298,736	1,457,471	1,803,304	1,883,065	2,263,070	1,866,165	2,101,010
13	Average, per nonirrigated farm reporting.....dollars..	1,862.80	1,614.03	1,392.51	1,409.48	2,412.65	1,249.94	2,206.94
14	per acre on all nonirrigated farms.....dollars..	2.37	2.36	3.36	3.45	5.10	3.40	3.05
15	Implements and machinery, irrigated farms reporting value.....number..	16	45	15	4	73	3	11
16	Total reported.....dollars..	31,465	60,365	15,870	4,550	162,518	3,600	5,480
17	Average, per irrigated farm reporting.....dollars..	1,966.56	1,341.89	1,058.00	1,137.50	2,226.27	1,200.00	498.18
18	per acre, on all irrigated farms.....dollars..	2.21	1.45	1.63	3.13	4.19	3.79	1.92
19	Implements and machinery, nonirrigated farms reporting value.....number..	675	903	1,201	1,332	931	1,451	1,031
20	Total reported.....dollars..	859,181	847,380	811,107	1,189,489	1,333,025	909,492	1,477,693
21	Average, per acre, on all nonirrigated farms.....dollars..	1.57	1.37	1.51	2.18	3.00	1.64	2.14
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
22	Enterprises.....1940.....number.....	18	15	9	3	71	4	6
23	.....1930.....number.....	1	2	2	1	30	2	2
24	.....1920.....number.....	.....	.....	.....	.....	16	.....	.....
25	Average size of enterprise based on							
26	irrigable area.....1940.....acres.....	67	82	67	67	108	35	35
27	.....1930.....acres.....	.....	.....	.....	.....	170	.....	.....
28	.....1920.....acres.....	.....	.....	.....	.....	164	.....	.....
29	Diversion dams.....1940.....number.....	3	8	.....	.....	6	3	1
30	Main canals and laterals.....1940.....length, miles.....	1.0	3.0	.....	0.1	11.0	.....	.....
31	.....1930.....length, miles.....	.....	.....	.....	.....	55	.....	.....
32	.....1920.....length, miles.....	.....	.....	.....	.....	70	.....	.....
33	.....1940.....capacity, c.f.s. ⁴	26	91	22	8	166	5	1
34	.....1930.....capacity, c.f.s. ⁴.....	.....	.....	.....	.....	89	.....	.....
35	.....1920.....capacity, c.f.s. ⁴.....	.....	.....	.....	.....	118	.....	.....
36	Pipe lines ⁵.....1940.....length, miles.....	.....	.....	0.6	1.4	0.2	0.3	.....
37	Storage dams.....1940.....number.....	2	2	5	.....	4	.....	.....
38	Reservoirs.....1940.....number.....	4	3	6	.....	5	.....	.....
39	.....1930.....number.....	.....	.....	.....	.....	4	.....	.....
40	.....1920.....number.....	.....	.....	.....	.....	3	.....	.....
41	.....1940.....capacity, acre-feet.....	109	16	102	.....	216	.....	.....
42	.....1930.....capacity, acre-feet.....	.....	.....	.....	.....	1,242	.....	.....
43	.....1920.....capacity, acre-feet.....	.....	.....	.....	.....	101	.....	.....
44	Wells, flowing.....1940.....number.....	20	.....	.....	.....	.....	.....	.....
45	.....1930.....number.....	.....	.....	.....	.....	.....	.....	.....
46	.....1920.....number.....	.....	.....	.....	.....	.....	.....	.....
47	.....1940.....yield, g.p.m.....	423	.....	.....	.....	.....	.....	.....
48	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
49	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
50	Wells, pumped.....1940.....number.....	7	35	4	.....	75	2	1
51	.....1930.....number.....	.....	.....	.....	.....	84	.....	.....
52	.....1920.....number.....	.....	.....	.....	.....	7	.....	.....
53	.....1940.....yield, g.p.m.....	6,400	30,650	1,650	.....	53,310	(²)	1,700
54	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	23,110	.....	.....
55	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	4,590	.....	.....
56	Pumping plants.....1940.....number.....	11	52	13	3	87	4	8
57	.....1930.....number.....	.....	.....	.....	.....	36	.....	.....
58	.....1920.....number.....	.....	.....	.....	.....	17	.....	.....
59	Prime movers.....1940.....capacity, hp.....	274	1,076	258	80	2,179	14	52
60	.....1930.....capacity, hp.....	.....	.....	.....	.....	768	.....	.....
61	.....1920.....capacity, hp.....	.....	.....	.....	.....	397	.....	.....
62	Pumps.....1940.....capacity, g.p.m.....	14,400	56,530	11,475	3,850	104,210	1,000	3,990
63	.....1930.....capacity, g.p.m.....	.....	.....	.....	.....	47,500	.....	.....
64	.....1920.....capacity, g.p.m.....	.....	.....	.....	.....	21,390	.....	.....
65	Pumping lift, from all sources.....1940.....average, feet.....	33	34	35	37	31	29	36
66	.....1930.....average, feet.....	.....	.....	.....	.....	28	.....	.....
67	.....1920.....average, feet.....	.....	.....	.....	.....	27	.....	.....
67	from pumped wells.....1940.....average, feet.....	44	38	22	.....	34	(²)	54
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁶								
68	Enterprises reporting pay roll.....number.....	.....	.....	.....	.....	.....	.....	.....
69	Irrigated area in these enterprises.....acres.....	.....	.....	.....	.....	.....	.....	.....
70	Wages and salaries paid and payable.....dollars..	.....	.....	.....	.....	.....	.....	.....
71	Persons employed during week ending April 29.....number..	.....	.....	.....	.....	.....	.....	.....

* Census of Agriculture.

¹ Data between census years not comparable (see footnote).² Data are included only in State totals because less than 3 farms or 3 enterprises reported in the 1940 Census.³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION - KANSAS

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1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939--Continued

Irrigation data omitted from any of the counties listed are included under "All other counties"

Rush	Saline	Scott	Shawnee	Sheridan	Stafford	Stanton	Trego	Wallace	Washington	Wichita	All other counties ¹	
14,865,386	19,496,654	5,658,791	18,370,132	8,029,836	22,443,919	2,732,182	8,897,283	2,632,089	20,765,055	3,737,283	960,704,401	1
820,950	107,000	1,491,837	615,200	75,060	289,840	53,200	49,600	59,900	206,420	92,780	3,955,900	2
606,550	78,000	963,235	611,600	50,760	225,540	53,200	37,600	46,100	156,420	87,630	3,298,770	3
214,400	29,000	523,602	3,600	24,300	73,300	.....	12,000	13,600	20,000	6,160	687,130	4
16,754.08	13,375.00	15,870.61	25,639.33	9,362.50	23,094.62	13,300.00	9,920.00	8,657.14	20,642.00	10,308.89	14,490.48	5
39.03	105.84	19.03	261.56	13.21	47.59	10.76	19.84	6.80	47.88	9.53	22.45	6
46	8	90	22	7	13	4	(²) 4	(²) 7	(²) 10	(²) 9	266	7
104,715	(²)	186,160	(²)	12,025	60,200	12,200	(²)	(²)	(²)	(²)	784,064	8
2,276.41	2,875.00	2,068.44	6,918.18	1,717.86	4,630.77	3,050.00	2,000.00	1,600.00	3,857.50	1,632.78	2,947.61	9
4.98	22.75	2.37	64.71	2.12	9.56	2.47	3.20	1.08	8.76	1.51	4.45	10
911	1,502	314	2,104	810	1,184	167	818	285	2,514	300	103,173	11
1,692,428	3,135,460	454,015	4,816,324	1,383,126	2,580,595	197,395	1,193,930	304,425	4,879,285	459,087	179,678,436	12
1,798.54	2,087.52	1,445.91	2,289.13	1,707.56	2,179.56	1,182.01	1,459.57	1,068.16	1,940.85	1,530.22	1,740.58	13
3.90	7.59	1.28	15.73	2.54	5.37	0.60	2.22	0.67	9.01	1.15	6.01	14
47	7	94	20	7	11	4	5	7	10	9	219	15
70,285	9,400	178,694	15,660	8,550	27,540	7,200	3,150	6,570	16,208	12,730	340,827	16
1,496.43	1,342.86	1,001.00	783.00	1,221.43	2,503.64	1,800.00	630.00	938.57	1,620.80	1,414.44	1,368.78	17
3.34	9.30	2.28	6.66	1.51	4.37	1.46	1.26	0.64	3.68	1.31	1.93	18
987	1,445	352	1,777	810	1,199	191	837	289	2,400	298	67,050	19
1,097,392	1,383,864	467,830	1,048,583	891,872	1,857,671	378,195	690,450	244,812	1,524,124	435,366	77,008,697	20
2.53	3.35	1.31	3.42	1.64	3.87	1.15	1.28	0.53	3.37	1.09	2.56	21
50	7	70	25	6	3	4	5	8	9	13	42	22
1	2	9	1	2	3	.....	.....	2	3	1	78	23
.....	.....	12	.....	.....	.....	.....	.....	.....	.....	.....	59	24
41	32	281	31	33	52	295	40	79	53	108	80	25
.....	.....	945	.....	.....	.....	.....	.....	.....	.....	.....	.....	26
.....	.....	2,514	.....	.....	.....	.....	.....	.....	.....	.....	81	27
18	.....	1	.....	.....	.....	.....	.....	1	2	2	2	28
6.3	.....	5.0	.....	.....	.....	1.0	.....	2.0	2.0	.....	8.1	29
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	30
.....	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	102	31
147	9	5	1	.....	.....	6	2	13	13	1	112	32
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41	33
0.3	0.2	2	.....	.....	.....	.....	.....	.....	.....	.....	104	34
.....	.....	0.7	2.9	.....	.....	.....	.....	.....	0.2	0.1	3.6	35
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	36
1	.....	4	.....	.....	.....	.....	.....	.....	.....	1	3	37
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	9	38
.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	10	39
(²)	.....	15	.....	.....	.....	.....	.....	.....	.....	(²)	25	40
.....	.....	(²)	.....	.....	.....	.....	.....	.....	.....	.....	7	41
.....	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	3	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(²)	46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	500	47
24	1	87	29	8	3	4	3	16	1	11	21	48
.....	.....	16	.....	.....	.....	.....	.....	.....	.....	.....	116	49
.....	.....	54	.....	.....	.....	.....	.....	.....	.....	.....	105	50
20,150	(²)	87,410	12,160	3,850	2,860	3,400	1,700	7,725	(²)	8,150	14,890	51
.....	.....	20,850	.....	.....	.....	.....	.....	.....	.....	.....	33,740	52
.....	.....	32,050	.....	.....	.....	.....	.....	.....	.....	.....	20,591	53
63	7	91	30	6	3	5	6	10	9	15	46	54
.....	.....	18	.....	.....	.....	.....	.....	.....	.....	.....	91	55
.....	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	51	56
1,553	35	3,374	192	76	70	193	112	195	94	499	810	57
.....	.....	930	.....	.....	.....	.....	.....	.....	.....	.....	1,445	58
74,400	3,900	1,930	.....	.....	.....	.....	.....	.....	.....	.....	915	59
.....	.....	51,160	12,680	3,850	2,860	5,900	4,000	10,150	8,350	15,000	39,240	60
.....	.....	20,550	.....	.....	.....	.....	.....	.....	.....	.....	80,226	61
.....	.....	32,350	.....	.....	.....	.....	.....	.....	.....	.....	30,109	62
38	20	67	28	36	27	81	61	25	21	63	37	63
.....	.....	64	.....	.....	.....	.....	.....	.....	.....	.....	28	64
48	(²)	67	.....	.....	.....	.....	.....	.....	.....	.....	.....	65
.....	.....	70	28	36	27	91	65	24	(²)	78	47	66
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71

¹Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.²Includes siphons and farm pipe lines reported.³Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION—LOUISIANA

STATE TABLE 1.—IRRIGATION SUMMARY FOR THE STATE: 1890 TO 1940

ITEM (For definitions and explanations, see text)	CENSUS OF—						
	1940	1935	1930	1920	1910	1900	1890
Approximate land area of State.....acres....	*28,913,280	29,061,760	29,061,760	29,061,760	29,061,760	29,061,760	29,061,760
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number....	150,007	170,210	161,445	135,463	120,546	115,969	80,294
Land in all farms.....acres....	8,996,108	10,444,288	9,355,437	10,019,822	10,439,481	11,059,127	9,544,210
Farms irrigated: ¹							
Farms.....number....	7,037	6,585	5,588	6,471	2,630	4,531	(²)
Increase or decrease (-) over preceding census.....percent....	25.9		-13.6	140.6	-40.6		
Proportion of all farms.....percent....	4.7	3.9	3.5	4.8	2.2	3.9	
Land in farms.....acres....	1,066,655	(²)	892,604	(²)	(²)	(²)	(²)
Proportion of all farm land.....percent....	10.7	(²)	9.5	(²)	(²)	(²)	(²)
Area irrigated.....acres....	*413,969	*361,943	*400,375	(⁷)	(⁷)	201,685	84,377
Increase or decrease (-) over preceding census.....percent....	3.4					139.0	
Proportion of total land area of State.....percent....	1.4	1.2	1.4			0.7	0.3
Proportion of all farm land.....percent....	4.1	3.5	4.3			1.8	0.9
Value of irrigated farms (land and buildings).....dollars..	45,182,979	(²)	45,496,283	(²)	(²)	(²)	(²)
Average per farm.....dollars..	6,420.77	(²)	8,141.78	(²)	(²)	(²)	(²)
Average per acre.....dollars..	42.36	(²)	60.97	(²)	(²)	(²)	(²)
Value of farm implements and machinery.....dollars..	7,291,697	(²)	5,178,941	(²)	(²)	(²)	(²)
Average per farm.....dollars..	1,036.19	(²)	926.98	(²)	(²)	(²)	(²)
Average per acre.....dollars..	6.84	(²)	5.80	(²)	(²)	(²)	(²)
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number....	2,593	(²)	2,352	1,373	1,237	(²)	(²)
Farms irrigated.....number....	7,305	(²)	(²)	(²)	(²)	(²)	(²)
Area irrigated.....acres....	447,095	(²)	450,801	454,882	380,200	(²)	(²)
Area existing works were capable of supplying with water.....acres....	759,815	(²)	795,165	728,742	553,220	(²)	(²)
Area irrigable.....acres....	793,674	(²)	850,401	*851,211	*581,965	(²)	(²)
Additional area existing works were capable of supplying with water.....acres....	312,820	(²)	344,204	273,860	173,020	(²)	(²)
Additional irrigable area in enterprises not supplied with water.....acres....	346,579	(²)	399,500	*396,329	*201,765	(²)	(²)
Investment in irrigation enterprises.....dollars..	11,535,513	(²)	15,744,743	14,063,181	6,859,106	2,629,319	(²)
Increase or decrease (-) over preceding census.....percent....	*-26.5	(²)	12.0	105.0	171.2		
Average per acre based on area works were capable of supplying with water.....dollars..	15.22	(²)	19.80	19.30	12.40	(²)	(²)
Increase or decrease (-) over preceding census.....percent....	*-23.1	(²)	2.6	55.6			
Estimated completed cost of existing enterprises.....dollars..	11,659,725	(²)	15,771,003	14,264,178	6,914,169	(²)	(²)
Average per acre based on irrigable area in enterprises.....dollars..	14.69	(²)	18.55	*16.76	*11.88	(²)	(²)
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	3.05	(²)	4.00	7.01	(²)	(²)	(²)

¹Relates to farms reporting irrigated cropland harvested and/or irrigated pasture, 1940 Census; farms reporting irrigated cropland harvested, 1935 Census; farms reporting irrigated crops, 1930, 1920, and 1910 Censuses; and farms reporting irrigated land, 1900 and 1890 Censuses. ²Not available. ³Increase or decrease represented by 1940 figures are with reference to 1930 figures, not 1935. ⁴Irrigated land from which crops were harvested plus 2,110 acres of irrigated land used only for pasture. ⁵Irrigated land from which crops were harvested. ⁶Acres of irrigated crops including some duplication where 2 or more crops were harvested from same land. ⁷Data were secured for crops irrigated but the returns were considered relatively incomplete. ⁸Total is for irrigated farms reporting this item. Averages are based on all irrigated farms. ⁹For 1920 and 1910 relates to total area in enterprises. Irrigable areas for those years were not reported. ¹⁰The land area shown for 1940 represents redeterminations by the Bureau of the Census and, therefore, differs from that shown for earlier years.

STATE TABLE 2.—CENSUS OF AGRICULTURE—NUMBER OF FARMS, FARM ACREAGE ACCORDING TO USE, AND SPECIFIED FARM VALUES FOR IRRIGATED AND NONIRRIGATED FARMS, BY TENURE OF OPERATOR, 1940

ITEM (For definitions and explanations, see text)	Farms	Land in farms	CROPLAND HARVESTED 1939		Irrigated pasture 1939	VALUE OF FARMS (land and buildings)		VALUE OF BUILDINGS		VALUE OF IMPLEMENTS AND MACHINERY	
			Total	Irrigated ¹		Total	Average per acre ²	Total	Average per acre ²	Total	Average per acre ²
All farms.....	Number	Acres	Acres	Acres	Acres	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Owners and managers.....	150,007	8,996,108	4,051,870	411,859	2,110	353,873,506	35.40	91,393,625	9.14	35,804,852	3.58
Tenants.....	80,840	6,362,988	2,015,993	217,405	1,287	218,599,053	34.35	58,611,589	9.84	24,658,665	3.88
	89,167	3,633,120	2,036,677	194,454	823	135,273,850	37.23	28,762,036	7.92	11,146,187	3.07
Irrigated farms, total.....	7,037	1,066,655	494,290	411,859	2,110	45,182,979	42.36	8,019,180	7.52	7,291,697	6.81
Owners and managers.....	3,807	642,822	268,274	217,405	1,287	28,353,724	44.11	5,670,053	8.82	4,607,569	7.17
Tenants.....	3,230	423,833	226,016	194,454	823	16,829,255	39.71	2,349,127	5.54	2,684,128	6.33
Wholly irrigated farms.....	1,964	399,977	185,402	185,402	837	16,515,252	41.29	2,401,065	6.00	2,752,883	6.88
Owners and managers.....	958	208,442	82,080	82,080	155	9,342,292	44.61	1,601,297	7.65	1,468,098	7.01
Tenants.....	1,006	190,535	103,322	103,322	681	7,172,960	37.05	799,769	4.20	1,284,785	6.74
Partly irrigated farms.....	5,073	666,678	308,888	226,457	1,273	28,667,727	43.00	5,618,114	8.43	4,538,814	6.81
Owners and managers.....	2,849	433,360	185,194	135,325	1,131	19,011,432	43.87	4,068,756	9.39	3,139,471	7.24
Tenants.....	2,224	233,298	123,694	91,132	142	9,656,295	41.39	1,549,358	6.64	1,399,343	6.00
Nonirrigated farms, total.....	142,970	8,929,453	3,567,880			308,690,527	34.57	83,374,445	9.34	28,513,155	3.19

¹Does not include irrigated fallow land or land in young irrigated crops not harvested or in irrigated crops that failed.

²Based on all land in farms for each tenure group.

CENSUS OF IRRIGATION — LOUISIANA

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STATE TABLE 3.—NUMBER OF ENTERPRISES, IRRIGABLE AREA, AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1940; IRRIGATED AREA, 1939, 1929, AND 1919; WATER DELIVERED TO IRRIGATORS, 1939; BY SOURCE OF WATER SUPPLY

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	1940			IRRIGATED AREA				DELIVERY OF WATER TO IRRIGATORS, 1939					
	Enter- prises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Irrigated area reporting—			Quantity delivered per acre ¹	Cost ¹	
								Quantity	Cost	Quantity and cost		Per acre	Per acre- foot
	Number	Acres	Acres	Acres	Acres	Acres	Percent	Acres	Acres	Acres	Acres-foot	Dollars	Dollars
Total.....	2,566	793,674	759,915	447,095	450,901	454,892	-0.8	367,081	437,631	358,599	2.4	4.29	1.77
Primary sources:													
Streams, gravity.....	35	981	981	494	1,611	10,226	-69.3	357	422	333	1.9	0.31	0.18
Streams, pumped.....	466	439,654	420,321	247,190	257,390	248,305	-4.0	180,870	244,956	178,973	2.8	5.17	1.86
Streams, gravity and pumped.....	8	2,665	2,665	1,830	.....	12,620	.....	1,655	1,830	1,655	3.9	2.04	0.68
Wells, pumped.....	1,138	228,674	220,316	135,192	172,695	154,304	-21.7	127,252	132,080	124,879	2.2	3.70	1.65
Wells, flowing.....	334	1,927	1,923	1,372	2,896	196	-52.6	1,355	380	365	0.8	1.88	2.44
Wells, pumped and flowing.....	39	393	393	214	196	1,075	9.2	214	190	190	1.3	5.94	4.68
Lakes, gravity.....	32	2,163	2,163	1,096	515	3,225	112.8	594	947	445	1.5	1.80	1.21
Lakes, pumped.....	50	13,480	12,190	6,528	1,459	6,966	347.4	6,328	6,358	6,258	2.4	4.55	1.93
Springs.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springs and streams.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stored storm water.....	73	1,629	1,629	1,375	2,271	84	-39.4	1,327	1,342	1,319	1.8	2.59	1.41
City water.....	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sewage.....	1	494	448	441	.....	.....	.....	427	439	425	0.9	0.48	0.52
Streams, gravity; wells, pumped...	6	4,396	4,396	3,775	.....	10,045	.....	2,561	1,475	261	1.3	5.17	3.63
Streams, gravity; wells, flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped; wells, pumped....	20	18,249	14,894	9,202	.....	.....	.....	7,463	9,202	7,463	1.4	2.74	2.02
Waste water, seepage or drainage...	312	66,561	65,988	31,610	.....	.....	.....	30,937	31,265	30,592	1.4	1.46	1.01
Other mixed.....	20	12,408	11,608	6,745	11,695	7,835	-42.3	5,741	6,745	5,741	1.9	7.21	3.76
Other and not reported.....	.....	.....	.....	.....	173	.....	.....	.....	.....	.....	.....	.....	.....
Supplemental sources: ²													
Streams, gravity and/or storage...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped.....	15	4,792	4,342	2,579	260	.....	891.9	2,579	2,434	2,434	0.8	1.51	1.84
Wells, flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Based on enterprises reporting both quantity and cost of water, assuming (a) that for enterprises serving 1 to 4 farms the cost of water is cost of maintenance and operation, and for enterprises serving 5 or more farms it is total annual charges, and (b) that enterprises reporting cost and quantity of water had used the same quantity of water per acre as all enterprises which reported water delivered. ²Areas shown under "Supplemental sources" are parts of areas shown under "Primary sources" and therefore are not again added into the totals, (see text).

STATE TABLE 4.—INVESTMENT, 1940 AND 1930; AND COST OF MAINTENANCE AND OPERATION, 1939, 1929, AND 1919; BY SOURCE OF WATER SUPPLY

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	INVESTMENT							COST OF MAINTENANCE AND OPERATION ¹						
	1940			1930			Average per acre increase or decrease (-) 1930-40	1939		1929		Average per acre increase or decrease (-) 1930-40	1919	
	Amount	Pro- por- tion of total	Aver- age per acre ²	Amount	Pro- por- tion of total	Aver- age per acre ²		Irrigated area reporting	Aver- age per acre	Irrigated area reporting	Aver- age per acre		Irrigated area reporting	Aver- age per acre
	Dollars	Percent	Dollars	Dollars	Percent	Dollars	Dollars	Acres	Dollars	Acres	Dollars	Dollars	Acres	Dollars
Total.....	11,565,513	100.0	15.22	15,744,743	100.0	19.80	-4.58	436,931	3.65	431,337	4.09	-0.43	431,413	7.01
Primary sources:														
Streams, gravity.....	4,223	(³)	4.30	17,288	0.1	7.80	-3.50	422	0.73	1,596	2.42	-1.69	9,937	3.69
Streams, pumped.....	6,297,829	54.5	14.98	8,631,806	58.1	17.04	-2.06	244,256	4.05	248,802	3.66	0.39	242,282	7.76
Streams, gravity and pumped.....	26,950	0.2	10.11	.....	.....	.....	.....	1,830	2.70	.....	.....	.....	12,550	6.06
Wells, pumped.....	4,159,334	36.0	18.88	6,013,183	38.2	25.05	-6.17	132,080	3.48	163,313	4.45	-0.97	140,659	5.95
Wells, flowing.....	128,300	1.1	66.72	249,656	1.6	71.43	-4.71	380	1.83	1,559	2.71	-0.78	189	2.25
Wells, pumped and flowing.....	21,169	0.2	53.87	17,326	0.1	78.75	-24.88	190	5.94	173	3.90	2.04	1,075	4.19
Lakes, gravity.....	3,510	(³)	1.62	2,225	(³)	2.32	-0.70	947	1.04	515	0.59	0.45	2,480	3.21
Lakes, pumped.....	125,515	1.1	10.30	46,750	0.3	25.15	-14.85	6,358	4.49	1,432	2.97	1.52	6,716	9.17
Springs.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springs and streams.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stored storm water.....	14,940	0.1	9.11	17,779	0.1	6.09	3.02	1,342	2.55	2,252	0.80	1.75	10	5.00
City water.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sewage.....	1,143	(³)	2.55	.....	.....	.....	.....	439	0.47	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped...	39,850	0.3	9.07	.....	.....	.....	.....	1,475	4.31	.....	.....	.....	9,115	10.69
Streams, gravity; wells, flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped; wells, pumped....	240,464	2.1	16.15	.....	.....	.....	.....	9,202	2.62	.....	.....	.....	.....	.....
Waste water, seepage or drainage...	233,150	2.0	3.35	.....	.....	.....	.....	31,265	1.48	.....	.....	.....	.....	.....
Other mixed.....	252,535	2.2	21.76	533,225	3.4	21.25	0.51	6,745	3.39	11,695	9.55	-6.16	6,400	3.07
Other and not reported.....	.....	.....	.....	2,705	(³)	15.64	.....	.....	.....	.....	.....	.....	.....	.....
Supplemental sources: ⁴														
Streams, gravity and/or storage...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped.....	16,701	0.1	3.85	12,800	0.1	7.76	-3.91	2,434	1.51	200	3.50	-1.99	.....	.....
Wells, flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Based on irrigated area in enterprises reporting cost of maintenance and operation. ²Based on area works were capable of supplying with water. ³Less than one-tenth of 1 percent. ⁴Areas shown under "Supplemental sources" are parts of areas shown under "Primary sources" and therefore are not again added into the totals, (see text).

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STATE TABLE 5.—AREAS, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920

ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF—				Increase or decrease (—) 1930-40 primary enterprises
	1940		1930	1920	
	Primary enterprises	Supplemental enterprises ¹	Primary enterprises	Primary enterprises	
AREA IRRIGATED					
Total.....	Acres 447,095	Acres 2,579	Acres 450,901	Acres 454,883	Percent -0.8
Individual and partnership.....	248,664	2,579	226,259	259,673	9.9
Cooperative, incorporated.....	36,939			10,635	
Cooperative, unincorporated.....	1,701		224,625	184,574	-28.9
Commercial.....	159,764		17		58.8
State.....	27				
AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER					
Total.....	759,915	4,342	795,165	728,742	-4.4
Individual and partnership.....	419,739	4,342	334,045	375,917	25.7
Cooperative, incorporated.....	41,930			20,325	
Cooperative, unincorporated.....	5,330		461,060	332,500	-36.5
Commercial.....	292,805		60		85.0
State.....	111				
IRRIGABLE AREA ²					
Total.....	793,674	4,792	850,401	851,211	-0.7
Individual and partnership.....	432,818	4,792	374,306	468,126	15.0
Cooperative, incorporated.....	43,930			20,685	
Cooperative, unincorporated.....	5,510		476,035	362,400	-34.6
Commercial.....	311,305		60		85.0
State.....	111				

¹Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text).²For 1920 relates to total area. Irrigable area for that year was not reported.STATE TABLE 6.—ENTERPRISES, AREAS, AVERAGE COSTS, 1940; AND AREA IRRIGATED, 1939;
BY TYPE OF ENTERPRISE

TYPE OF ENTERPRISE (For definitions and explanations, see text)	ENTERPRISES		AREAS		AVERAGE COST				AREA IRRIGATED, 1939 ¹				
	Total	Serving 5 or more farms	Irrigable	Works were capable of supplying with water	Primary enterprises		Supplemental enterprises		Farms served	Total area	Cropland		Irrigated pasture
					Works and equipment per acre ²	Maintenance and operation per acre ³	Works and equipment per acre ²	Maintenance and operation per acre ³			From which crops were harvested	On which crops failed	
Total.....	Number 2,566	Number 109	Acres 793,674	Acres 759,915	Dollars 15.20	Dollars 3.64	Dollars 3.85	Dollars 1.51	Number 7,305	Acres 447,095	Acres 442,317	Acres 1,078	Acres 3,700
Individual and partnership.....	2,517	75	432,818	419,739	13.78	2.84	3.85	1.51	3,673	248,664	243,928	1,038	3,700
Cooperative, incorporated.....	8	6	43,930	41,930	17.20	3.78			398	36,939	36,939		
Cooperative, unincorporated.....	12	1	5,510	5,330	8.43	4.64			29	1,701	1,681	40	
Commercial.....	28	27	311,305	292,805	17.07	4.79			3,204	159,764	159,764		
State.....	41		111	111	23.42	24.52			1	27	27		

¹Reported by enterprises in the Census of Irrigation, 1940, not by the Census of Agriculture. ²Based on area works were capable of supplying with water and cost of works and equipment. ³Based on irrigated area in enterprises reporting maintenance and operation in 1939. ⁴Data for less than 3 enterprises shown with permission of the enterprises involved.

STATE TABLE 7.—INVESTMENT IN IRRIGATION ENTERPRISES, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920

TYPE OF ENTERPRISE (For definitions and explanations, see text)	TOTAL INVESTMENT, TO JANUARY 1								AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER		Capital expenditures during 1939 ^a	Estimated investment required to complete works
	1940					1930	1920	Increase or decrease (-) 1930-40	Primary enterprises	Supplemental enterprises		
	Total	Primary enterprises	Supplemental enterprises	Total cost of works and equipment	Investment in water rights ^b							
Total.....	Dollars 11,565,513	Dollars 11,548,812	Dollars 16,701	Dollars 11,565,513	Dollars	Dollars 15,744,743	Dollars 14,063,181	Percent -26.5	Dollars 15.20	Dollars 3.85	Dollars 117,704	Dollars 94,212
Individual and partnership.....	5,799,128	5,782,427	16,701	5,799,128	.....	6,994,092	7,943,252	-17.0	13.78	3.85	23,838	48,212
Cooperative, incorporated.....	721,172	721,172	.....	721,172	.....	}	161,658	.....	{	17.20	4,770	3,000
Cooperative, unincorporated.....	44,925	44,925	.....	44,925	.....						
Commercial.....	4,997,688	4,997,688	.....	4,997,688	.....	8,757,151	5,958,271	-42.9	17.07	.....	89,096	43,000
State.....	2,600	2,600	.....	2,600	.....	3,500	.....	-25.7	23.42	.....	.....	.....

¹Only for enterprises serving 5 or more farms.²Water rights have no legal status in Louisiana.

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STATE TABLE 8.—INDEBTEDNESS, ARREARAGE, AND CHARGES, BY TYPE OF ENTERPRISE,¹ CENSUS OF 1940

TYPE OF ENTERPRISE (For definitions and explanations, see text)	INDEBTEDNESS OF ENTERPRISES REPORTING						ARREARAGES OF ENTERPRISES REPORTING ²			CHARGES OF ENTERPRISES REPORTING			
	Enter- prises 1940	Area		Total indebted- ness 1940	Average per acre assessed 1939	Average per acre works were capable of supplying with water	Enter- prises 1940	Total arrearages		Average per acre assessed 1939	Area assessed 1939	Charges made 1939	Charges collected 1939
		Irri- gable 1940	Works were capable of supplying with water 1940					Dec. 31 1939	Dec. 31 1938				
Total.....	Number 36	Acres 232,305	Acres 226,905	Dollars 2,748,768	Dollars 18.87	Dollars 12.11	Number 11	Dollars 1,137,646	Dollars 1,078,511	Dollars 18.85	Acres 245,975	Dollars 1,259,711	Dollars 642,853
Partnership.....	17	14,960	13,560	78,000	6.45	5.75	2	7,333	5,746	0.51	{ 44,137 36,554	188,564 166,872	41,070 131,879
Cooperative, incorporated.....	4	32,000	30,000	245,484	9.61	8.18	1						
Cooperative, unincorporated.....											320	2,240	3,215
Commercial.....	15	185,345	183,345	2,425,294	22.46	13.23	8	1,130,313	1,072,705	24.55	164,864	902,035	366,689
State.....													

¹Only for enterprises serving 5 or more farms. No supplemental enterprises reported indebtedness in this State.²In payment of principal, interest, and/or other funded obligations.STATE TABLE 9.—COST OF MAINTENANCE AND OPERATION, AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939,
BY TYPE OF ENTERPRISE

TYPE OF ENTERPRISE (For definitions and explanations, see text)	COST OF MAINTENANCE AND OPERATION						PAY ROLL AND EMPLOYEES, 1939 ¹		
	Primary enterprises		Supplemental enterprises		Average cost per irrigated acre		Enterprises reporting pay roll	Wages and salaries paid and payable	Employees during week ending April 29
	Irrigated area reporting 1939	Reported cost 1939	Irrigated area reporting 1939	Reported cost 1939	Primary enterprises 1939	Supplemental enterprises 1939			
Total.....	Acres 436,931	Dollars 1,589,007	Acres 2,434	Dollars 3,683	Dollars 3.64	Dollars 1.51	Number 91	Dollars 502,320	Number 802
Individual and partnership.....	238,636	676,728	2,434	3,683	2.84	1.51	58	69,655	196
Cooperative, incorporated.....	36,939	139,555			3.78		7	58,720	82
Cooperative, unincorporated.....	1,565	7,266			4.64				
Commercial.....	159,764	764,786			4.70		26	373,945	524
State.....	27	662			24.52				

¹Only for enterprises serving 5 or more farms.

STATE TABLE 10.—IRRIGATION WORKS, BY TYPE OF ENTERPRISE, 1940

TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	DAMS		CANALS			RESERVOIRS		PIPE LINES	FLOWING WELLS		PUMPED WELLS		PUMPING PLANTS			
	Diver- sion	Stor- age	Capac- ity at main head- ing	Length ¹		Num- ber	Capacity	Length	Num- ber	Yield	Number	Yield	Prime movers		Pumps	
				Earth	Lined ²								Number	Rated capac- ity	Number	Rated capac- ity
Total.....	Number 105	Number 114	Sec.-ft. 10,335	Miles 2,397	Miles 24.0	75	Ac.-ft. 34,199	Miles 63.6	502	G. p. m. 12,695	1,504	G. p. m. 1,626,613	2,326	Hp. 85,574	2,403	G. p. m. 6,453,487
Individual and partnership.....	104	³ 112	4,215	1,075	21.6	73	25,449	51.6	501	12,675	1,489	1,489,007	2,216	61,671	2,298	3,314,381
Cooperative, incorporated.....	1		1,121	238	0.2			0.5			1	1,000	20	3,977	18	604,000
Cooperative, unincorporated.....			259	5					1	20	7	14,806	11	558	11	43,506
Commercial.....		2	4,740	1,081	2.2	2	7,750	11.5			6	20,000	78	19,308	75	2,487,800
State.....											1	1,800	1	60	1	1,800

¹Includes main and lateral canals but not farm ditches.²Includes flumes.³A number of storage dams were reported without corresponding reservoirs or their capacities.

STATE TABLE 11.—DAMS, BY MATERIAL: 1940 AND 1930

MATERIAL	1940		1930	
	Diversion		Storage	
	Number	Number	Number	Number
Total.....	105	114	36	81
Concrete or masonry.....	3	1	1	
Timber.....	15	19		
Earth and rock.....	45	91		69
Other and mixed.....		2	134	10
Not reported.....	42	1	1	2

¹Principally temporary dams, replaced annually.

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STATE TABLE 12.—PUMPING PLANTS, BY KIND OF MOTIVE POWER AND TYPE OF PUMP, 1940; AND TOTAL NUMBER AND CAPACITY, 1930

PUMPS BY KIND OF POWER EMPLOYED	Pumps	Proportion of total number	Rated capacity of pumps	Proportion of total capacity	Average lift of pumps	MOTIVE POWER BY TYPE OF PUMP EMPLOYED	Prime movers	Proportion of total number	Rated capacity of movers	Proportion of total capacity
Total, 1940.....	Number 2,403	Percent 100.0	G. p. m. 6,453,487	Percent 100.0	Feet 32	Total, 1940.....	Number 2,326	Percent 100.0	Hp 85,574	Percent 100.0
Electric motor.....	284	11.8	688,807	10.7	39	Centrifugal pump.....	1,575	67.7	44,628	52.2
Centrifugal.....	202	8.4	480,405	7.4	37	Electric.....	209	9.0	6,635	7.8
Turbine.....	57	2.4	170,840	2.6	58	Internal-combustion.....	1,330	57.2	29,041	33.9
Plunger.....	20	0.8	212	(¹)	10	Other.....	36	1.5	8,952	10.5
Other.....	5	0.2	37,350	0.6	37	Turbine pump.....	529	22.8	31,113	36.3
Internal-combustion engine.....	1,994	83.0	3,848,963	59.6	31	Electric.....	57	2.5	3,787	4.4
Centrifugal.....	1,369	57.8	2,671,569	41.4	26	Internal-combustion.....	469	20.2	27,146	31.7
Turbine.....	479	19.9	812,316	12.4	47	Other.....	3	0.1	180	0.2
Plunger.....	42	1.7	858	(¹)	15	Plunger pump.....	63	2.7	103	0.1
Other.....	84	3.5	264,223	4.1	25	Electric.....	21	0.9	22	(¹)
Other kinds of motive power.....	37	1.5	467,440	7.2	21	Internal-combustion.....	42	1.8	81	0.1
Centrifugal.....	26	1.1	452,610	7.0	21	Other.....	.....	.....	.....	.....
Turbine.....	3	0.1	6,700	0.1	38	Other and mixed types of pumps.....	159	6.8	9,730	11.4
Plunger.....	.....	.....	.....	.....	.....	Electric.....	14	0.6	1,647	1.9
Other.....	8	0.3	8,100	0.1	9	Internal-combustion.....	135	5.8	6,578	7.7
Mixed kinds of motive power.....	88	3.7	1,448,277	22.5	30	Other.....	10	0.4	1,505	1.8
Centrifugal.....	71	3.0	1,108,305	17.2	29	Total, 1930.....	² 1,790	.....	86,413	.....
Turbine.....	7	0.3	12,500	0.2	61	Increase or decrease (-) 1930-1940.....	536	.....	-899	.....
Plunger.....	2	0.1	12	(¹)	10					
Other.....	8	0.3	327,460	5.1	22					
Total, 1930.....	2,000	.....	5,914,789	.....	37					
Increase or decrease (-) 1930-1940..	403	.....	538,688	.....	-5					

¹ Less than one-tenth of 1 percent.² Number of pumping plants.

STATE TABLE 13.—PIPE LINES, BY MATERIAL, SIZE, AND LENGTH: 1940 AND 1930

MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940
	1940 ¹	1930 ²	
Total.....	Miles 63.6	Miles 15.1	Percent 321.2
Concrete:			
1 to 12 inches.....	6.1		
13 to 24 inches.....	8.7		
Over 24 inches.....	2.6		
Metal:			
1 to 12 inches.....	20.5	10.3	60.0
13 to 24 inches.....	19.8		
Over 24 inches.....	0.4	4.3	369.8
Wood-stave:			
1 to 12 inches.....	5.5	0.3	(³)
13 to 24 inches.....	0.1		
Over 24 inches.....	0.3	0.2	100.0
Clay and other:			
1 to 12 inches.....	1.1		
13 to 24 inches.....	0.5		
Over 24 inches.....			

¹ Includes siphons and farm pipe lines reported.² Pipe sizes were separated at 30 inches in diameter (instead of 24 inches) in the 1930 Census.³ Percent not shown when more than 1,000.

STATE TABLE 14.—AREA WITHIN IRRIGATION ENTERPRISES FOR WHICH DRAINS HAVE BEEN INSTALLED, AND ADDITIONAL AREA IN NEED OF DRAINAGE: 1940, 1930, AND 1920

ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number...	633	577	406
Area irrigable in these enterprises.....acres...	214,408	226,510	¹ 283,476
Area irrigated in these enterprises.....acres...	101,321	(²)	(²)
Area for which drains have been installed.....acres...	174,848	169,577	167,139
Additional area needing drainage.....acres...	12,379	18,832	21,202
Ratio of area drained to area irrigated in—			
(a) Enterprises reporting lands drained and/or needing drainage.....percent..	172.6	³ 74.9	¹ 58.0
(b) All irrigation enterprises.....percent..	39.1	37.6	36.7
Ratio of area drained plus area needing drainage to—			
(a) Irrigable area reporting.....percent..	87.3	83.2	¹ 69.4
(b) Irrigated area reporting.....percent..	194.8	(²)	(²)

¹ For 1920 relates to total area in enterprises. Irrigable area was not reported and irrigated area in enterprises reporting drainage was not reported separately for the 1920 Census. ² Not available. ³ Based on irrigable area for 1930, area irrigated in enterprises reporting land drained or needing drainage not available.

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STATE TABLE 15.—WATER USED, BY SOURCE OF SUPPLY: 1939, 1929, AND 1919

ITEM (For definitions and explanations, see text)	TOTAL			MEASURED			NOT MEASURED		
	1939	1929 ¹	1919 ¹	1939	1929	1919 ¹	1939	1929 ¹	1919 ¹
PRIMARY ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	714,760	471,354	198,842	.....	.....	7,022	714,760	471,354	191,920
Area irrigated by these enterprises.....acres.....	208,397	166,224	65,424	.....	.....	780	208,397	166,224	64,644
Average water per acre irrigated.....acre-feet..	3.4	2.8	3.0	.....	.....	9.0	3.4	2.8	3.0
Total water delivered to irrigators.....acre-feet..	541,298	33,180	16,497	.....	.....	.....	541,298	33,180	16,497
Area irrigated by these enterprises.....acres.....	201,425	21,219	7,994	.....	.....	.....	201,425	21,219	7,994
Average water per acre irrigated.....acre-feet..	2.7	1.6	2.1	.....	.....	.....	2.7	1.6	2.1
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	342,722	.....	.....	.....	.....	.....	342,722	.....	.....
Area irrigated by these enterprises.....acres.....	165,656	.....	.....	.....	.....	.....	165,656	.....	.....
Average water per acre irrigated.....acre-feet..	2.1	.....	.....	.....	.....	.....	2.1	.....	.....
SUPPLEMENTAL ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	.....	.....	.....	.....	.....	.....	.....	.....	.....
Area irrigated by these enterprises.....acres.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Average water per acre irrigated.....acre-feet..	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total water delivered to irrigators.....acre-feet..	243	.....	.....	.....	.....	.....	243	.....	.....
Area irrigated by these enterprises.....acres.....	150	.....	.....	.....	.....	.....	150	.....	.....
Average water per acre irrigated.....acre-feet..	1.6	.....	.....	.....	.....	.....	1.6	.....	.....
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	1,873	.....	.....	.....	.....	.....	1,873	.....	.....
Area irrigated by these enterprises.....acres.....	2,429	.....	.....	.....	.....	.....	2,429	.....	.....
Average water per acre irrigated.....acre-feet..	0.8	.....	.....	.....	.....	.....	0.8	.....	.....

¹Data only for enterprises serving 5 or more farms. Water and area for surface and underground sources and water and area for primary and supplemental enterprises were not segregated for 1929 and 1919.

STATE TABLE 16.—CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES, 1939

DRAINAGE BASIN AND STATION	Parish	Elevation of station	PRECIPITATION, OCTOBER 1938—SEPTEMBER 1939										TEMPERATURES, 1939	
			Water year		Oct.—Dec.		Jan.—Mar.		Apr.—June		July—Sept.		Annual mean	Departure ¹
			Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹		
Mississippi River		Feet	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Degrees F.	Degrees F.
Tallulah.....	Madison.....	91	47.27	-2.17	8.22	-4.55	18.35	-2.72	9.51	-1.98	11.18	+1.64	65.8	+0.9
Natchez, Miss.....	Adams Co. (Miss.)..	206	55.88	+1.02	10.75	-2.66	20.62	+1.60	11.99	-1.51	13.62	+1.49	67.4	+0.8
Baton Rouge.....	East Baton Rouge...	60	46.96	-10.33	6.99	-5.64	10.47	-1.81	17.03	+2.56	11.47	-2.44	68.6	+0.8
New Orleans.....	Orleans.....	9	49.81	-7.66	7.65	-3.58	7.64	-5.67	22.15	+6.43	12.37	-4.83	70.8	+1.6
Ouachita River														
Monroe.....	Ouachita.....	82	43.00	-9.70	6.91	-6.51	20.66	+5.42	8.79	-4.26	6.62	-4.44	(²)	(²)
Winnboro.....	Franklin.....	57	55.02	+6.99	7.76	-1.94	21.63	+10.16	12.72	+0.68	9.91	+1.09	(²)	(²)
Red River														
Minden.....	Webster.....	194	39.60	-9.98	11.15	-1.14	19.55	+6.42	5.46	-7.69	3.44	-7.57	(²)	(²)
Shreveport.....	Caddo.....	107	37.86	-5.51	9.34	-1.29	16.60	+5.27	6.75	-5.60	5.17	-3.89	68.3	+2.5
Dodson.....	Winn.....	235	55.13	+6.19	7.53	-4.05	22.85	+8.21	12.44	+0.27	12.31	+1.76	(²)	(²)
Natchitoches.....	Natchitoches.....	120	55.68	+7.31	9.14	-3.79	25.12	+11.14	11.06	+0.08	9.36	-0.12	66.9	+0.6
Alexandria.....	Rapides.....	77	49.02	-7.86	9.89	-4.68	16.29	+0.50	12.66	-1.53	10.18	-2.15	67.9	+0.9
Calcasieu River														
De Ridder.....	Beauregard.....	208	45.13	-8.21	10.62	-3.62	14.58	-0.04	10.76	-3.09	9.17	-1.46	(²)	(²)
Lake Charles.....	Calcasieu.....	22	33.47	-24.15	7.68	-6.86	8.18	-4.62	5.94	-8.79	12.27	-4.08	(²)	(²)
Mentau River														
Vernon River														
Vernon River	Evangeline.....	46	43.33	-14.54	8.81	-7.43	11.26	-4.33	10.32	-2.92	12.94	+0.14	(²)	(²)
Abbeville.....	Vermilion.....	12	53.62	-4.60	9.14	-4.62	7.22	-4.91	13.20	-1.57	24.36	+6.50	(²)	(²)
Bayou Terrebonne														
Moua.....	Terrebonne.....	13	49.01	-10.77	8.67	-4.90	5.54	-6.08	16.65	+3.02	19.05	-2.81	69.6	+0.8
Pearl River														
Franklinton.....	Washington.....	155	49.40	-11.49	9.02	-4.04	11.74	-5.30	15.32	+1.01	13.32	-3.18	(²)	(²)

¹Departure from normal.

²Not available.

Precipitation.—The average precipitation in Louisiana for 1939, 51.51 inches, was 3.94 inches below the normal, as reported by the U. S. Weather Bureau. The greatest annual total was 72.29 inches at Urania; the least 31.66 inches at Lake Charles. The greatest local monthly total was 17.94 inches at Winnfield; the least was 0.16 of an inch at Lake Arthur (near). The greatest amount in 24 hours, 11.13 inches, occurred at Winnfield January 4-5. The average number of days with .01 or more was 98.

Temperature.—The mean temperature in Louisiana in 1939, 68.4°, was 1.0 above the normal. The highest mean, for 32 stations having a complete year's record, was 71.8° at Burrwood and the lowest was 65.8° at Tallulah. The highest monthly mean was 86.3° at Minden in July; and the lowest was 49.3° at Plain Dealing in January. The highest temperature recorded was 108° at Plain Dealing on July 15; the lowest was 20° at Pollock, on February 22, and at Monroe and Tallulah, on November 5. The greatest annual range was 86° at Plain Dealing; the least, 55° at Port Eads.

Winter crops made satisfactory progress during January and some plowing was done in the south; but farm work

was hindered in the north by wet soil. Frequent rains retarded farm work during February, especially in the north. Good progress was made in March planting corn, potatoes, and truck. Carlot shipment of strawberries began on the 11th. Crops were retarded by cold during the first part of April, and cold and lack of moisture the latter part. Cotton germinated slowly and much replanting was necessary. The progress of crops was unsatisfactory during the first half of May, either because of dryness or cool nights, but warmer weather and adequate moisture during the latter half provided needed stimulation. Frequent showers to locally excessive rains during the first week of June seriously interfered with cultivation of crops. Crops made good progress during July, except cotton and corn which were damaged by too much rain during the last 10 days in some portions of the southeast and extreme south. Cotton picking and rice and sweet-potato harvesting made rapid progress during the last week of August. Conditions were mostly favorable for the progress and harvesting of crops during September.

CENSUS OF IRRIGATION - LOUISIANA

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

PRIMARY ENTERPRISES (For definitions and explanations, see text)		TOTAL	IRRIGATED FARMS					
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms
1	Enterprises, 1940.....number...	2,570	45	2,012	385	77	18	13
2	Irrigated farms, 1939.....number...	7,305		2,012	895	694	989	2,615
3	Area irrigated, 1939.....acres...	447,085		130,601	74,221	46,731	69,668	126,824
4	(a) From which crops were harvested.....acres...	442,317		126,894	74,001	46,327	69,331	126,824
5	(b) On which crops failed.....acres...	1,078		277	70	404	327	
6	(c) Irrigated pasture.....acres...	3,700		3,550	150			
CAPITAL INVESTMENT, 1940								
7	Total capital investment in all enterprises.....dollars..	11,548,812	58,241	2,929,884	1,689,645	1,185,742	1,781,147	3,904,153
8	Cost of irrigation works and equipment.....dollars..	11,548,812	58,241	2,929,884	1,689,645	1,185,742	1,781,147	3,904,153
9	Area works were capable of supplying with water.....acres...	759,915	4,990	236,681	119,668	68,467	117,314	212,795
10	Average investment per acre irrigated.....dollars..	25.83		22.42	22.77	25.37	25.87	31.03
11	Average investment per acre which the works could supply with water.....dollars..	15.20	11.67	12.38	14.12	17.32	15.18	18.35
MAINTENANCE AND OPERATION, AND CHARGES, 1939								
12	Enterprises reporting maintenance and operation.....number...	2,164	41	1,615	374	74	17	13
13	(a) Area irrigated in these enterprises.....acres...	436,931		125,166	73,162	43,821	68,958	125,824
14	(b) Cost of maintenance and operation.....dollars..	1,589,007	60	389,653	208,463	144,788	270,806	575,147
15	(c) Average cost per irrigated acre reporting.....dollars..	3.64		3.11	2.85	3.30	3.93	4.57
16	Total annual charges.....dollars..	1,259,711				183,473	338,774	737,464
17	Average charge per irrigated acre reporting.....dollars..	5.27				4.22	4.86	5.86
18	Area against which charges were assessed.....acres...	245,975				43,493	76,698	125,824
19	Average annual charge per acre assessed.....dollars..	5.12				4.22	4.42	5.86
20	Total charges collected.....dollars..	542,853				40,925	124,768	377,160
INDEBTEDNESS AND ARREARAGE, 1939								
21	Enterprises reporting indebtedness.....number...	36				17	12	7
22	(a) Area irrigated in these enterprises.....acres...	145,657				9,821	45,409	90,427
23	(b) Indebtedness.....dollars..	2,748,788				80,400	876,289	1,792,099
24	(c) Average indebtedness per acre irrigated.....dollars..	18.87				8.19	19.30	19.82
25	(d) Cost of irrigation works and equipment.....dollars..	4,374,198				170,625	1,351,450	2,852,123
26	(e) Total investment.....dollars..	4,374,198				170,625	1,351,450	2,852,123
27	(f) Maintenance and operation.....dollars..	615,426				25,460	185,640	404,326
28	(g) Total annual charges.....dollars..	810,912				40,746	247,450	523,796
29	(h) Total charges collected.....dollars..	259,697				7,675	28,380	223,632
30	(i) Area against which annual charges were assessed.....acres...	145,657				9,821	45,409	90,427
31	(j) Average indebtedness per acre assessed.....dollars..	18.87				8.19	19.30	19.82
32	(k) Average charges per acre assessed.....dollars..	5.57				4.15	5.45	5.78
33	(l) Average charges per acre irrigated.....dollars..	5.57				4.15	5.45	5.78
34	Enterprises reporting arrearage.....number...	11				3	5	3
35	(a) Area assessed in these enterprises.....acres...	60,361				2,950	18,600	38,811
36	(b) Total arrearage.....dollars..	1,137,646				14,240	373,103	750,303
37	(c) Average arrearage per acre assessed.....dollars..	18.85				4.83	19.74	19.48
38	(d) Indebtedness.....dollars..	2,083,086				37,500	578,434	1,467,152
TYPE, 1940								
39	Individual and partnership.....number...	2,501	45	2,001	381	71	3	
40	Cooperative (incorporated and unincorporated).....number...	20		9		2	3	2
41	Commercial.....number...	28		1		4	12	11
42	All other.....number...	1		1				
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939								
43	Enterprises reporting pay roll.....number...	91				61	17	13
44	Wages and salaries paid and payable for 1939.....dollars..	502,320				74,419	136,902	280,999
45	Persons employed during week ending April 29, 1939.....	802				205	217	360
SOURCE OF WATER SUPPLY, 1939								
46	Streams, gravity.....number...	35	1	17	17			
47	Streams, pumped.....number...	466	14	346	63	15	15	13
48	Wells, pumped.....number...	1,138	22	814	253	48	1	
49	Wells, pumped and flowing; or wells flowing.....number...	373	7	363	3			
50	Lakes, gravity or pumped.....number...	52	1	73	7		1	
51	Mixed, streams and wells.....number...	34		18	8	8		
52	Other mixed or stored storm water.....number...	122		381	34	6	1	
SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)								
		TOTAL	IRRIGATED FARMS					
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms
1	Enterprises, 1940.....number...	16		12	3			
2	Irrigated farms, 1939.....number...	20	1	12	8			
3	Area irrigated, 1939.....acres...	2,579		1,285	1,294			
CAPITAL INVESTMENT, 1940								
4	Total capital investment in all enterprises.....dollars..	16,701		11,228	5,473			
5	Cost of irrigation works and equipment.....dollars..	16,701		11,228	5,473			
6	Area works were capable of supplying with water.....acres...	4,342		2,742	1,600			
7	Average investment per acre irrigated.....dollars..	6.48			7.96	4.23		
8	Average investment per acre which the works could supply with water.....dollars..	3.85		4.09	3.42			
MAINTENANCE AND OPERATION, AND CHARGES, 1939								
9	Enterprises reporting maintenance and operation.....number...	12		9	3			
10	(a) Area irrigated in these enterprises.....acres...	2,434		1,140	1,294			
11	(b) Cost of maintenance and operation.....dollars..	3,683		1,533	2,150			
12	(c) Average cost per irrigated acre reporting.....dollars..	1.51		1.34	1.66			
TYPE, 1940								
13	Individual and partnership.....number...	15	1	12	3			
SOURCE OF SUPPLEMENTAL WATER SUPPLY, 1939								
14	Streams, pumped.....number...	1		1				
15	Wells, pumped or flowing.....number...	15	1	11	3			

¹ Relates to enterprises reporting no irrigation in 1939 but having works capable of supplying water in 1940.² Annual charges, reported only by enterprises serving 5 or more farms, 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.

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CHARGES, INDEBTEDNESS AND ARREARAGE, TYPE OF ENTERPRISE, PAY ROLL, NUMBER OF EMPLOYEES, FARMS, AREAS IRRIGATED, AND COST OF WORKS: CENSUS OF 1940

ACRES IRRIGATED						COST OF IRRIGATION WORKS AND EQUIPMENT				
No acres ¹	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	Less than \$5,000	\$5,000 to \$14,999	\$15,000 to \$99,999	\$100,000 to \$1,499,999	
45	1,683	562	246	27	7	2,089	378	61	19	1
.....	1,847	980	932	1,794	1,763	2,562	857	1,007	2,879	2
.....	28,672	100,504	113,971	109,545	94,403	118,920	95,879	78,235	151,060	3
.....	28,051	98,987	111,658	109,318	94,403	115,205	94,963	78,089	151,060	4
.....	136	111	504	327	.....	632	299	147	.....	5
.....	485	1,406	1,809	.....	.....	3,083	617	.....	.....	6
58,241	882,066	2,533,151	2,280,160	2,939,181	2,856,013	1,398,595	3,070,838	2,082,195	4,997,184	7
58,241	882,066	2,533,151	2,280,160	2,939,181	2,856,013	1,398,595	3,070,838	2,082,195	4,997,184	8
.....	4,990	66,024	178,344	158,848	208,989	141,720	169,301	134,435	265,295	9
.....	30.76	25.20	20.01	25.83	30.25	11.76	32.03	26.61	32.44	10
.....	11.87	13.36	14.12	14.35	14.06	7.02	19.09	15.49	18.84	11
41	1,304	545	241	26	7	1,719	364	82	19	12
.....	25,079	97,591	111,713	107,245	94,403	113,825	93,410	75,636	154,060	13
60	95,755	304,568	304,773	471,931	411,920	285,249	292,636	304,661	706,261	14
.....	3.69	3.12	2.73	4.40	4.36	2.51	3.13	4.03	4.58	15
.....	19,071	164,979	598,232	507,398	27,427	53,695	282,728	895,831	17	17
.....	4.77	4.41	5.03	5.99	3.84	4.19	4.35	5.82	17	15
.....	3,998	37,408	119,927	84,644	7,138	12,824	71,953	151,060	18	18
.....	4.77	4.41	4.74	5.99	3.84	4.19	3.93	5.82	19	19
.....	3,876	33,259	294,602	211,116	1,279	22,055	117,259	402,350	20	20
.....	.....	8	10	13	5	5	9	9	13	21
.....	1,852	8,610	58,806	76,389	1,554	4,147	19,161	120,795	22	22
.....	28,700	149,833	801,284	1,768,951	17,500	24,500	230,763	2,467,005	23	23
.....	15.50	17.40	13.63	23.16	11.26	5.91	12.51	20.42	24	24
.....	48,275	174,070	1,884,435	2,267,418	18,200	79,575	421,269	3,855,154	25	25
.....	48,275	174,070	1,884,435	2,267,418	18,200	79,575	421,269	3,855,154	26	26
.....	7,159	25,572	252,673	330,022	8,503	7,771	55,712	543,440	27	27
.....	11,235	36,766	317,765	445,156	11,309	18,788	102,532	678,293	28	28
.....	525	3,360	106,801	148,911	3,885	7,150	218,562	218,562	29	29
.....	1,852	8,610	58,806	76,389	1,554	4,147	19,161	120,795	30	30
.....	15.50	17.40	13.63	23.16	11.26	5.91	12.51	20.42	31	31
.....	6.07	4.27	5.40	5.83	7.28	4.53	5.35	5.62	32	32
.....	6.07	4.27	5.40	5.83	7.28	4.53	5.35	5.62	33	33
.....	1	2	5	3	1	.....	3	7	34	34
.....	2,891	.....	18,959	38,511	(4)	.....	4,741	55,620	35	35
.....	68,441	.....	318,902	750,303	(4)	.....	4,69,441	1,068,205	36	36
.....	23.67	.....	19.48	19.48	(4)	.....	14.65	19.21	37	37
.....	135,033	.....	480,901	1,467,152	(4)	.....	143,033	1,940,053	38	38
45	1,657	554	239	6	.....	2,075	376	50	.....	39
.....	5	7	3	3	.....	11	2	4	.....	40
.....	.....	1	4	18	.....	2	.....	10	.....	41
.....	1	.....	.....	.....	.....	1	.....	.....	.....	42
.....	.....	16	45	24	6	11	28	33	19	43
.....	.....	3,933	77,935	234,791	185,961	6,205	10,961	128,219	357,235	44
.....	.....	33	188	326	255	21	71	228	479	45
1	34	.....	.....	.....	.....	35	.....	.....	.....	46
14	247	116	61	21	7	400	29	19	18	47
22	621	347	147	1	.....	772	393	33	.....	48
7	306	.....	.....	.....	.....	373	.....	.....	.....	49
1	72	7	1	1	.....	81	.....	.....	1	50
9	10	13	2	2	.....	18	11	5	.....	51
.....	314	52	24	2	.....	410	5	7	.....	52
ACRES IRRIGATED						COST OF IRRIGATION WORKS AND EQUIPMENT				
No acres ¹	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	Less than \$5,000	\$5,000 to \$14,999	\$15,000 to \$99,999	\$100,000 to \$1,499,999	
1	7	5	3	.....	.....	16	.....	.....	.....	1
.....	7	6	7	.....	.....	20	.....	.....	.....	2
.....	385	700	1,494	.....	.....	2,579	.....	.....	.....	3
5,000	.....	5,901	5,800	.....	.....	16,701	.....	.....	.....	4
5,000	.....	5,901	5,800	.....	.....	16,701	.....	.....	.....	5
1,645	.....	1,047	1,750	.....	.....	4,342	.....	.....	.....	6
.....	10.39	8.43	3.88	.....	.....	6.48	.....	.....	.....	7
.....	3.24	5.64	3.31	.....	.....	3.85	.....	.....	.....	8
.....	4	5	3	.....	.....	12	.....	.....	.....	9
.....	240	700	1,494	.....	.....	2,434	.....	.....	.....	10
.....	625	1,668	1,390	.....	.....	3,689	.....	.....	.....	11
.....	2.60	2.38	0.93	.....	.....	1.51	.....	.....	.....	12
1	7	5	3	.....	.....	16	.....	.....	.....	13
.....	.....	1	.....	.....	.....	1	.....	.....	.....	14
1	7	4	3	.....	.....	15	.....	.....	.....	15

¹Indebtedness and arrearage were reported only by enterprises serving 5 or more farms.

²Data for 1 enterprise from the "Less than \$5,000" group are included with the "\$15,000 to \$99,999" group.

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DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND
AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	STATE TOTAL ¹	GULF OF MEXICO (Gulf of Mexico drains entire State; therefore, Gulf of Mexico total for Louisiana is identical with State total)					
		Mississippi River			Calcasieu River		
		Total	Direct	Red River ²	Sabine River	Total	Direct ³
			(1)	(2)	(11)		(12)
IRRIGATED FARMS AND AREAS							
1 Irrigated farms.....1939..number.....	7,305	166	155	11	142	716	490
2 Area irrigated.....1939..acres.....	447,095	10,600	9,538	1,062	17,629	78,901	53,655
3 (a) Cropland harvested.....1939..acres.....	442,317	10,268	9,217	1,052	17,619	78,550	53,479
4 (b) Crop failure.....1939..acres.....	1,078	264	254	10	.....	.....	.....
5 (c) Pasture.....1939..acres.....	3,700	67	67	.....	10	251	170
6 Area irrigated.....1929..acres.....	450,901	10,469	9,872	.....	18,335	62,866	.....
7 ..1919..acres.....	454,882	20,269	17,416	.....	18,035	54,818	.....
8 Increase or decrease (-), 1929-1939.....percent.....	-0.8	1.3	6.3	.....	-8.9	25.5	.....
9 Irrigable area in enterprises.....1940..acres.....	793,674	17,037	15,518	1,519	23,400	147,716	103,507
10 ..1930..acres.....	850,401	18,970	17,342	.....	23,806	113,850	.....
11 ..1920 ⁴ ..acres.....	851,211	29,428	24,070	.....	20,850	169,193	.....
12 Excess of irrigable area over the area irrigated.....1940..acres.....	346,879	5,437	5,980	467	5,771	68,815	49,862
13 ..1930..acres.....	399,500	8,507	8,370	.....	5,471	50,984	.....
14 ..1920 ⁴ ..acres.....	396,329	9,159	6,854	.....	7,815	114,875	.....
15 Area works were capable of supplying with water.....1940..acres.....	759,915	15,711	14,192	1,519	23,400	135,511	93,007
16 ..1930..acres.....	795,165	13,216	11,668	.....	23,606	101,920	.....
17 ..1920..acres.....	728,742	27,228	23,765	.....	20,850	137,178	.....
18 Increase or decrease (-), 1930-1940.....percent.....	-4.4	18.9	21.6	.....	-0.9	33.0	.....
19 Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	312,820	5,111	4,654	457	5,771	56,610	39,352
20 ..1930..acres.....	344,264	2,753	2,696	.....	5,271	39,054	.....
21 ..1920..acres.....	273,860	6,959	6,339	.....	7,815	82,860	.....
22 Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	58.8	57.5	67.2	69.9	75.3	58.2	57.7
23 ..1929..percent.....	56.7	79.2	76.9	.....	77.7	61.7	.....
24 ..1919..percent.....	62.4	74.4	73.3	.....	62.5	39.6	.....
CAPITAL INVESTED TO JANUARY 1							
25 Total investment in irrigation enterprises.....1940..dollars.....	11,565,513	166,119	156,731	11,388	528,420	1,531,317	888,708
26 (a) Cost of irrigation works and equipment.....1940..dollars.....	11,565,513	166,119	156,731	11,388	528,420	1,531,317	888,708
27 (b) Investment in water rights (reported).....1940..dollars.....	.....	.....	.....	.....	.....	.....	.....
28 Total investment in irrigation enterprises.....1930..dollars.....	15,744,743	302,038	284,998	.....	587,693	3,901,748	.....
29 ..1920..dollars.....	14,063,181	331,071	302,385	.....	328,000	1,816,390	.....
30 Increase or decrease (-), 1930-1940.....percent.....	-26.5	-44.3	-45.0	.....	-10.1	-60.8	.....
31 Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	15.22	10.70	11.04	7.50	22.58	11.30	9.56
32 ..1930..dollars.....	19.80	22.86	24.43	.....	24.90	38.28	.....
33 ..1920..dollars.....	19.30	12.16	12.73	.....	15.73	13.24	.....
34 Average investment per acre irrigated.....1939..dollars.....	25.87	15.86	16.43	10.72	29.97	19.41	16.56
35 Estimated final investment in existing enterprises.....1940..dollars.....	11,659,725	168,169	156,781	11,388	528,420	1,539,466	944,308
36 Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	14.69	9.87	10.10	7.50	22.58	10.76	9.12
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Sup.				
		Enterprises					
37 Enterprises reporting maintenance and operation.....1939..number.....	2,171	12	90	84	6	146	68
38 Area irrigated in these enterprises.....1939..acres.....	436,931	2,434	9,876	8,858	1,018	78,492	53,466
39 Cost of maintenance and operation.....1939..dollars.....	1,589,007	3,663	20,538	24,367	2,171	74,059	176,743
40 Average cost, per acre irrigated.....1939..dollars.....	3.64	1.51	2.69	2.75	2.13	4.20	3.30
41 Total annual charges (reported) ⁵.....1939..dollars.....	1,289,711	.....	1,247	1,247	.....	71,431	152,889
42 Average annual charge per acre irrigated.....1939..dollars.....	5.27	.....	1.42	1.42	.....	4.35	4.04
43 Area against which charges were assessed.....1939..acres.....	245,975	.....	876	876	.....	16,421	45,602
44 Average annual charge per acre assessed.....1939..dollars.....	5.12	.....	1.42	1.42	.....	4.35	3.35
45 Total charges collected ⁶.....1939..dollars.....	542,853	.....	.....	.....	.....	86,835	154,526
46 Indebtedness to December 31 (reported) ⁷.....1939..dollars.....	2,748,768	.....	.....	.....	.....	91,330	205,472
WATER DELIVERED TO IRRIGATORS, 1939							
47 Enterprises reporting water delivered.....1939..number.....	2,409	15	81	76	5	145	64
48 Area irrigated by these enterprises.....1939..acres.....	367,081	2,579	10,130	9,322	808	1,208	25,081
49 Water delivered.....1939..acre-feet.....	684,020	2,116	43,661	41,825	1,836	1,404	55,404
50 Average water delivered per acre irrigated.....1939..acre-feet.....	2.4	0.8	4.3	4.5	2.3	1.2	2.2
51 Average cost of water per acre irrigated.....1939..dollars.....	4.27	1.51	2.75	2.78	2.38	2.05	3.44
52 Average cost of water per acre-foot delivered.....1939..dollars.....	1.77	1.84	0.64	0.62	1.05	1.76	1.56
DRAINAGE OF IRRIGATED LAND							
53 Enterprises reporting land drained or needing drainage.....1939..number.....	633	.....	15	13	2	18	7
54 Irrigable area in these enterprises.....1939..acres.....	214,408	.....	2,983	2,733	(⁸)	27,558	23,110
55 Irrigated area in these enterprises.....1939..acres.....	101,321	.....	2,480	2,230	(⁸)	8,603	6,243
56 Area for which drains have been installed.....1939..acres.....	174,848	.....	2,444	2,194	(⁸)	20,478	19,420
57 Additional area needing drainage.....1939..acres.....	12,379	.....	505	505	.....	3,160	2,180

¹ Data for 2 enterprises in Bayou Lafourche Drainage Basin (23) (number refers to separate map) are included with Gulf of Mexico Drainage Basin total.² Data for 1 enterprise in Ouachita River "Direct" Drainage Basin (4) (number refers to separate map) and 1 enterprise in Bayou Bartholomew Drainage Basin (7) are included with Red River Drainage Basin (2).³ Data for 2 enterprises in West Fork Calcasieu River Drainage Basin (15) (number refers to separate map) are included with Calcasieu River "Direct" Drainage Basin (12).

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IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE
IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939

GULF OF MEXICO—Continued											
Calcasieu River—Con.		Mermentau River				Vermilion River		Atchafalaya River			
Rundick Creek	Bayou Serpent	Total	Direct	Nezpique Bayou	Bayou Queue de Tortue			Total	Direct	Bayou Teche	
(13)	(14)		(16)	(17)	(18)	(19)			(20)	Total	
5	221	3,836	618	2,465	753	1,386	92	20	72	1	
754	24,492	262,921	74,764	133,300	54,857	57,619	14,732	2,865	11,887	2	
754	24,417	261,211	74,289	132,790	54,132	55,965	13,968	2,865	11,103	3	
.....	.....	398	210	178	10	347	49	.....	49	4	
.....	75	1,312	265	332	715	1,306	735	.....	735	5	
.....	.....	256,599	.....	.....	.....	82,765	13,360	.....	.....	6	
.....	.....	268,840	.....	.....	.....	74,034	23,342	.....	.....	7	
.....	.....	2.5	.....	.....	.....	-30.4	10.4	.....	.....	8	
1,066	43,143	473,285	144,300	226,306	102,679	98,788	26,052	4,005	22,047	9	
.....	.....	407,376	.....	.....	.....	256,073	20,512	.....	.....	10	
.....	.....	458,463	.....	.....	.....	138,066	31,920	.....	.....	11	
312	18,651	210,364	69,536	99,006	47,522	41,169	11,900	1,140	10,160	12	
.....	.....	150,777	.....	.....	.....	173,288	7,152	.....	.....	13	
.....	.....	189,623	.....	.....	.....	64,032	8,578	.....	.....	14	
1,066	41,438	455,495	132,053	221,812	101,630	97,894	24,646	4,005	20,641	15	
.....	.....	378,853	.....	.....	.....	248,618	19,467	.....	.....	16	
.....	.....	362,765	.....	.....	.....	126,649	30,685	.....	.....	17	
.....	.....	20.2	.....	.....	.....	-60.8	26.6	.....	.....	18	
312	10,946	162,574	57,289	69,612	46,773	40,275	9,894	1,140	8,754	19	
.....	.....	122,254	.....	.....	.....	166,893	6,107	.....	.....	20	
.....	.....	113,915	.....	.....	.....	52,615	7,543	.....	.....	21	
70.7	59.1	57.7	56.6	60.1	54.0	58.9	59.9	71.5	57.6	22	
.....	.....	67.7	.....	.....	.....	33.2	68.6	.....	.....	23	
.....	.....	70.2	.....	.....	.....	58.5	75.6	.....	.....	24	
21,540	621,069	7,508,490	2,095,544	4,124,705	1,286,241	1,351,379	198,520	22,900	175,620	25	
21,540	621,069	7,508,490	2,095,544	4,124,705	1,286,241	1,351,379	198,520	22,900	175,620	26	
.....	.....	7,504,660	.....	.....	.....	2,680,508	304,183	.....	.....	27	
.....	.....	7,713,797	.....	.....	.....	3,355,327	407,956	.....	.....	28	
.....	.....	-0.7	.....	.....	.....	-49.6	.....	.....	.....	29	
20.21	14.99	16.48	15.87	18.60	12.68	13.80	8.05	5.72	8.51	31	
.....	.....	19.97	.....	.....	.....	10.74	15.63	.....	.....	32	
.....	.....	20.15	.....	.....	.....	26.49	13.21	.....	.....	33	
28.57	25.36	28.56	28.03	30.94	23.48	23.45	13.46	7.99	14.77	34	
21,540	623,718	7,535,268	2,099,100	4,146,902	1,289,266	1,351,499	206,195	22,900	183,295	35	
20.21	14.46	15.92	14.55	18.32	12.56	13.68	7.91	5.72	8.31	36	
5	73	1,022	198	623	201	208	78	14	64	37	
754	24,252	258,326	73,215	131,281	53,830	54,723	14,302	2,865	11,437	38	
2,220	99,493	930,426	291,318	501,845	137,263	227,878	34,374	3,485	30,889	39	
2.94	4.10	3.60	3.98	3.82	2.55	4.16	2.40	1.22	2.70	40	
.....	45,752	743,541	154,867	429,089	159,595	243,231	1,620	.....	1,620	41	
.....	4.34	5.59	4.75	5.85	5.84	6.24	6.00	.....	6.00	42	
.....	10,547	133,269	32,620	73,319	27,330	38,980	270	.....	270	43	
.....	4.34	5.58	4.75	5.85	5.84	6.24	6.00	.....	6.00	44	
.....	.....	301,492	62,455	187,887	51,150	.....	.....	.....	.....	45	
.....	130,523	1,489,772	154,528	543,142	792,102	962,194	.....	.....	.....	46	
5	76	1,108	199	607	202	208	73	13	60	47	
754	23,642	232,213	64,860	114,051	53,302	55,440	14,043	2,740	11,303	48	
879	67,894	559,538	191,899	248,474	119,165	124,490	25,812	5,345	20,467	49	
1.2	2.9	2.4	3.0	1.4	2.2	2.2	1.8	1.6	1.6	50	
2.94	4.04	4.38	4.14	3.92	4.65	4.07	2.58	1.20	2.68	51	
2.53	1.41	1.82	1.40	2.88	2.13	1.82	1.29	0.61	1.48	52	
.....	11	244	53	124	67	147	24	6	18	53	
.....	4,448	150,594	52,460	69,923	28,131	22,324	9,723	1,110	8,613	54	
.....	2,560	70,351	25,606	31,123	13,622	13,185	5,486	790	4,706	55	
.....	1,058	129,817	44,681	59,447	25,969	15,445	5,575	998	4,577	56	
.....	980	5,360	4,395	445	520	1,116	2,160	.....	2,160	57	

* For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

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

* Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

* Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION — LOUISIANA

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		GULF OF MEXICO—Continued					
		Atchafalaya River—Continued		Lake Pontchartrain			
		Bayou Teche—Continued		Total ¹	Amite River	Natchitoches River	Tangipahoa River
		Direct	Bayou Boeuf				
		(21)	(22)		(24)	(25)	(26)
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number....	58	14	905	5	787	172
2	Area irrigated.....1939..acres.....	10,367	1,520	1,392	33	3,704	652
3	(a) Cropland harvested.....1939..acres.....	9,592	1,511	4,353	33	3,685	652
4	(b) Crop failure.....1939..acres.....	40	9	20		20	
5	(c) Pasture.....1939..acres.....	735		19		19	
6	Area irrigated.....1929..acres.....			5,074		3,548	1,526
7	.....1919..acres.....						
8	Increase or decrease (-), 1929-1939.....percent.....			-13.4		4.4	-57.3
9	Irrigable area in enterprises.....1940..acres.....	18,256	3,791	6,971	39	5,782	1,142
10	.....1930..acres.....			7,864		6,053	1,811
11	.....1920 ² ..acres.....						
12	Excess of irrigable area over the area irrigated.....1940..acres.....	7,889	2,271	2,579	6	2,078	490
13	.....1930..acres.....			2,790		2,505	285
14	.....1920 ² ..acres.....						
15	Area works were capable of supplying with water.....1940..acres.....	17,650	2,991	6,833	39	5,644	1,142
16	.....1930..acres.....			6,640		4,903	1,737
17	.....1920..acres.....						
18	Increase or decrease (-), 1930-1940.....percent.....			2.9		15.1	-34.3
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	7,283	1,471	2,441	6	1,940	490
20	.....1930..acres.....			1,566		1,355	211
21	.....1920..acres.....						
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	58.7	50.8	64.3	84.6	65.6	57.1
23	.....1929..percent.....			76.4		72.4	87.9
24	.....1919..percent.....						
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars.....	151,770	23,850	277,118	960	236,688	38,670
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	151,770	23,850	277,118	960	236,688	38,670
27	(b) Investment in water rights (reported).....1940..dollars.....						
28	Total investment in irrigation enterprises.....1930..dollars.....			384,298		287,221	97,077
29	.....1920..dollars.....						
30	Increase or decrease (-), 1930-1940.....percent.....			-27.9		-17.6	-60.2
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	8.60	7.97	40.56	24.62	41.94	33.86
32	.....1930..dollars.....			57.88		58.58	55.89
33	.....1920..dollars.....						
34	Average investment per acre irrigated.....1939..dollars.....	14.64	15.69	63.10	29.09	63.90	59.31
35	Estimated final investment in existing enterprises.....1940..dollars.....	153,445	29,850	278,558	960	238,123	38,670
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	8.41	7.87	39.96	24.62	41.18	33.86
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
37	Enterprises reporting maintenance and operation.....1939..number....	52	12	617	3	502	111
38	Area irrigated in these enterprises.....1939..acres.....	10,267	1,170	3,302	24	2,777	498
39	Cost of maintenance and operation.....1939..dollars.....	25,129	5,760	14,951	84	11,542	3,300
40	Average cost, per acre irrigated.....1939..dollars.....	2.45	4.92	4.53	3.50	4.16	6.63
41	Total annual charges (reported) ³.....1939..dollars.....	1,620					
42	Average annual charge per acre irrigated.....1939..dollars.....	6.00					
43	Area against which charges were assessed.....1939..acres.....	270					
44	Average annual charge per acre assessed.....1939..dollars.....	6.00					
45	Total charges collected ³.....1939..dollars.....						
46	Indebtedness to December 31 (reported) ⁴.....1939..dollars.....						
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number....	48	12	895	5	726	153
48	Area irrigated by these enterprises.....1939..acres.....	9,857	1,446	4,289	33	3,616	637
49	Water delivered.....1939..acre-feet.....	16,659	3,808	4,021	39	3,469	512
50	Average water delivered per acre irrigated.....1939..acre-feet.....	1.7	2.6	0.9	1.2	1.0	0.8
51	Average cost of water per acre irrigated.....1939..dollars.....	2.45	4.71	4.56	3.50	4.18	6.75
52	Average cost of water per acre-foot delivered.....1939..dollars.....	1.45	1.79	4.97	3.00	4.35	8.40
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number....	16	2	184		172	12
54	Irrigable area in these enterprises.....1939..acres.....	7,538	(5)	1,231		1,146	85
55	Irrigated area in these enterprises.....1939..acres.....	4,616	(5)	887		915	72
56	Area for which drains have been installed.....1939..acres.....	4,577		1,070		985	85
57	Additional area needing drainage.....1939..acres.....	1,085	(5)	78		78	

¹ Data for 1 enterprise in Chefmetre River Drainage Basin (27) (number refers to separate map) are included with Lake Pontchartrain Drainage Basin total.

² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

³ Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

⁴ Annual charges and indebtedness were reported only by enterprises serving 5 or more farms and items 41 to 46, inclusive, relate to those enterprises only.

⁵ Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — LOUISIANA

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DRAINAGE BASIN TABLE II.—ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		STATE TOTAL ¹	GULF OF MEXICO (Gulf of Mexico drains entire State; therefore, Gulf of Mexico total for Louisiana is identical with State total)					
			Mississippi River			Calcasieu River		
			Total	Direct	Red River ²	Sabine River	Total	Direct ³
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
1	Enterprises.....1940..number.....	4 2,573	98	60	8	8	158	72
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	295	160	158	190	2,925	858	1,292
3	Diversion dams.....1940..total number.....	105	16	16			2	2
4		1930..total number.....	36	1	1		2	
5		1920..total number.....	419	379	340		4	
6	(a) Concrete and masonry.....1940..number.....	3						
7	(b) Timber.....1940..number.....	15	8	8				
8	(c) Earth and rock.....1940..number.....	45	8	8			2	2
9	(d) Other, mixed, and not reported..1940..number.....	42						
10	Main canals and laterals.....1940..total length, miles.....	2,421.0	68.1	66.1	2.0	77.4	439.6	293.5
11		1930..total length, miles.....	2,226	16		83	362	
12		1920..total length, miles.....	3,243	387	356	85	327	
13	(a) Earth.....1940..length, miles.....	2,397	68	66	2	77	431	285
14	(b) Lined.....1940..length, miles.....	24.0	0.1	0.1		0.4	8.6	8.5
15		1940..capacity, c.f.s. ⁴	10,335	467	455	12	352	2,133
16		1930..capacity, c.f.s. ⁴	11,386	719	719		1,522	578
17		1920..capacity, c.f.s. ⁴	11,889	1,576	869		111	1,700
18	Pipe lines ⁵.....1940..total length, miles.....	63.6	11.9	11.7	0.2		3.0	2.4
19		1930..total length, miles.....	15.1	13.4	13.2			
20		1920..total length, miles.....	50.1	7.0	6.2		0.4	
21	(a) Concrete.....1940..length, miles.....	15.4	1.0	0.9	0.1		2.0	2.0
22	(b) Metal.....1940..length, miles.....	40.7	10.9	10.8	0.1		0.8	0.2
23	(c) Wood-stave.....1940..length, miles.....	5.9					0.1	0.1
24	(d) Other.....1940..length, miles.....	1.6					0.1	0.1
25	Storage dams.....1940..total number.....	114	21	20	1		2	1
26		1930..total number.....	81	9	6		1	1
27		1920..total number.....	63				2	4
28	(a) Concrete and masonry.....1940..number.....	1						
29	(b) Earth and rock.....1940..number.....	91	16	15	1		2	1
30	(c) Other, mixed, and not reported..1940..number.....	22	5	5				
31	Reservoirs.....1940..total number.....	75	25	24	1		3	2
32	(a) 1-99 acre-feet capacity.....1940..number.....	50	16	16			2	1
33	(b) 100-999 acre-feet capacity.....1940..number.....	16	3	2	1		1	1
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	9	6	6				
35		1940..total capacity, ac.-ft. ⁷	34,199	19,088	18,968	(⁸)	701	(⁸)
36		1930..total capacity, ac.-ft.....	85	11	9		1	4
37		1920..total capacity, ac.-ft.....	13,900	156	104		20	448
38	Wells, flowing.....1940..number.....	502						
39		1930..number.....	807	1				
40		1920..number.....	9				5	
41		1940..yield, g.p.m.....	12,695					
42		1930..yield, g.p.m.....	31,961	48				
43		1920..yield, g.p.m.....	6,255				5,800	
44	Wells, pumped.....1940..number.....	1,504	1		1		99	19
45		1930..number.....	1,389	8	6		7	74
46		1920..number.....	812				2	62
47		1940..yield, g.p.m.....	1,526,613	(⁸)	(⁸)	(⁸)	223,700	49,900
48		1930..yield, g.p.m.....	1,958,811	4,012	1,362		16,800	271,650
49		1920..yield, g.p.m.....	1,607,637				27,500	243,400
50	Pumping plants.....1940..total number.....	2,326	60	50	10	10	181	86
51		1930..total number.....	1,790	70	64		15	104
52	Prime movers.....1940..capacity, hp.....	85,574	1,761	1,565	196	1,330	12,147	6,138
53		1930..capacity, hp.....	85,413	1,224	1,098		1,852	10,332
54		1920..capacity, hp.....	85,628	3,131	2,846		1,050	13,639
55	(a) Electric.....1940..number.....	301	11	11	3		51	9
56		1940..capacity, hp.....	12,081	341	341	1,200	3,757	967
57	(b) Internal-combustion.....1940..number.....	1,976	48	38	10	7	118	67
58		1940..capacity, hp.....	62,846	1,418	1,232	186	6,409	3,325
59	(c) Other.....1940..number.....	49	1	1			12	10
60		1940..capacity, hp.....	10,637	(⁸)	(⁸)		1,981	1,846
61	Pumps.....1940..total number.....	2,403	63	53	10	10	179	84
62		1930..number.....	2,000	70	64		13	115
63		1920..number.....	1,941	79	74		6	161
64		1940..capacity, g.p.m.....	6,453,487	179,028	168,858	10,170	162,500	1,098,200
65		1930..capacity, g.p.m.....	5,914,799	94,270	82,630		175,100	947,050
66		1920..capacity, g.p.m.....	4,968,686	124,800	102,500		54,500	937,294
67	(a) Centrifugal.....1940..number.....	1,688	62	53	9	4	110	58
68		1940..capacity, g.p.m.....	4,712,919	176,528	168,858	7,670	152,000	767,550
69		1940..average capacity, g.p.m.....	2,792	2,847	3,186	852	36,000	6,978
70	(b) Turbine.....1940..number.....	546	1		1		6	62
71		1940..capacity, g.p.m.....	1,102,356	(⁸)	(⁸)	(⁸)	10,500	135,100
72		1940..average capacity, g.p.m.....	2,019	(⁸)	(⁸)	(⁸)	1,750	2,179
73	(c) Plunger.....1940..number.....	64					1	
74		1940..capacity, g.p.m.....	1,080				(⁸)	
75		1940..average capacity, g.p.m.....	17				(⁸)	
76	(d) Other.....1940..number.....	105					6	2
77		1940..capacity, g.p.m.....	637,132				195,500	(⁸)
78	Pumping lift, from all sources.....1940..average, feet.....	32	15	13	29	16	34	20
79		1930..average, feet.....	37	16	15		42	40
80		1920..average, feet.....	32		12		41	30
81	from pumped wells.....1940..average, feet.....	45	(⁸)	(⁸)	(⁸)	(⁸)	47	36
82	from surface sources.....1940..average, feet.....	13	14	13	24	12	15	15

¹Data for 2 enterprises in Bayou Lafourche Drainage Basin (23) (number refers to separate map) are included with Gulf of Mexico Drainage Basin total. ²Data for 1 enterprise in Ouachita River "Direct" Drainage Basin (4) (number refers to separate map) and 1 enterprise in Bayou Bartholomew Drainage Basin (7) are included with Red River Drainage Basin (2). ³Data for 2 enterprises in West Fork Calcasieu River Drainage Basin (15) (number refers to separate map) are included with Calcasieu River "Direct" Drainage Basin (12). ⁴Includes interdrainage basin projects counted as independent enterprises in each basin into which they extend. For actual number of enterprises see State table 1. ⁵Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources. ⁶Includes siphons and farm pipe lines reported. ⁷Total capacity of all reservoirs regardless of size. ⁸Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — LOUISIANA

DRAINAGE BASIN TABLE II—ENTERPRISES AND IRRIGATION

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		GULF OF MEXICO—Continued					
		Calcasieu River—Continued		Mermentau River			
		Dandick Creek (13)	Bayou Serpent (14)	Total	Direct (16)	Nezigue Bayou (17)	Bayou Queue de Tortue (18)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1	Enterprises.....1940..number.....	5	81	1,079	219	650	210
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	213	512	422	603	341	484
3	Diversion dams.....1940..total number.....			71	6	63	2
4	.....1930..total number.....			26			
5	.....1920..total number.....			14			
6	(a) Concrete and masonry.....1940..number.....			2	1		1
7	(b) Timber.....1940..number.....			6		6	
8	(c) Earth and rock.....1940..number.....			21	4	16	1
9	(d) Other, mixed, and not reported.....1940..number.....			42	1	41	
10	Main canals and laterals.....1940..total length, miles.....	2.0	144.1	1,429.1	351.4	777.2	300.5
11	.....1930..total length, miles.....			1,323			
12	.....1920..total length, miles.....			1,431			
13	(a) Earth.....1940..length, miles.....	2	144	1,422	351	772	299
14	(b) Lined.....1940..length, miles.....		0.1	7.1	0.4	5.3	1.5
15	.....1940..capacity, c.f.s. ²	5	227	5,239	1,436	2,525	1,278
16	.....1930..capacity, c.f.s. ²			2,282			
17	.....1920..capacity, c.f.s. ²			6,067			
18	Pipe lines.....1940..total length, miles.....	0.5	0.1	19.5	1.7	15.8	2.0
19	.....1930..total length, miles.....			0.2			
20	.....1920..total length, miles.....			0.1			
21	(a) Concrete.....1940..length, miles.....			11.4	1.7	9.7	
22	(b) Metal.....1940..length, miles.....	0.5	0.1	1.6		1.6	
23	(c) Wood-stave.....1940..length, miles.....			5.3		3.3	2.0
24	(d) Other.....1940..length, miles.....			1.2		1.2	
25	Storage dams.....1940..total number.....	1		89	4	84	1
26	.....1930..total number.....			85			
27	.....1920..total number.....			47			
28	(a) Concrete and masonry.....1940..number.....	1		1		1	
29	(b) Earth and rock.....1940..number.....	1		73	4	69	
30	(c) Other, mixed, and not reported.....1940..number.....			15		14	1
31	Reservoirs.....1940..total number.....	1		43	4	38	1
32	(a) 1-99 acre-feet capacity.....1940..number.....	1		29	1	27	1
33	(b) 100-999 acre-feet capacity.....1940..number.....			12	1	11	
34	(c) 1,000 and over acre-feet capacity.....1940..number.....			2	2		
35	.....1940..total capacity, ac.-ft. ⁴	(⁵)		11,488	8,260	3,188	(⁵)
36	.....1930..total capacity, ac.-ft. ⁴			63			
37	.....1920..total capacity, ac.-ft. ⁴			13,018			
38	Wells, flowing.....1940..number.....						
39	.....1930..number.....						
40	.....1920..number.....						
41	.....1940..yield, g.p.m.....						
42	.....1930..yield, g.p.m.....						
43	.....1920..yield, g.p.m.....						
44	Wells, pumped.....1940..number.....	3	77	543	153	298	92
45	.....1930..number.....			575			
46	.....1920..number.....			594			
47	.....1940..yield, g.p.m.....	6,500	173,900	1,175,242	401,105	620,757	153,380
48	.....1930..yield, g.p.m.....			1,397,670			
49	.....1920..yield, g.p.m.....			1,209,750			
50	Pumping plants.....1940..total number.....	5	90	1,065	252	603	210
51	.....1930..total number.....			733			
52	Prime movers.....1940..capacity, hp.....	290	5,719	58,863	14,831	35,855	8,177
53	.....1930..capacity, hp.....			59,119			
54	.....1920..capacity, hp.....			56,300			
55	(a) Electric.....1940..number.....		42	97			3
56	.....1940..capacity, hp.....		2,790	6,046	4,046	1,950	140
57	(b) Internal-combustion.....1940..number.....	4	47	987	185	557	225
58	.....1940..capacity, hp.....	230	2,854	47,326	10,485	29,344	7,497
59	(c) Other.....1940..number.....	1	1	21	1	18	2
60	.....1940..capacity, hp.....	(⁵)	(⁵)	5,491	(⁵)	4,651	(⁵)
61	Pumps.....1940..total number.....	5	90	1,095	252	603	234
62	.....1930..number.....			788			
63	.....1920..number.....			1,293			
64	.....1940..capacity, g.p.m.....	8,050	362,700	3,885,298	1,143,475	1,956,731	785,090
65	.....1930..capacity, g.p.m.....			2,909,458			
66	.....1920..capacity, g.p.m.....			2,627,213			
67	(a) Centrifugal.....1940..number.....	1	51	621	151	301	168
68	.....1940..capacity, g.p.m.....	(⁵)	140,800	2,542,666	737,380	1,118,826	686,460
69	.....1940..average capacity, g.p.m.....	(⁵)	2,761	4,094	4,883	3,717	4,032
70	(b) Turbine.....1940..number.....	3	35	442	92	286	64
71	.....1940..capacity, g.p.m.....	6,500	75,400	908,565	252,290	558,645	97,630
72	.....1940..average capacity, g.p.m.....	2,167	2,154	2,058	2,742	1,933	1,525
73	(c) Plunger.....1940..number.....	1		2	1	1	
74	.....1940..capacity, g.p.m.....	(⁵)		(⁵)	(⁵)	(⁵)	
75	.....1940..average capacity, g.p.m.....	(⁵)		(⁵)	(⁵)	(⁵)	
76	(d) Other.....1940..number.....		4	30	8	21	1
77	.....1940..capacity, g.p.m.....		146,500	433,950	153,750	279,200	(⁵)
78	Pumping lift, from all sources.....1940..average, feet.....	41	45	34	34	39	20
79	.....1930..average, feet.....			44			
80	.....1920..average, feet.....			35			
81	from pumped wells.....1940..average, feet.....	53	49	55	48	63	41
82	from surface sources.....1940..average, feet.....	22	11	14	13	17	9

¹Data for 1 enterprise in Chefduc River Drainage Basin (27) (number refers to separate map) are included with Lake Pontchartrain Drainage Basin total.

²Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

³Includes siphons and farm pipe lines reported.

CENSUS OF IRRIGATION - LOUISIANA

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WORKS, 1940, 1930, AND 1920-Continued

GULF OF MEXICO—Continued									
Vermilion River	Atchafalaya River					Lake Pontchartrain			
	Total	Direct	Bayou Teche			Total ¹	Amite River	Natchitoches River	Tangipahoa River
			Total	Direct	Bayou Boeuf				
(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	
224	81	14	67	53	14	623	6	760	156
437	304	286	308	333	214	7	6	7	7
5	11	3	8	6					
4	3								
17									
1	1		1	1					
4	10	3	7	7					
334.0	66.3	12.0	54.3	49.3	5.0	3.0		3.0	
363	78								
869	151								
330	64	12	52	47	5	3		3	
4.0	2.3		2.3	2.3					
1,776	457	149	308	249	59	3		3	
6,126	94								
1,699	728								
1.0	1.0	0.2	0.8	0.6	0.2	27.2		23.6	3.5
	1.4								
	42.2								
	0.4		0.4	0.3	0.1	0.6		0.6	
1.0	0.1		0.1		0.1	26.3		22.7	3.5
	0.5	0.2	0.3	0.3		0.3		0.3	
2						1			1
	4								
	1								
2									
1						1		1	
						1		1	
(5)						(5)		(5)	
	5					1		1	
	207					60		60	
						502	5	442	54
						806		578	228
2	1								
						12,605	226	11,044	375
						31,913		23,029	7,984
425									
54	16		16	12	4	790	1	669	120
55	10					660		466	174
82	42								
51,633	26,200		26,200	23,400	2,800	44,338	(5)	34,688	9,610
178,350	60,700					29,629		21,549	8,080
67,007	59,980								
240	96	15	81	61	20	652	1	535	116
164	74					627		470	157
7,022	2,741	362	2,379	2,112	267	1,670	(5)	1,379	290
8,662	3,235					1,773		1,368	405
7,052	4,070								
1	12		12	7	5	126	1	78	47
(5)	510		510	460	50	212	(5)	133	78
233	83	15	68	53	15	518		449	69
3,906	2,181	362	1,819	1,602	217	1,436		1,224	212
6	1		1	1		8		8	
3,061	(5)		(5)	(5)		22		22	
251	98	15	83	61	22	705	1	588	116
179	79					771		531	240
223	171								
623,593	257,770	63,700	194,070	167,600	26,470	43,750	(5)	34,825	8,985
1,442,590	247,490					29,541		21,416	8,125
694,044	230,675								
232	87	15	72	53	19	570		479	91
801,843	234,370	63,700	170,570	144,300	26,270	34,712		27,838	6,874
3,456	2,693	4,247	2,369	2,723	1,383	61		68	79
17	11		11	8	3	7		6	1
19,150	23,500		23,500	23,300	200	3,041		2,991	(5)
1,126	2,136		2,136	2,912	67	434		498	(5)
						61	1	54	6
						915	(5)	399	476
						15	(5)	7	79
						67		49	18
(5)						5,082		3,597	1,485
11	19	11	20	22	16	39	(5)	40	34
21	20					37		43	19
29	19								
22	51		51	51	50	39	(5)	40	34
8	14	11	15	16	13	23		23	

¹Total capacity of all reservoirs regardless of size.

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

CENSUS OF IRRIGATION — LOUISIANA

PARISH TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, [Parishes for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		STATE TOTAL	Acadia	Allen	Ascension	Avoyelles
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*						
1	All farms.....1940..number.....	150,007	3,937	1,302	1,411	5,242
2	.....1930..number.....	161,445	3,828	1,068	1,335	5,973
3	Irrigated farms.....1940..number.....	7,037	1,308	177	11	6
4	.....1930..number.....	5,588	1,210	91	14	3
5	Increase or decrease (-), 1930-1940.....percent.....	25.9	7.9	94.5	-21.4	100.0
6	Operated by—					
7	(a) Owners and managers.....1940..number.....	3,807	730	108	7	5
8	.....1930..number.....	3,049	553	47	11	1
9	(b) Tenants.....1940..number.....	3,230	576	69	4	3
10	.....1930..number.....	2,539	557	44	3	3
11	Land in all farms.....1940..acres.....	9,996,108	299,881	102,523	74,623	172,859
12	Land in irrigated farms.....1940..acres.....	1,065,655	229,118	31,435	9,975	2,013
13	Average per farm.....1940..acres.....	152	175	178	907	340
14	(a) Operated by owners and managers.....1940..acres.....	642,822	148,364	21,894	8,167	(5)
15	Average per farm.....1940..acres.....	169	203	203	1,167	(5)
16	(b) Operated by tenants.....1940..acres.....	423,833	80,754	9,601	1,808	(5)
17	Average per farm.....1940..acres.....	131	140	139	452	(5)
18	Approximate land area.....1940..acres.....	28,913,280	423,380	496,000	192,000	528,610
IRRIGATED AND IRRIGABLE AREAS						
19	Area irrigated.....1939..acres.....	447,095	106,377	16,122	2,804	830
20	(a) Cropland harvested.....1939..acres.....	442,317	106,048	16,090	2,732	830
21	(b) Crop failure.....1939..acres.....	1,078	135	32	72	.....
22	(c) Pasture.....1939..acres.....	3,700	194	.....	.....	.....
23	Area irrigated.....1929..acres.....	450,901	133,539	11,508	3,721	830
24	.....1919..acres.....	454,883	134,710	15,805	2,080	.....
25	Increase or decrease (-), 1929-1939.....percent.....	-0.8	-20.3	39.4	-24.6	-3.5
26	Irrigable area in enterprises.....1940..acres.....	793,674	196,398	36,747	3,445	1,750
27	.....1930..acres.....	850,401	107,691	18,282	4,396	660
28	.....1920 ² ..acres.....	851,211	208,799	30,705	2,935	.....
29	Excess of irrigable area over the area irrigated.....1940..acres.....	346,579	90,321	20,625	541	920
30	.....1930..acres.....	399,500	64,152	6,714	545	.....
31	Area works were capable of supplying with water.....1940..acres.....	750,915	194,255	32,192	3,245	1,750
32	.....1930..acres.....	795,165	192,791	17,187	4,230	735
33	.....1920 ² ..acres.....	728,742	186,218	28,500	2,635	.....
34	Increase or decrease (-), 1930-1940.....percent.....	-4.4	0.8	87.3	-23.3	138.1
35	Excess, capability of works over area irrigated.....1940..acres.....	312,820	87,878	16,070	441	520
36	.....1930..acres.....	344,264	59,252	5,619	509	.....
37	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent.....	41.9	46.4	51.2	28.1	40.6
38	.....1929..percent.....	50.5	59.9	55.4	47.1	.....
39	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	58.8	51.8	50.1	86.4	47.4
40	.....1929..percent.....	56.7	60.3	67.3	88.0	.....
CAPITAL INVESTED TO JANUARY 1						
41	Total investment in all enterprises.....1940..dollars.....	11,555,513	3,662,073	292,290	39,300	10,350
42	(a) Cost of irrigation works and equipment.....1940..dollars.....	11,505,513	3,652,073	292,290	39,300	10,350
43	(b) Investment in water rights (reported) ⁴.....1940..dollars.....	.....	.....	.....	.....	.....
44	Total investment in all enterprises.....1930..dollars.....	15,714,743	4,137,252	240,900	29,650	7,685
45	.....1920 ² ..dollars.....	14,093,181	3,793,948	309,450	44,100	.....
46	Increase or decrease (-), 1930-1940.....percent.....	-23.5	-12.1	21.3	32.5	34.7
47	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars.....	15.22	18.85	9.08	12.11	5.91
48	.....1930..dollars.....	19.80	21.62	14.02	7.01	10.46
49	.....1920 ² ..dollars.....	19.30	20.04	10.82	16.74	.....
50	Average investment per acre irrigated.....1939..dollars.....	25.87	34.43	18.13	14.02	12.47
51	Estimated final investment in existing enterprises.....1940..dollars.....	11,659,725	3,078,183	318,290	39,300	10,350
52	.....1930..dollars.....	15,771,003	4,168,302	250,900	41,650	8,485
53	.....1920 ² ..dollars.....	14,204,178	3,795,013	310,950	44,100	.....
54	Increase or decrease (-), 1930-1940.....percent.....	-26.1	-11.8	26.9	-5.6	22.0
55	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars.....	14.69	18.70	8.66	11.41	5.91
56	.....1930..dollars.....	18.55	21.08	13.72	9.76	9.87
57	.....1920 ² ..dollars.....	16.76	18.19	10.13	16.74	.....
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
		Primary	Supplemental	Primary	Supplemental	
		Enterprises		Enterprises		
58	Enterprises reporting maintenance and operation.....1939..number.....	2,181	12	321	1	37
59	Area irrigated in these enterprises.....1939..acres.....	436,931	2,434	104,992	(5)	16,122
60	Cost of maintenance and operation.....1939..dollars.....	1,589,007	3,683	412,017	(5)	53,037
61	Average cost, per acre irrigated.....1939..dollars.....	3.64	1.51	3.92	(5)	3.29
62	.....1929..dollars.....	4.09	.....	4.25	.....	6.71
63	Total annual charges (reported) ⁶.....1939..dollars.....	1,250,711	.....	343,564	.....	20,858
64	Average annual charge per acre irrigated.....1939..dollars.....	5.27	.....	5.78	.....	2.03
65	Area against which charges were assessed.....1939..acres.....	245,975	.....	59,459	.....	17,279
66	Average annual charge per acre assessed.....1939..dollars.....	5.12	.....	5.78	.....	1.21
67	Total charges collected ⁶.....1939..dollars.....	542,853	.....	230,977	.....	39,000
68	Indebtedness to December 31 (reported) ⁷.....1939..dollars.....	2,748,768	.....	503,442	.....	17,500
WATER DELIVERED TO IRRIGATORS						
69	Enterprises reporting water delivered.....1939..number.....	2,419	15	307	1	35
70	Area irrigated in these enterprises.....1939..acres.....	367,081	2,579	91,958	(5)	7,883
71	Water delivered in these enterprises.....1939..acre-feet.....	884,020	2,116	209,595	(5)	14,548
72	Average water delivered per acre irrigated.....1939..acre-feet.....	2.4	0.8	2.3	(5)	1.8
73	Average cost of water per acre irrigated.....1939..dollars.....	4.27	1.51	4.64	(5)	3.08
DRAINAGE OF IRRIGATED LAND						
74	Enterprises reporting land drained or needing drainage.....1939..number.....	634	.....	50	.....	7
75	Irrigable area in these enterprises.....1939..acres.....	214,408	.....	83,947	.....	2,465
76	Irrigated area in these enterprises.....1939..acres.....	101,321	.....	35,533	.....	1,210
77	Area for which drains have been installed.....1939..acres.....	174,848	.....	76,245	.....	526
78	Additional area needing drainage.....1939..acres.....	12,379	.....	270	.....	355

*Census of Agriculture.

¹Percent not shown when more than 1,000.²Data are included only in State totals because less than 3 farms reported in the 1940 Census.³For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION — LOUISIANA

PARISH TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, 1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, 1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

[Parishes for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920 irrigation data omitted from any of the parishes listed are included under "All other parishes"]

ITEM (For definitions and explanation, see text)		St. Landry	St. Martin	St. Mary	Tangipahoa	Vermilion	All other parishes ¹
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS²							
1 All farms.....	1940...number.....	7,983	2,440	387	1,521	3,392	98,370
2	1930...number.....	7,494	2,084	520	1,336	3,951	100,412
3 Irrigated farms.....	1940...number.....	232	11	14	869	1,750	44
4	1930...number.....	173	30	13	1,176	1,532	31
5 Increase or decrease (-), 1930-1940.....	percent.....	26.3	46.7	7.7	-26.1	14.2	41.0
6 Operated by—(a) Owners and managers.....	1940...number.....	110	16	5	565	953	26
7	1930...number.....	89	13	8	800	719	28
8 (b) Tenants.....	1940...number.....	112	28	9	301	797	18
9	1930...number.....	84	17	5	376	813	9
10 Land in all farms.....	1940...acres.....	248,790	128,523	113,318	192,747	316,201	6,837,371
11	1930...acres.....	31,748	6,624	16,797	20,701	222,277	18,724
12 Average per farm.....	1940...acres.....	143	151	1,200	21	137	126
13 (a) Operated by owners and managers.....	1940...acres.....	23,408	1,161	15,163	16,326	137,168	11,218
14	1930...acres.....	213	260	3,034	29	114	517
15 (b) Operated by tenants.....	1940...acres.....	8,340	2,160	1,628	1,375	81,809	1,596
16	1930...acres.....	74	88	181	15	106	270
17 Approximate land area.....	1940...acres.....	595,200	472,320	387,200	513,920	783,360	18,897,920
IRRIGATED AND IRRIGABLE AREAS							
18 Area irrigated.....	1939...acres.....	8,002	3,010	2,875	3,211	95,148	2,013
19 (a) Cropland harvested.....	1939...acres.....	7,158	2,970	2,975	3,188	92,845	2,003
20 (b) Crop failure.....	1939...acres.....	9	40	.....	6	357	10
21 (c) Pasture.....	1939...acres.....	535	.....	.....	17	1,846	.....
22 Area irrigated.....	1929...acres.....	14,391	741	3,944	5,072	81,098	3,292
23	1919...acres.....	10,258	8,267	3,040	.....	87,830	3,924
24 Increase or decrease (-), 1929-1939.....	percent.....	-41.4	306.2	-27.1	-36.7	13.1	-38.3
25 Irrigable area in enterprises.....	1940...acres.....	11,593	5,893	3,835	5,296	165,682	2,922
26	1930...acres.....	20,992	2,890	5,895	7,462	261,307	1,713
27	1920 ³ ...acres.....	23,611	10,575	4,340	.....	190,576	11,968
28 Excess of irrigable area over the area irrigated.....	1940...acres.....	3,581	2,988	960	2,085	70,514	909
29	1930...acres.....	6,601	2,149	2,041	2,790	177,209	1,491
30 Area works were capable of supplying with water.....	1940...acres.....	11,391	5,079	3,435	5,163	184,443	2,922
31	1930...acres.....	20,504	2,850	5,538	6,638	251,892	1,039
32	1920 ³ ...acres.....	21,022	10,475	4,340	.....	117,469	11,874
33 Increase or decrease (-), 1930-1940.....	percent.....	-44.1	109.8	-38.0	-22.2	-34.7	-37.7
34 Excess, capability of works over area irrigated.....	1940...acres.....	3,389	2,969	560	1,952	69,295	909
35	1930...acres.....	6,113	2,109	1,591	1,566	167,794	917
36 Proportion which area irrigated is of all lands in irrigated farms.....	1939...percent.....	25.2	45.1	17.1	15.5	42.8	10.8
37	1929...percent.....	61.2	21.9	18.4	18.3	16.4	33.3
38 Proportion which area irrigated is of area works were capable of supplying with water.....	1939...percent.....	70.2	50.3	83.7	62.2	57.9	98.9
39	1929...percent.....	70.2	26.0	71.2	76.4	33.4	89.8
CAPITAL INVESTED TO JANUARY 1							
40 Total investment in all enterprises.....	1940...dollars.....	161,473	51,140	16,010	217,479	2,091,047	19,398
41 (a) Cost of irrigation works and equipment.....	1940...dollars.....	161,473	51,140	16,010	217,479	2,091,047	19,398
42 (b) Investment in water rights (reported).....	1940...dollars.....	.....	.....	.....	.....	.....	.....
43 Total investment in all enterprises.....	1930...dollars.....	545,152	60,793	57,200	384,278	2,689,309	78,465
44	1920...dollars.....	530,222	118,310	55,650	.....	3,477,876	221,204
45 Increase or decrease (-), 1930-1940.....	percent.....	-70.4	-15.9	-72.0	-43.4	-22.2	-75.3
46 Average investment, based on area works were capable of supplying with water, per acre.....	1940...dollars.....	14.18	8.55	4.66	42.12	12.72	6.61
47	1930...dollars.....	26.59	21.33	10.33	57.80	10.49	.....
48	1920...dollars.....	25.22	11.89	12.82	.....	23.58	.....
49 Average investment per acre irrigated.....	1939...dollars.....	20.19	16.09	5.57	67.73	21.98	5.53
50 Estimated final investment in existing enterprises.....	1940...dollars.....	163,093	51,190	16,010	218,889	2,091,192	19,388
51	1930...dollars.....	546,402	60,793	57,200	384,578	2,689,308	78,465
52	1920...dollars.....	518,022	120,810	55,650	.....	3,479,026	227,204
53 Increase or decrease (-), 1930-1940.....	percent.....	-70.2	-15.8	-72.0	-43.1	-22.2	-75.3
54 Average investment, based on estimated final investment and irrigable area, per acre.....	1940...dollars.....	14.07	8.53	4.17	41.33	12.62	6.61
55	1930...dollars.....	26.03	21.01	9.56	48.92	10.29	.....
56	1920 ³ ...dollars.....	23.21	11.42	12.82	.....	21.67	.....
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
				Primary		Supplemental	
				Enterprises			
57 Enterprises reporting maintenance and operation.....	1939...number.....	55	20	13	537	344	8
58 Area irrigated in these enterprises.....	1939...acres.....	7,259	2,742	2,875	2,522	92,126	1,190
59 Cost of maintenance and operation.....	1939...dollars.....	23,341	8,501	2,208	11,209	295,627	1,315
60 Average cost, per acre irrigated.....	1939...dollars.....	3.22	3.10	0.77	4.44	3.21	0.82
61	1929...dollars.....	3.91	6.15	3.49	5.57	2.99	.....
62 Total annual charges (reported) ³	1939...dollars.....	10,768	.....	.....	.....	349,938	.....
63 Average annual charge per acre irrigated.....	1939...dollars.....	5.28	.....	.....	.....	5.95	.....
64 Area against which charges were assessed.....	1939...acres.....	2,038	.....	.....	.....	58,812	.....
65 Average annual charge per acre assessed.....	1939...dollars.....	5.28	.....	.....	.....	5.95	.....
66 Total charges collected ⁴	1939...dollars.....	3,215	.....	.....	.....	4,845	.....
67 Indebtedness to December 31 (reported) ⁴	1939...dollars.....	2,600	.....	.....	.....	1,753,704	.....
WATER DELIVERED TO IRRIGATORS							
68 Enterprises reporting water delivered.....	1939...number.....	53	20	13	726	344	8
69 Area irrigated in these enterprises.....	1939...acres.....	7,206	2,885	2,875	3,108	92,514	1,190
70 Water delivered in these enterprises.....	1939...acre-feet.....	10,855	7,334	3,824	2,895	208,086	1,331
71 Average water delivered per acre irrigated.....	1939...acre-feet.....	1.5	2.5	1.3	0.7	2.3	0.9
72 Average cost of water per acre irrigated.....	1939...dollars.....	3.93	3.17	0.77	4.48	4.45	0.82
DRAINAGE OF IRRIGATED LAND							
73 Enterprises reporting land drained or needing drainage.....	1939...number.....	26	6	6	179	195	5
74 Irrigable area in these enterprises.....	1939...acres.....	1,167	2,300	1,160	1,194	30,470	780
75 Irrigated area in these enterprises.....	1939...acres.....	2,752	816	880	952	18,795	759
76 Area for which drains have been installed.....	1939...acres.....	3,887	802	500	1,033	21,940	774
77 Additional area needing drainage.....	1939...acres.....	85	.....	600	78	1,636	.....

¹ Census of Agriculture. ² Data between census years not comparable (see headnote). ³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ⁴ Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons. ⁵ Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION — LOUISIANA

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PARISH TABLE II.—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939

[Parishes for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920 irrigation data omitted from any of the parishes listed are included under "All other parishes"]

ITEM (For definitions and explanations, see text)		STATE TOTAL	Acadia	Allen	Ascension	Avoyelles	Calcasieu
FARM VALUES, 1940*							
1	Land and buildings, all farms.....dollars..	353,873,506	16,134,128	2,202,615	3,281,671	9,149,218	6,484,163
2	Land and buildings, irrigated farms.....dollars..	45,182,979	11,646,772	813,370	359,640	116,350	3,365,136
Operated by—							
3	(a) Owners and managers.....dollars..	28,353,724	7,647,047	594,245	298,060	(1)	1,299,036
4	(b) Tenants.....dollars..	16,829,255	3,999,725	219,125	61,680	(1)	2,066,100
5	Average, land and buildings, per farm.....dollars..	6,420.77	8,917.00	4,595.31	32,694.55	19,391.67	6,611.27
6	per acre in farms.....dollars..	42.36	50.80	25.83	36.05	56.95	27.58
7	Buildings, irrigated farms reporting value.....number..	6,779	1,246	174	9	6	480
8	Total reported.....dollars..	8,019,180	1,891,242	147,560	88,800	33,000	595,378
9	Average, per irrigated farm reporting.....dollars..	1,182.94	1,517.85	848.05	9,866.67	5,500.00	1,240.37
10	per acre on all irrigated farms.....dollars..	7.52	8.25	4.69	8.90	16.15	4.88
11	Buildings, nonirrigated farms reporting value.....number..	138,949	2,530	1,113	1,349	5,063	1,242
12	Total reported.....dollars..	83,374,445	1,238,917	557,072	942,686	2,287,459	1,183,769
13	Average, per nonirrigated farm reporting.....dollars..	602.64	489.69	500.51	698.80	450.02	937.01
14	per acre on all nonirrigated farms.....dollars..	9.34	17.76	7.84	14.58	13.39	19.51
15	Implements and machinery, irrigated farms reporting value.....number..	6,220	1,172	163	10	6	452
16	Total reported.....dollars..	7,291,697	1,680,573	198,287	95,830	31,000	824,809
17	Average, per irrigated farm reporting.....dollars..	1,172.30	1,433.04	1,216.40	9,583.00	5,166.67	1,824.80
18	per acre, on all irrigated farms.....dollars..	6.84	7.33	6.30	9.61	15.17	6.76
19	Implements and machinery, nonirrigated farms reporting value.....number..	116,411	2,257	981	1,296	4,427	1,026
20	Total reported.....dollars..	28,513,155	427,664	100,734	304,066	818,166	241,741
21	Average, per acre, on all nonirrigated farms.....dollars..	3.19	6.13	1.42	4.70	4.79	4.05
ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
22	Enterprises.....1940.....number.....	2,583	328	37	8	4	91
23	.....1930.....number.....	2,355	348	25	10	4	42
24	.....1920.....number.....	1,373	328	32	6	.....	56
25	Average size of enterprise based on						
26	irrigable area.....1940.....acres.....	307	600	993	431	438	1,048
27	.....1930.....acres.....	361	568	731	427	215	2,722
28	.....1920.....acres.....	630	637	960	439	.....	2,627
29	Diversions dams.....1940.....number.....	105	3	.....	.....	.....	2
30	Main canals and laterals.....1940.....length, miles.....	2,421.0	667.2	86.0	4.0	2.0	327.8
31	.....1930.....length, miles.....	2,226	703	43	6	1	394
32	.....1920.....length, miles.....	3,243	818	77	8	.....	305
33	.....1940.....capacity, c.f.s.*.....	10,335	1,966	350	73	17	1,687
34	.....1930.....capacity, c.f.s.*.....	11,386	2,930	135	72	1	1,985
35	.....1920.....capacity, c.f.s.*.....	11,889	1,934	36	16	.....	1,580
36	Pipe lines.....1940.....length, miles.....	63.6	16.4	0.1	0.5	0.1	2.3
37	Storage dams.....1940.....number.....	114	4	.....	8	.....	2
38	Reservoirs.....1940.....number.....	75	4	.....	5	.....	2
39	.....1930.....number.....	85	6	2	3	.....	5
40	.....1920.....number.....	74	11	.....	.....	.....	3
41	.....1940.....capacity, acre-feet.....	34,199	160	.....	2,255	(c)	6,448
42	.....1930.....capacity, acre-feet.....	13,909	881	80	9	.....	460
43	.....1920.....capacity, acre-feet.....	7,632	2,170	.....	.....	.....	.....
44	Wells, flowing.....1940.....number.....	502	.....	.....	.....	.....	.....
45	.....1930.....number.....	807	.....	.....	.....	.....	5
46	.....1920.....number.....	9	.....	.....	.....	.....	.....
47	.....1940.....yield, g.p.m.....	12,695	.....	.....	.....	.....	.....
48	.....1930.....yield, g.p.m.....	31,961	.....	.....	.....	.....	.....
49	.....1920.....yield, g.p.m.....	6,255	.....	.....	.....	.....	5,800
50	Wells, pumped.....1940.....number.....	1,504	235	26	.....	1	22
51	.....1930.....number.....	1,989	308	23	1	1	16
52	.....1920.....number.....	812	280	32	.....	.....	28
53	.....1940.....yield, g.p.m.....	1,626,613	476,965	60,400	(c)	.....	50,600
54	.....1930.....yield, g.p.m.....	1,959,811	637,055	49,500	1,000	2,500	88,450
55	.....1920.....yield, g.p.m.....	1,607,637	426,300	89,700	.....	.....	106,800
56	Pumping plants.....1940.....number.....	2,326	379	40	10	7	100
57	.....1930.....number.....	1,790	379	27	8	4	54
58	.....1920.....number.....	1,250	347	45	7	.....	57
59	Prime movers.....1940.....capacity, hp.....	89,574	29,088	3,117	410	151	5,916
60	.....1930.....capacity, hp.....	88,413	31,793	1,962	300	57	7,559
61	.....1920.....capacity, hp.....	85,623	27,279	5,580	375	.....	7,947
62	Pumps.....1940.....capacity, g.p.m.....	6,453,487	1,648,465	114,620	46,000	10,000	723,550
63	.....1930.....capacity, g.p.m.....	6,814,789	1,393,978	96,700	33,600	3,050	916,562
64	.....1920.....capacity, g.p.m.....	4,968,686	1,509,395	161,100	9,600	.....	745,200
65	Pumping lift, from all sources.....1940.....average, feet.....	32	47	41	16	23	18
66	.....1930.....average, feet.....	37	47	49	14	22	22
67	.....1920.....average, feet.....	32	37	36	15	.....	21
68	from pumped wells.....1940.....average, feet.....	45	69	54	.....	(c)	35
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁷							
69	Enterprises reporting pay roll.....number.....	107	42	4	.....	.....	8
70	Irrigated area in these enterprises.....acres.....	230,726	58,642	9,040	.....	.....	47,060
71	Wages and salaries paid and payable.....dollars..	502,320	170,537	12,416	.....	.....	93,467
72	Persons employed during week ending April 29.....number..	802	279	21	.....	.....	104

* Census of Agriculture.

1 Data are included only in State totals because less than 3 farms reported in the 1940 Census.

2 Includes interparish projects counted as independent enterprises for each parish into which they extend. For actual number of enterprises see State table 1.

3 For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

4 Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

5 Includes siphons and farm pipe lines reported.

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

7 Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION — LOUISIANA

PARISH TABLE II—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940,

[Parishes for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		Cameron	Evangeline	Iberia	Iberville	Jefferson Davis	Lafayette
FARM VALUES, 1940*							
1	Land and buildings, all farms.....dollars..	1,474,345	7,084,174	6,417,047	4,074,194	10,811,857	9,668,839
2	Land and buildings, irrigated farms.....dollars..	323,020	2,241,195	401,870	115,680	8,938,288	374,760
Operated by—							
3	(a) Owners and managers.....dollars..	75,500	1,429,880	342,920	71,350	5,104,322	219,740
4	(b) Tenants.....dollars..	247,520	811,315	58,950	44,330	3,833,966	155,020
5	Average, land and buildings, per farm.....dollars..	3,549.67	3,183.52	22,326.11	7,712.00	11,638.40	7,973.02
6	per acre in farms.....dollars..	15.17	36.92	37.13	38.12	40.24	71.92
7	Buildings, irrigated farms reporting value.....number..	79	692	14	5	729	47
8	Total reported.....dollars..	41,810	455,685	81,300	34,100	1,328,284	68,100
9	Average, per irrigated farm reporting.....dollars..	528.24	658.50	5,807.14	6,820.00	1,822.06	1,448.94
10	per acre on all irrigated farms.....dollars..	1.96	7.51	7.51	11.24	5.98	13.07
11	Buildings, nonirrigated farms reporting value.....number..	701	3,797	1,247	675	845	3,327
12	Total reported.....dollars..	297,392	1,528,445	1,718,045	909,147	474,836	1,990,144
13	Average, per nonirrigated farm reporting.....dollars..	424.24	402.28	1,377.74	1,347.33	561.94	599.68
14	per acre on all nonirrigated farms.....dollars..	5.89	12.42	17.25	10.04	9.79	15.17
15	Implements and machinery, irrigated farms reporting value.....number..	83	638	18	5	695	46
16	Total reported.....dollars..	165,115	387,018	109,325	28,110	1,239,419	36,845
17	Average, per irrigated farm reporting.....dollars..	1,989.34	606.61	6,073.61	5,622.00	1,783.34	800.88
18	per acre, on all irrigated farms.....dollars..	7.76	6.38	10.10	9.26	5.58	7.07
19	Implements and machinery, nonirrigated farms reporting value.....number..	524	3,114	909	678	694	2,686
20	Total reported.....dollars..	94,247	401,225	750,404	392,632	159,374	573,277
21	Average, per acre, on all nonirrigated farms.....dollars..	1.87	3.27	7.53	4.33	3.29	1.36
ENTERPRISES AND IRRIGATION WORKS							
JANUARY 1							
22	Enterprises.....1940.....number.....	15	278	17	5	299	26
23	.....1930.....number.....	4	96	5	3	244	4
24	.....1920.....number.....	5	83	43	7	269	14
25	Average size of enterprise based on irrigable area.....1940.....acres.....	2,203	84	394	284	609	199
26	.....1930.....acres.....	1,595	212	573	305	688	494
27	.....1920.....acres.....	862	227	280	363	713	409
28	Diversion dams.....1940.....number.....	1	52	5	2	5	1
29	Main canals and laterals.....1940.....length, miles.....	77.0	56.6	13.7	15.1	461.6	11.1
30	.....1930.....length, miles.....	10	178	15	.....	390	6
31	.....1920.....length, miles.....	10	56	67	.....	413	24
32	.....1940.....capacity, c.f.s. ³	793	479	93	74	1,416	13
33	.....1930.....capacity, c.f.s. ³	86	1,091	394	.....	1,800	18
34	.....1920.....capacity, c.f.s. ³	8	127	381	9	1,850	53
35	Pipe lines ⁴.....1940.....length, miles.....	.....	1.3	0.1	0.4	1.9	.....
36	Storage dams.....1940.....number.....	1	81	.....	3	2	.....
37	Reservoirs.....1940.....number.....	2	35	.....	2	2	.....
38	.....1930.....number.....	.....	34	.....	.....	.....	.....
39	.....1920.....number.....	.....	10	1	2	4	.....
40	.....1940.....capacity, acre-feet.....	(⁵)	3,068	.....	(⁵)	(⁵)	.....
41	.....1930.....capacity, acre-feet.....	.....	5,006	.....	.....	.....	.....
42	.....1920.....capacity, acre-feet.....	.....	255	2,041	43	55	.....
43	Wells, flowing.....1940.....number.....	.....	.....	.....	.....	.....	.....
44	.....1930.....number.....	.....	.....	.....	.....	.....	.....
45	.....1920.....number.....	.....	.....	1	.....	.....	.....
46	.....1940.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....
47	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....
48	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....
49	Wells, pumped.....1940.....number.....	1	39	4	.....	245	26
50	.....1930.....number.....	.....	42	.....	.....	232	3
51	.....1920.....number.....	1	26	35	.....	259	15
52	.....1940.....yield, g.p.m.....	(⁵)	73,142	4,500	.....	611,405	34,000
53	.....1930.....yield, g.p.m.....	.....	98,650	.....	.....	691,965	6,100
54	.....1920.....yield, g.p.m.....	2,600	59,150	40,580	.....	631,700	28,900
55	Pumping plants.....1940.....number.....	20	180	24	5	344	28
56	.....1930.....number.....	3	68	6	2	270	5
57	.....1920.....number.....	5	57	46	9	282	14
58	Prime movers.....1940.....capacity, hp.....	1,461	4,169	764	173	22,439	1,088
59	.....1930.....capacity, hp.....	150	1,235	455	100	22,260	290
60	.....1920.....capacity, hp.....	187	2,451	1,826	435	21,565	880
61	Pumps.....1940.....capacity, g.p.m.....	286,355	206,796	66,200	13,840	1,523,870	36,500
62	.....1930.....capacity, g.p.m.....	38,800	136,720	28,100	7,500	1,381,248	6,500
63	.....1920.....capacity, g.p.m.....	93,094	71,070	99,275	25,900	1,093,050	28,900
64	Pumping lift, from all sources.....1940.....average, feet.....	11	24	17	12	41	50
65	.....1930.....average, feet.....	9	31	22	18	45	40
66	.....1920.....average, feet.....	17	34	19	13	38	36
67	from pumped wells.....1940.....average, feet.....	(⁵)	62	46	.....	49	54
PAY ROLL AND NUMBER OF EMPLOYEES							
1939*							
68	Enterprises reporting pay roll.....number.....	4	14	.....	.....	15	2
69	Irrigated area in these enterprises.....acres.....	6,970	6,492	.....	.....	44,016	(⁵)
70	Wages and salaries paid and payable.....dollars.....	18,276	6,634	.....	.....	77,455	(⁵)
71	Persons employed during week ending April 29.....number.....	33	31	.....	.....	105	(⁵)

* Census of Agriculture.

¹ Data between census years not comparable (see headnote).² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.³ Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

CENSUS OF IRRIGATION — LOUISIANA

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1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939—Continued

irrigation data omitted from any of the parishes listed are included under "All other parishes"

Livingston	Orleans	Plaquemines	Rapides	St. James	St. Landry	St. Martin	St. Mary	Tangipahoa	Vermilion	All other parishes ¹	
2,876,817	1,947,990	2,532,777	11,056,102	2,638,691	14,841,919	5,844,294	3,928,530	6,387,917	14,658,793	210,377,425	1
507,461	520,250	153,785	206,232	474,190	1,371,787	302,985	222,033	1,586,450	10,207,494	934,201	2
443,076	485,500	98,535	180,932	335,890	1,000,920	185,345	176,733	1,213,100	6,295,778	747,715	3
64,405	34,750	55,250	25,300	138,200	370,867	117,050	45,300	373,350	3,911,718	186,486	4
1,714.46	20,009.62	2,135.90	29,461.71	10,777.05	6,179.22	0,886.25	15,859.50	1,831.93	5,832.85	21,231.84	5
50.54	1,106.91	38.41	55.45	34.51	43.21	45.74	13.22	76.64	45.82	49.89	6
294	23	69	6	34	219	35	14	854	1,708	42	7
202,871	168,200	49,160	47,750	111,460	305,019	42,405	76,700	594,815	1,375,341	277,200	8
690.04	7,813.04	712.46	7,958.33	3,278.24	1,392.78	1,211.57	5,692.86	696.50	805.23	6,600.00	9
20.20	357.87	12.28	12.84	8.11	9.61	6.40	4.74	28.73	6.19	14.80	10
1,828	168	512	3,244	333	7,535	2,259	351	3,570	1,604	85,043	11
824,794	263,207	772,684	2,900,809	524,174	3,322,151	1,299,463	993,746	1,975,433	840,094	56,539,068	12
451.20	1,566.71	1,509.15	894.21	1,574.10	440.90	575.24	2,807.18	553.34	529.73	594.88	13
11.27	22.77	18.47	13.09	11.95	13.03	10.66	10.30	11.48	9.05	8.29	14
279	24	68	7	42	208	39	11	766	1,453	35	15
71,427	19,285	12,422	37,773	100,360	269,963	61,700	53,020	173,785	1,591,720	103,911	16
256.01	803.64	182.68	5,396.14	2,389.52	1,297.90	1,582.05	4,820.00	226.87	1,095.47	2,968.89	17
7.11	41.03	3.10	10.16	7.30	8.50	9.81	3.16	8.40	7.10	5.55	18
1,654	127	328	2,490	359	6,873	2,098	246	3,051	1,371	79,302	19
212,711	90,016	157,826	1,022,276	333,287	1,940,662	497,674	603,228	503,827	405,867	19,082,051	20
2.91	7.79	3.77	4.61	7.60	5.26	4.08	6.25	2.83	4.32	2.80	21
158	14	37	6	24	60	22	13	762	365	14	22
1	1	86	2	9	104	7	11	1,163	154	32	23
.....	.....	157	.....	21	116	32	13	.....	105	20	24
8	23	30	260	345	193	273	295	7	454	209	25
.....	.....	85	.....	389	202	413	544	7	1,697	.....	26
.....	.....	60	.....	291	204	330	334	.....	973	460	27
.....	.....	.....	.....	14	1	7	2	.....	2	.....	28
.....	.....	14.0	2.0	30.0	25.2	27.4	6.0	.....	585.8	8.5	29
.....	.....	2	.....	8	92	10	11	.....	385	2	30
.....	.....	309	.....	60	92	48	16	.....	917	23	31
.....	2	50	22	228	235	69	155	3	2,567	52	32
.....	.....	2	.....	20	418	26	57	.....	2,286	65	33
.....	.....	726	.....	101	2,309	232	28	.....	1,767	732	34
6.9	3.1	2.4	0.2	5.3	0.4	0.3	.....	20.2	1.0	0.7	35
.....	.....	.....	.....	9	.....	.....	.....	.....	2	2	36
.....	.....	.....	.....	17	.....	.....	.....	.....	1	4	37
.....	.....	2	.....	2	26	.....	.....	.....	1	38	38
.....	.....	.....	.....	.....	38	.....	.....	.....	.....	5	39
.....	.....	.....	.....	16,625	.....	.....	.....	(5)	(5)	160	40
.....	.....	65	.....	28	1,278	.....	.....	60	.....	54	41
.....	.....	.....	.....	.....	2,008	.....	.....	.....	.....	.....	42
179	.....	.....	.....	.....	.....	.....	.....	322	.....	1	43
.....	.....	.....	.....	.....	.....	.....	.....	806	.....	1	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	45
5,478	.....	.....	.....	.....	.....	.....	.....	7,067	.....	(5)	46
.....	.....	.....	.....	.....	.....	.....	.....	31,913	.....	48	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	425	30	48
167	.....	.....	3	18	2	.....	.....	621	93	1	49
.....	.....	5	.....	39	.....	.....	.....	660	58	1	50
.....	.....	.....	.....	28	.....	.....	.....	.....	104	.....	51
4,530	.....	.....	800	.....	37,050	(5)	.....	36,968	124,213	(5)	52
.....	.....	312	.....	.....	136,100	.....	.....	29,629	217,350	200	53
.....	.....	.....	.....	.....	51,600	15,000	.....	.....	155,307	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55
101	.....	9	10	23	60	23	13	549	396	15	56
.....	.....	38	.....	9	86	7	13	627	165	19	57
.....	.....	14	.....	21	87	32	15	.....	185	27	58
216	.....	81	123	751	2,239	500	359	1,333	10,879	297	59
.....	.....	145	.....	455	4,728	345	605	1,773	8,787	414	60
.....	.....	169	.....	990	4,320	1,236	470	.....	8,664	1,254	61
3,720	.....	5,518	8,400	90,000	141,170	42,050	70,550	37,190	1,352,583	26,110	62
.....	.....	5,330	.....	26,400	201,350	24,090	81,800	29,541	1,483,400	89,140	63
.....	.....	3,300	.....	44,800	124,200	96,100	13,900	.....	809,502	41,460	64
23	.....	12	18	12	31	17	8	41	11	23	65
.....	.....	17	.....	11	30	21	14	38	24	17	66
.....	.....	5	.....	13	56	20	15	.....	19	.....	67
23	.....	.....	20	.....	68	(5)	.....	41	23	(5)	68
.....	.....	.....	.....	(5)	1	.....	.....	.....	11	.....	69
.....	.....	.....	.....	(5)	.....	.....	.....	.....	55,848	.....	70
.....	.....	.....	.....	(5)	1,728	.....	.....	.....	120,853	.....	71
.....	.....	.....	.....	(5)	2,151	.....	.....	.....	209	.....	72
.....	.....	.....	.....	.....	11	.....	.....	.....	.....	.....	73

¹ Includes siphons and farm pipe lines reported.

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

³ Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION — MONTANA

STATE TABLE 1.—IRRIGATION SUMMARY FOR THE STATE: 1890 TO 1940

ITEM (For definitions and explanations, see text)	CENSUS OF—						
	1940	1935	1930	1920	1910	1900	1890
Approximate land area of State ¹.....acres....	* 93,642,240	93,523,840	93,523,840	* 93,523,840	93,568,640	93,508,640	93,568,640
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number...	41,823	50,564	47,495	57,077	26,214	13,370	5,603
Land in all farms.....acres....	46,451,594	47,511,868	44,559,152	35,070,636	13,545,603	11,844,454	1,064,197
Farms irrigated: ²							
Farms.....number...	15,087	13,864	11,925	10,807	8,970	8,043	3,706
Increase or decrease (-) over preceding census.....percent..	⁴ 23.5	.....	10.3	20.5	11.5	117.0	.....
Proportion of all farms.....percent..	36.1	27.4	25.1	18.7	34.2	60.2	66.1
Land in farms.....acres....	16,022,060	(⁵)	12,032,619	(⁵)	(⁵)	(⁵)	(⁵)
Proportion of all farm land.....percent..	34.5	(⁵)	26.9	(⁵)	(⁵)	(⁵)	(⁵)
Area irrigated.....acres....	⁶ 1,587,602	⁷ 1,272,054	⁸ 1,343,035	(⁹)	(⁹)	951,154	350,582
Increase or decrease (-) over preceding census.....percent..	⁴ 18.2	.....	.....	.....	.....	171.3	.....
Proportion of total land area of State.....percent..	1.7	1.4	1.4	.....	.....	1.0	0.4
Proportion of all farm land.....percent..	3.4	2.7	3.0	.....	.....	8.0	17.8
Value of irrigated farms (land and buildings).....dollars..	163,836,136	(⁵)	100,057,936	(⁵)	(⁵)	(⁵)	(⁵)
Average per farm.....dollars..	10,859.42	(⁵)	15,937.78	(⁵)	(⁵)	(⁵)	(⁵)
Average per acre.....dollars..	10.23	(⁵)	15.80	(⁵)	(⁵)	(⁵)	(⁵)
Value of farm implements and machinery ¹⁰.....dollars..	16,967,155	(⁵)	14,969,479	(⁵)	(⁵)	(⁵)	(⁵)
Average per farm ¹⁰.....dollars..	1,124.62	(⁵)	1,255.30	(⁵)	(⁵)	(⁵)	(⁵)
Average per acre ¹⁰.....dollars..	1.06	(⁵)	1.24	(⁵)	(⁵)	(⁵)	(⁵)
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number...	5,555	(⁵)	4,461	6,035	5,534	(⁵)	(⁵)
Farms irrigated.....number...	17,094	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Area irrigated.....acres....	1,711,409	(⁵)	1,594,912	1,681,729	1,679,084	(⁵)	(⁵)
Area existing works were capable of supplying with water.....acres....	2,344,390	(⁵)	2,276,000	2,753,498	2,205,155	(⁵)	(⁵)
Area irrigable.....acres....	2,688,214	(⁵)	2,622,423	¹¹ 4,329,148	¹¹ 3,515,602	(⁵)	(⁵)
Additional area existing works were capable of supplying with water.....acres....	632,981	(⁵)	681,088	1,071,769	526,071	(⁵)	(⁵)
Additional irrigable area in enterprises not supplied with water.....acres....	876,805	(⁵)	1,027,511	¹¹ 2,647,419	¹¹ 1,836,518	(⁵)	(⁵)
Investment in irrigation enterprises.....dollars..	37,952,505	(⁵)	50,319,204	52,143,363	22,970,958	4,583,073	1,623,195
Increase or decrease (-) over preceding census.....percent..	⁴ 33.9	(⁵)	-3.5	127.0	390.5	188.5	.....
Average per acre based on area works were capable of supplying with water.....dollars..	28.73	(⁵)	22.11	18.94	10.42	(⁵)	(⁵)
Increase or decrease (-) over preceding census.....percent..	⁴ 20.9	(⁵)	16.7	81.8	.....	.....	.....
Estimated completed cost of existing enterprises.....dollars..	75,174,645	(⁵)	58,489,575	70,079,028	32,382,077	(⁵)	(⁵)
Average per acre based on irrigable area in enterprises.....dollars..	29.04	(⁵)	22.30	¹¹ 16.19	¹¹ 9.21	(⁵)	(⁵)
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	0.73	(⁵)	0.87	1.26	0.89	(⁵)	(⁵)

¹Includes 153,600 acres in Yellowstone National Park. ²A decrease of 44,800 acres was due to the building of several reservoirs for irrigation projects. ³Relates to farms reporting irrigated cropland harvested and/or irrigated pasture, 1940 Census; farms reporting irrigated cropland harvested, 1935 Census; farms reporting irrigated crops, 1930, 1920, and 1910 Censuses; and farms reporting irrigated land, 1900 and 1890 Censuses. ⁴Increase or decrease represented by 1940 figures are with reference to 1930 figures, not 1935. ⁵Not available. ⁶Irrigated land from which crops were harvested plus 228,476 acres of irrigated land used only for pasture. ⁷Irrigated land from which crops were harvested. ⁸Acres of irrigated crops including some duplication where 2 or more crops were harvested from same land. ⁹Data were secured from crops irrigated but the returns were considered relatively incomplete. ¹⁰Total is for irrigated farms reporting this item. Averages are based on all irrigated farms. ¹¹For 1920 and 1910 relates to total area in enterprise. Irrigable areas for those years were not reported. ¹²The land area shown for 1940 represents re-determinations by the Bureau of the Census, and, therefore, differs from that shown for earlier years.

STATE TABLE 2.—CENSUS OF AGRICULTURE—NUMBER OF FARMS, FARM ACREAGE ACCORDING TO USE, AND SPECIFIED FARM VALUES FOR IRRIGATED AND NONIRRIGATED FARMS, BY TENURE OF OPERATOR, 1940

ITEM (For definitions and explanations, see text)	Farms	Land in farms	CROPLAND HARVESTED 1939		Irrigated pasture 1939	VALUE OF FARMS (land and buildings)		VALUE OF BUILDINGS		VALUE OF IMPLEMENTS AND MACHINERY	
			Total	Irrigated ¹		Total	Average per acre ²	Total	Average per acre ²	Total	Average per acre ²
All farms.....	Number 41,823	Acres 46,451,594	Acres 5,748,069	Acres 1,359,126	Acres 228,476	Dollars 350,178,461	Dollars 7.54	Dollars 66,610,875	Dollars 1.43	Dollars 43,193,602	Dollars 0.93
Owners and managers.....	30,181	38,691,217	4,410,260	1,021,441	183,638	278,677,767	7.22	53,752,421	1.39	33,237,340	0.86
Tenants.....	11,642	7,860,377	1,337,809	337,685	44,838	71,500,694	9.10	12,858,454	1.64	9,956,262	1.27
Irrigated farms, total.....	15,087	16,022,060	1,783,790	1,359,126	228,476	163,836,136	10.23	33,750,271	2.11	16,967,155	1.06
Owners and managers.....	10,858	14,015,361	1,367,514	1,021,441	183,638	129,225,314	9.22	27,308,944	1.95	12,735,851	0.91
Tenants.....	4,229	2,006,699	416,282	337,685	44,838	34,610,822	17.25	6,441,327	3.21	4,231,304	2.11
Wholly irrigated farms.....	10,048	7,814,138	991,404	991,404	169,724	95,193,995	12.18	21,694,423	2.78	10,121,619	1.30
Owners and managers.....	7,121	6,814,241	742,986	742,986	136,725	74,319,287	10.91	17,258,151	2.53	7,291,729	1.07
Tenants.....	2,927	999,897	248,418	248,418	32,999	20,874,708	20.88	4,436,272	4.44	2,829,890	2.83
Partly irrigated farms.....	5,039	8,207,922	792,362	367,722	58,752	68,642,141	8.36	12,055,848	1.47	6,845,536	0.83
Owners and managers.....	3,737	7,201,120	624,528	278,455	46,913	54,906,027	7.62	10,060,793	1.40	5,444,122	0.76
Tenants.....	1,302	1,006,802	167,834	89,267	11,839	13,736,114	13.64	2,005,055	1.99	1,401,414	1.39
Nonirrigated farms, total.....	26,736	30,429,534	3,964,303	.....	.....	186,342,325	6.12	32,860,604	1.08	26,225,447	0.86

¹Does not include irrigated fallow land or land in young irrigated crops not harvested or in irrigated crops that failed.

²Based on all land in farms for each tenure group.

CENSUS OF IRRIGATION - MONTANA

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STATE TABLE 3.—NUMBER OF ENTERPRISES, IRRIGABLE AREA, AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1940; IRRIGATED AREA, 1939, 1929, AND 1919; WATER DELIVERED TO IRRIGATORS, 1939; BY SOURCE OF WATER SUPPLY

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	1940			IRRIGATED AREA				DELIVERY OF WATER TO IRRIGATORS, 1939					
	Enter- prises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Irrigated area reporting—			Quantity delivered per acre ¹	Cost ¹	
								Quantity	Cost	Quantity and cost		Per acre	Per acre- foot
Number	Acres	Acres	Acres	Acres	Acres	Percent	Acres	Acres	Acres	Acres-foot	Dollars	Dollars	
Total.....	5,555	2,588,214	2,344,390	1,711,409	1,594,912	1,681,729	7.3	1,524,390	1,656,110	1,483,338	2.2	0.91	0.41
Primary sources:													
Streams, gravity.....	4,427	2,154,007	1,989,640	1,475,894	1,392,161	1,515,212	6.0	1,294,767	1,424,963	1,256,743	2.1	0.71	0.33
Streams, pumped.....	381	73,854	58,205	35,925	38,620	15,743	-7.0	35,517	34,886	34,614	2.1	2.86	1.37
Streams, gravity and pumped.....	49	283,649	228,320	145,679	56,970	19,872	155.7	144,223	145,667	144,216	1.8	1.43	0.80
Wells, pumped.....	62	1,040	980	844	243	139	247.3	844	777	777	1.7	4.64	2.70
Wells, flowing.....	24	779	753	698	821	212	-15.0	93	33	33	6.4	0.67	0.10
Wells, pumped and flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity.....	19	19,971	19,932	6,460	4,905	16,653	32.1	6,398	6,482	6,382	4.7	1.37	0.29
Lakes, pumped.....	28	500	308	244	5,528	79	-95.6	244	225	225	1.7	4.94	2.49
Springs.....	272	13,099	11,789	10,215	10,947	14,945	-6.7	9,723	9,477	8,996	2.1	0.63	0.30
Springs and streams.....	96	21,005	20,403	17,371	.....	.....	.....	16,467	16,586	16,133	1.8	0.32	0.18
Stored storm water.....	46	3,830	3,620	2,531	4,826	3,280	-47.6	2,518	2,182	2,167	0.8	1.02	1.29
City water.....	1	(2)	(2)	(2)	335	15	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Sewage.....	1	(2)	(2)	(2)	5	245	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Streams, gravity; wells, pumped...	19	1,653	1,636	1,496	2,694	155	-44.5	1,396	1,248	1,248	1.5	0.75	0.48
Streams, gravity; wells, flowing...	1	(2)	(2)	(2)	.....	6,068	.....	(2)	(2)	(2)	(2)	(2)	(2)
Streams, pumped; wells, pumped...	2	(2)	(2)	(2)	.....	.....	.....	(2)	(2)	(2)	(2)	(2)	(2)
Waste water, seepage or drainage...	25	1,485	1,482	1,448	.....	.....	.....	1,123	1,363	1,068	2.1	0.51	0.25
Other mixed.....	49	13,181	13,171	12,467	76,732	89,070	-83.8	10,957	12,124	10,619	2.0	1.06	0.53
Other and not reported.....	.....	.....	.....	.....	123	41	.....	.....	.....	.....	.....	.....	.....
Supplemental sources: ⁵													
Streams, gravity and/or storage...	44	270,824	233,824	168,502	.....	.....	.....	123,164	145,930	123,149	1.3	0.70	0.56
Streams, pumped.....	8	367	367	304	.....	.....	.....	304	299	299	1.3	2.03	1.57
Wells, pumped.....	1	(2)	(2)	(2)	.....	.....	.....	(2)	(2)	(2)	(2)	(2)	(2)
Wells, flowing.....	1	(2)	(2)	(2)	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Based on enterprises reporting both quantity and cost of water, assuming (a) that for enterprises serving 1 to 4 farms the cost of water is cost of maintenance and operation, and for enterprises serving 5 or more farms it is total annual charges, and (b) that enterprises reporting cost and quantity of water had used the same quantity of water per acre as all enterprises which reported water delivered. ²Data are included only in totals because less than 3 enterprises reported in the 1940 Census. ³Areas shown under "Supplemental sources" are a part of areas shown under "Primary sources" and therefore are not again added into the totals (see text).

STATE TABLE 4.—INVESTMENT, 1940 AND 1930; AND COST OF MAINTENANCE AND OPERATION, 1939, 1929, AND 1919; BY SOURCE OF WATER SUPPLY

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	INVESTMENT						COST OF MAINTENANCE AND OPERATION ¹							
	1940			1930			Average per acre increase or decrease (-) 1930-40	1939		1929		Average per acre increase or decrease (-) 1930-40	1919	
	Amount	Pro- por- tion of total	Aver- age per acre ²	Amount	Pro- por- tion of total	Aver- age per acre ²		Irrigated area reporting	Aver- age per acre	Irrigated area reporting	Aver- age per acre		Irrigated area reporting	Aver- age per acre
Total.....	Dollars 67,352,505	Percent 100.0	Dollars 28.73	Dollars 50,319,204	Percent 100.0	Dollars 22.11	Dollars 6.62	Acres 1,650,373	Dollars 0.79	Acres 1,476,854	Dollars 0.87	Dollars -0.14	Acres 1,369,651	Dollars 1.26
Primary sources:														
Streams, gravity.....	43,431,164	64.5	21.89	41,292,784	82.1	20.91	0.38	1,419,226	0.58	1,280,361	0.77	-0.19	1,249,390	1.18
Streams, pumped.....	1,957,853	2.9	33.64	2,208,928	4.4	43.23	-9.59	34,886	3.47	37,957	2.36	1.11	11,414	5.63
Streams, gravity and pumped.....	15,406,871	22.9	67.48	4,374,095	8.7	41.88	25.60	145,667	1.31	56,930	1.91	-0.60	19,872	1.77
Wells, pumped.....	34,741	0.1	35.45	14,259	(3)	49.34	-13.89	777	4.64	171	9.38	-4.74	49	5.41
Wells, flowing.....	13,290	(2)	17.65	9,025	(5)	7.69	9.96	33	0.67	753	1.62	-0.95	154	7.24
Wells, pumped and flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity.....	491,592	0.7	24.66	123,326	0.2	9.56	15.1	6,462	1.11	4,348	0.45	0.66	8,063	5.46
Lakes, pumped.....	22,997	(3)	74.67	194,880	0.4	18.94	55.73	225	4.34	5,528	4.52	-0.18	41	11.07
Springs.....	91,284	0.1	7.74	79,313	0.1	6.08	1.66	9,477	0.61	9,369	0.70	-0.09	7,821	1.57
Springs and streams.....	86,464	0.1	4.24	.....	.....	.....	.....	16,586	0.32	.....	.....	.....	.....	.....
Stored storm water.....	45,379	0.1	12.54	131,355	0.3	18.52	-5.98	2,182	1.03	4,714	1.32	-0.29	1,957	5.74
City water.....	(4)	(4)	(4)	4,050	(3)	8.77	(4)	(4)	(4)	312	3.30	(4)	.....	.....
Sewage.....	(4)	(4)	(4)	25	(8)	5.00	(4)	(4)	(4)	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped...	15,411	(5)	9.42	25,267	(5)	5.59	3.83	1,248	0.75	1,425	1.11	-0.36	150	6.67
Streams, gravity; wells, flowing...	(4)	(4)	(4)	.....	.....	.....	.....	(4)	(4)	.....	.....	.....	6,065	1.41
Streams, pumped; wells, pumped...	(4)	(4)	(4)	.....	.....	.....	.....	(4)	(4)	.....	.....	.....	.....	.....
Waste water, seepage or drainage...	4,212	(3)	2.84	.....	.....	.....	.....	1,363	0.72	.....	.....	.....	.....	.....
Other mixed.....	279,295	0.4	21.20	1,955,681	3.7	19.55	1.65	12,124	0.95	74,883	0.79	0.16	64,675	0.99
Other and not reported.....	.....	.....	.....	805	(5)	6.54	.....	.....	.....	103	0.19	.....	.....	.....
Supplemental sources: ⁵														
Streams, gravity and/or storage...	5,457,987	8.1	23.34	.....	.....	.....	.....	168,462	0.12	.....	.....	.....	.....	.....
Streams, pumped.....	10,940	(3)	28.27	.....	.....	.....	.....	299	2.03	.....	.....	.....	.....	.....
Wells, pumped.....	(4)	(4)	(4)	.....	.....	.....	.....	(4)	(4)	.....	.....	.....	.....	.....
Wells, flowing.....	(4)	(4)	(4)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Based on irrigated area in enterprises reporting cost of maintenance and operation. ²Based on area works were capable of supplying with water. ³Less than one-tenth of 1 percent. ⁴Data are included only in totals because less than 3 enterprises reported in the 1940 Census. ⁵Areas shown under "Supplemental sources" are a part of areas shown under "Primary sources" and therefore are not again added into the totals (see text).

CENSUS OF IRRIGATION—MONTANA

STATE TABLE 5.—AREAS, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920

ITEM AND TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	CENSUS OF—				Increase or decrease (-) 1930-40 primary enter- prises	ITEM AND TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	CENSUS OF—				Increase or decrease (-) 1930-40 primary enter- prises
	1940		1930	1920			1940		1930	1920	
	Primary enter- prises	Supple- mental enter- prises ¹	Primary enter- prises	Primary enter- prises			Primary enter- prises	Supple- mental enter- prises ¹	Primary enter- prises	Primary enter- prises	
AREA IRRIGATED						AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER—Continued					
Total.....	Acres 1,711,409	Acres 168,863	Acres 1,594,912	Acres 1,681,720	Percent 7.3						
Individual and partnership.....	827,564	5,504	885,274	976,615	-6.5	Bureau of Reclamation ²	Acres 323,197	Acres	Acres 247,756	Acres 172,206	Percent 30.4
Cooperative, incorporated.....	285,029	132,781	418,862	393,257	5.9	Office of Indian Affairs ²	241,184	.....	220,870	215,940	9.2
Cooperative, unincorporated....	159,344	496	.....	35,153	-14.8	State.....	³ 28,353	.....	360	50	(⁴)
Irrigation district.....	71,434	30,072	83,870	34,115	80.5	City and/or sewage.....	(⁵)	.....	.....	390	(⁵)
Commercial.....	40,384		22,375	88,291	89.2	Other.....	.....	.....	17,000	84,478	.....
Bureau of Reclamation ²	185,002	.....	98,327	98,867	76.1						
Office of Indian Affairs ²	133,542	.....	75,844	98,867	89.2	IRRIGABLE AREA ⁵					
State.....	³ 9,110	.....	390	320	(⁴)	Total.....	2,588,214	271,269	2,622,423	4,329,148	-1.3
City and/or sewage.....	(⁵)	.....	10,000	55,071	(⁵)	Individual and partnership.....	1,030,610	6,238	1,243,248	2,372,086	-17.1
Other.....	.....	.....	.....	.....	.....	Cooperative, incorporated.....	371,143	182,243	544,738	699,310	8.0
AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER						Cooperative, unincorporated..	217,120	716	141,648	71,687	-32.6
Total.....	2,344,390	234,269	2,276,000	2,753,408	3.0	Irrigation district.....	95,511	74,002	20,780	39,160	349.6
Individual and partnership.....	988,782	6,238	1,099,699	1,617,617	-10.3	Commercial.....	133,943		311,471	436,982	14.8
Cooperative, incorporated.....	356,348	177,243	524,077	553,352	8.7	Bureau of Reclamation ²	357,559	.....	334,178	526,680	4.2
Cooperative, unincorporated....	213,532	716	137,458	70,650	-39.8	Office of Indian Affairs ²	348,087	.....	360	100	(⁴)
Irrigation district.....	82,711	50,072	28,780	38,215	290.1	State.....	³ 34,241	8,000	.....	530	(⁵)
Commercial.....	112,283		City and/or sewage.....	(⁵)	17,000	182,603
						Other.....	.....	.....	.....	.....	.....

¹ Irrigated areas shown under "Supplemental enterprises" are a part of irrigated areas in "Primary enterprises," (see text). ² U. S. Dept. of the Interior. ³ Data for 1 "City and/or sewage" enterprise are included with "State" enterprises in the 1940 Census. ⁴ Percent not shown when more than 1,000. ⁵ For 1920 relates to total area. Irrigable area for that year was not reported. ⁶ For explanation of areas, see text, p. 317.

STATE TABLE 6.—ENTERPRISES, AREAS, AVERAGE COSTS, 1940; AND AREA IRRIGATED, 1939;
BY TYPE OF ENTERPRISE

TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	ENTERPRISES		AREAS		AVERAGE COST				AREA IRRIGATED, 1939 ¹				
	Total	Serving 5 or more farms	Irrigable	Works were capable of supplying with water	Primary enterprises		Supplemental enterprises		Farms served	Total area	Cropland		Irri- gated pasture
					Works and equipment per acre ²	Maintenance and operation per acre ³	Works and equipment per acre ²	Maintenance and operation per acre ³			From which crops were harvested	On which crops failed	
Total.....	Number 5,555	Number 351	Acres 2,588,214	Acres 2,314,390	Dollars 28.17	Dollars 0.72	Dollars 23.33	Dollars 0.12	Number 17,094	Acres 1,711,409	Acres 1,501,878	Acres 7,844	Acres 311,687
Individual and partnership.....	5,123	59	1,030,610	986,782	6.03	0.42	4.04	0.31	6,023	827,564	708,666	3,175	114,723
Cooperative, incorporated.....	132	120	371,143	356,348	13.16	0.50	15.92	0.11	3,045	285,029	260,597	238	24,191
Cooperative, unincorporated.....	126	103	217,120	213,532	20.56	0.64	1.89	0.36	1,600	158,344	139,423	402	18,519
Irrigation district.....	26	26	95,511	82,711	44.08	0.92	.....	0.15	1,161	71,434	66,561	700	4,143
Commercial.....	17	17	133,943	112,283	15.30	1.08	42.69	0.15	594	40,384	38,135	37	4,212
U. S. Bureau of Reclamation.....	18	18	357,559	323,197	82.33	1.45	.....	.....	2,666	186,002	173,271	1,215	11,516
U. S. Office of Indian Affairs.....	8	6	948,087	214,184	58.59	1.44	.....	.....	1,905	133,542	108,700	1,487	23,355
State.....	4,105	2	34,241	428,353	17.81	1.23	.....	.....	91	8,110	7,495	590	4,025
City and/or sewage.....	(⁴)	.....	(⁴)	(⁴)	(⁴)	.....	.....	.....	(⁴)	(⁴)	(⁴)	.....	(⁴)
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Reported by enterprises in the Census of Irrigation, 1940, not by the Census of Agriculture. ² Based on area works were capable of supplying with water and cost of works and equipment exclusive of water right investment. ³ Based on irrigated area in enterprises reporting maintenance and operation in 1939. ⁴ Data for 1 "City and/or sewage" enterprise are included with "State" enterprises in the 1940 Census. ⁵ For explanation of areas and investment, see text, p. 317.

STATE TABLE 7.—INVESTMENT IN IRRIGATION ENTERPRISES, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920

TYPE OF ENTERPRISE (For definitions and explanations, see text)	TOTAL INVESTMENT, TO JANUARY 1							AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER		Capital expendi- tures during 1939 ¹	Estimated invest- ment re- quired to complete works	
	1940					1930	1920	Increase or decrease (-) 1930-40	Primary enter- prises			Supple- mental enter- prises
	Total	Primary enter- prises	Supple- mental enter- prises	Total cost of works and equipment	Invest- ment in water rights							
Total.....	Dollars 87,352,505	Dollars 61,882,878	Dollars 5,469,627	Dollars 66,830,409	Dollars 522,096	Dollars 50,319,204	Dollars 52,143,363	Percent 33.9	Dollars 26.40	Dollars 23.35	Dollars 2,328,641	Dollars 7,622,140
Individual and partnership.....	6,238,533	6,212,642	25,891	5,997,741	240,792	7,595,504	15,543,287	-17.9	6.30	4.15	1,049	399,999
Cooperative, incorporated.....	7,245,501	4,421,100	2,824,501	7,156,251	89,350	8,466,836	6,692,877	38.9	12.41	15.94	57,870	12,120
Cooperative, unincorporated.....	4,514,497	4,513,047	1,450	4,391,948	122,549				21.14	2.03	6,306	21,200
Irrigation district.....	3,736,832	3,711,632	2,137,660	3,670,622	66,010	5,404,781	1,708,851	-30.9	44.87	42.69	74,252	114,800
Commercial.....	3,945,288	1,832,608		3,942,690	2,575	632,480	676,535	523.8	16.32		4,375	371,881
U. S. Bureau of Reclamation.....	20,607,374	26,607,374	.....	26,607,374	.....	18,325,910	14,381,318	45.2	82.33	.....	1,066,144	1,314,731
U. S. Office of Indian Affairs.....	14,079,522	14,079,522	.....	14,078,707	815	9,589,693	8,193,390	46.8	58.38	.....	1,051,262	5,478,964
State.....	2,985,078	2,985,053	460,025	2,985,073	5	3,900	.....	(²)	27.81	.....	67,283	28,425
City and/or sewage.....	(³)	(³)	.....	(³)	.....	.....	105,538	.....	(³)	.....	.....	.....
Other.....	.....	.....	.....	.....	.....	300,000	4,841,467	.....	.....	.....	.....	.....

¹ Only for enterprises serving 5 or more farms. ² Data for 1 "City and/or sewage" enterprise are included with "State" enterprises in the 1940 Census. ³ Percent not shown when more than 1,000. ⁴ For explanation of investment, see text, p. 317.

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STATE TABLE 11.—DAMS, BY MATERIAL: 1940 AND 1930

MATERIAL	1940		1930		MATERIAL	1940		1930	
	Diversion	Storage	Diversion	Storage		Diversion	Storage	Diversion	Storage
	Number	Number	Number	Number		Number	Number	Number	Number
Total.....	6,136	468	2,856	326	Earth and rock.....	3,217	385	.....	176
Concrete or masonry.....	251	19	188	40	Other and mixed.....	¹ 1,512	47	¹ 1,090	86
Timber.....	1,067	4	472	.....	Not reported.....	86	13	206	24

¹ Principally temporary dams, replaced annually.

STATE TABLE 12.—PUMPING PLANTS, BY KIND OF MOTIVE POWER AND TYPE OF PUMP, 1940; AND TOTAL NUMBER AND CAPACITY, 1930

PUMPS BY KIND OF POWER EMPLOYED	Ramps	Proportion of total number	Rated capacity of pumps	Proportion of total capacity	Average lift of pumps	MOTIVE POWER BY TYPE OF PUMP EMPLOYED	Prime movers	Proportion of total number	Rated capacity of movers	Proportion of total capacity
Total, 1940.....	Number 680	Percent 100.0	G.p.m. 1,309,014	Percent 100.0	Feet 21	Total, 1940.....	Number 651	Percent 100.0	Rp. 29,110	Percent 100.0
Electric motor.....	160	23.6	465,579	35.6	31	Centrifugal pump.....	555	85.3	17,952	61.7
Centrifugal.....	133	19.6	444,380	34.0	28	Electric.....	133	20.4	9,874	34.3
Turbine.....	8	1.2	8,662	0.7	64	Internal-combustion.....	409	62.9	7,191	24.7
Plunger.....	14	2.1	611	(¹)	46	Other.....	13	2.0	787	2.7
Other.....	5	0.7	11,726	0.9	31	Turbine pump.....	19	2.9	349	1.2
Internal-combustion engine.....	461	67.8	583,334	44.6	17	Electric.....	5	0.8	102	0.4
Centrifugal.....	418	61.5	521,615	39.9	17	Internal-combustion.....	14	2.1	247	0.8
Turbine.....	17	2.5	27,522	2.1	18	Other.....	.....	.....	.....	.....
Plunger.....	12	1.8	982	0.1	36	Plunger pump.....	34	5.2	96	0.3
Other.....	14	3.0	33,015	2.5	16	Electric.....	14	2.1	28	0.1
Other kinds of motive power.....	18	2.6	40,698	3.1	25	Internal-combustion.....	19	2.9	40	0.1
Centrifugal.....	11	1.6	40,200	3.1	18	Other.....	7	1.1	28	0.1
Turbine.....	.....	.....	.....	.....	.....	Other and mixed types of pumps.....	43	6.6	10,713	36.8
Plunger.....	5	0.7	248	(¹)	34	Electric.....	13	2.0	9,309	31.9
Other.....	2	0.3	250	(¹)	41	Internal-combustion.....	24	3.7	745	2.6
Mixed kinds of motive power.....	41	6.0	219,403	16.7	29	Other.....	6	0.9	659	2.3
Centrifugal.....	33	4.9	186,475	14.2	26	Total, 1930.....	² 198	.....	9,005	.....
Turbine.....	2	0.3	29,700	2.3	44	Increase or decrease (-) 1930-1940.....	453	.....	20,015	.....
Plunger.....	3	0.4	28	(¹)	66					
Other.....	3	0.4	3,200	0.2	20					
Total, 1930.....	233	.....	523,494	.....	22					
Increase or decrease (-) 1930-1940..	447	.....	785,520	.....	-1					

¹ Less than one-tenth of 1 percent.² Number of pumping plants.

STATE TABLE 13.—PIPE LINES, BY MATERIAL, SIZE, AND LENGTH: 1940 AND 1930

MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940	MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940
	1940 ¹	1930 ²			1940 ¹	1930 ²	
Total.....	Miles 128.1	Miles 64.9	Percent 128.2	Wood-stave:	Miles	Miles	Percent
Concrete:				1 to 12 inches.....	10.8	4.7	129.8
1 to 12 inches.....	1.8	0.2	800.0	13 to 24 inches.....	6.2	.....	37.6
13 to 24 inches.....	3.9	.....	5.0	Over 24 inches.....	9.1	11.1	.....
Over 24 inches.....	8.8	12.1	.....	Clay and other:			
Metal:				1 to 12 inches.....	0.9	0.7	28.6
1 to 12 inches.....	56.8	19.6	189.8	13 to 24 inches.....	26.4	8.6	226.2
13 to 24 inches.....	12.9	.....	179.8	Over 24 inches.....	1.5	.....	.....
Over 24 inches.....	9.0	8.0	.....			

¹ Includes siphons and farm pipe lines reported.² Pipe sizes were separated at 30 inches in diameter (instead of 24 inches) in the 1930 Census.

STATE TABLE 14.—AREA WITHIN IRRIGATION ENTERPRISES FOR WHICH DRAINS HAVE BEEN INSTALLED, AND ADDITIONAL AREA IN NEED OF DRAINAGE: 1940, 1930, AND 1920

ITEM	1940	1930	1920	ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number..	199	184	276	Ratio of area drained to area irrigated in—			
Area irrigable in these enterprises.....acres...	822,140	840,007	¹ 751,274	(a) Enterprises reporting lands drained and/or needing drainage.....percent..	31.1	³ 10.1	¹ 8.1
Area irrigated in these enterprises.....acres...	473,604	(²)	(²)	(b) All irrigation enterprises.....percent..	8.6	5.3	3.7
Area for which drains have been installed.....acres...	147,151	85,189	62,672	Ratio of area drained plus area needing drainage to—			
Additional area needing drainage.....acres...	52,071	59,905	50,901	(a) Irrigable area reporting.....percent..	24.2	17.3	¹ 15.1
				(b) Irrigated area reporting.....percent..	42.1	(²)	(²)

¹ For 1920 relates to total area in enterprises. Irrigable area was not reported and irrigated area in enterprises reporting drainage was not reported separately for the 1920 Census. ² Not available. ³ Based on irrigable area for 1930, area irrigated in enterprises reporting land drained or needing drainage not available.

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STATE TABLE 15.—WATER USED, BY SOURCE OF SUPPLY: 1939, 1929, AND 1919

ITEM (For definitions and explanations, see text)	TOTAL			MEASURED ¹			NOT MEASURED		
	1939	1929 ¹	1919 ¹	1939	1929	1919	1939	1929 ¹	1919 ¹
PRIMARY ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	2,577,861	2,244,723	4,103,486	1,359,246	676,245	1,802,871	1,218,615	1,566,478	2,300,615
Area irrigated by these enterprises.....acres.....	760,345	516,637	745,825	411,749	212,746	424,712	348,586	303,891	321,213
Average water per acre irrigated.....acre-feet..	3.4	4.3	5.5	3.3	3.2	4.2	3.5	5.2	7.2
Total water delivered to irrigators.....acre-feet..	3,208,500	602,515	958,991	869,707	283,818	409,939	2,339,793	318,697	559,052
Area irrigated by these enterprises.....acres.....	1,522,132	349,323	290,864	453,025	172,770	181,430	1,069,107	176,553	109,454
Average water per acre irrigated.....acre-feet..	2.1	1.7	3.3	1.9	1.6	2.3	2.2	1.8	5.1
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	4,646	.....	.....	.....	.....	.....	4,646	.....	.....
Area irrigated by these enterprises.....acres.....	2,258	.....	.....	.....	.....	.....	2,258	.....	.....
Average water per acre irrigated.....acre-feet..	2.1	.....	.....	.....	.....	.....	2.1	.....	.....
SUPPLEMENTAL ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	249,475	.....	.....	249,095	.....	.....	380	.....	.....
Area irrigated by these enterprises.....acres.....	116,814	.....	.....	116,589	.....	.....	215	.....	.....
Average water per acre irrigated.....acre-feet..	2.1	.....	.....	2.1	.....	.....	1.8	.....	.....
Total water delivered to irrigators.....acre-feet..	155,540	.....	.....	144,399	.....	.....	11,141	.....	.....
Area irrigated by these enterprises.....acres.....	123,493	.....	.....	113,544	.....	.....	9,924	.....	.....
Average water per acre irrigated.....acre-feet..	1.3	.....	.....	1.3	.....	.....	1.1	.....	.....
From underground sources reported:									
Total water delivered to irrigated.....acre-feet..	3	.....	.....	.....	.....	.....	3	.....	.....
Area irrigated by these enterprises.....acres.....	1	.....	.....	.....	.....	.....	1	.....	.....
Average water per acre irrigated.....acre-feet..	3.0	.....	.....	.....	.....	.....	3.0	.....	.....

¹Data only for enterprises serving 5 or more farms. Water and area for surface and underground sources and water and area for primary and supplemental enterprises were not segregated for 1929 and 1919.

STATE TABLE 16.—AREA IRRIGATED, BY TYPE OF RIGHTS UNDER WHICH WATER WAS DELIVERED:
1939, 1929, AND 1919

TYPE OF WATER RIGHTS (For definitions and explanations, see text)	1939			1929		1919	
	Area irrigated			Area irrigated	Proportion of total	Area irrigated	Proportion of total
	Primary enterprises	Proportion of total	Supplemental enterprises ¹				
Total.....	Acres 1,711,409	Percent 100.0	Acres 168,863	Acres 1,594,012	Percent 100.0	Acres 1,681,729	Percent 100.0
Appropriation ²	1,293,069	75.6	125,534	696,590	43.7	901,692	53.6
Underground.....	1,565	0.1	57	1,064	0.1	482	(³)
Appropriation and underground.....	271	(³)	.....	.....	.....	.....	.....
Adjudicated by court.....	393,604	23.0	30,183	805,729	50.5	701,015	41.7
Other mixed and not reported.....	22,900	1.3	13,089	91,529	5.7	78,540	4.7

¹Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text). ²"Appropriation" includes water rights published in the 1930 and 1920 Census reports as "Appropriation and use," "Notice filed and posted," "Permit from State," "Certificate or license from State," and "Riparian."
³Less than one-tenth of 1 percent.

BUREAU OF RECLAMATION AREAS AND INVESTMENT

The areas credited to the United States Bureau of Reclamation in State tables 5, 6, 8, and 9 include 186,002 acres irrigated in 1939 which were within the Bitter Root, Frenchtown, Huntley, Milk River, and Sun River Projects, and the area within Montana of the Lower Yellowstone Project (North Dakota) and a small area of the Shoshone (Wyoming) Project. The area in State table 7 includes that of the first or Glendive Division of the Buffalo Rapids Project, which began operating in 1940.

The investment attributed to the Bureau of Reclamation in State tables relates to the areas within Montana of these eight projects and reflects construction costs incurred by the United States for irrigation works and an investment totalling \$1,429,456 of non-Federal funds by irrigation districts in facilities which are included in the Chinook Division of the Milk River Project. Costs of drainage systems on Bureau of Reclamation Projects are excluded from the totals in this census. Data are omitted relating to an extension of the first division of the Buffalo Rapids Project and a second division of this project, which were under construction in 1940.

Since the Irrigation Census of 1930, the Bureau of Reclamation, under congressional authorization, took over

the Bitter Root Project, which had been constructed by private capital, and much of the system was rehabilitated. The Frenchtown Project was completed, new areas were brought in on the Sun River and Milk River Projects, and the construction of the Buffalo Rapids Project begun. The Buffalo Rapids Project was authorized in 1937 under the Emergency Relief Act of 1935 to provide employment in the Glendive area and provide family-size irrigated farms in an area where farming was unsuccessful without irrigation. The extension of the first division, and the second division of this project were authorized under the Water Conservation and Utilization Program which grew out of drought conditions in the Great Plains and areas to the westward.

Expansion of irrigation in eastern Montana and western North Dakota may follow the utilization of power produced at Fort Peck Dam, construction by the Corps of Engineers, United States Army, to provide low-cost electric energy for pumping projects along the Missouri River and its tributaries. Under the Fort Peck Power Act of 1938, the Bureau of Reclamation is the distributing agency for this power.

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

	PRIMARY ENTERPRISES (For definitions and explanations, see text)	Total	IRRIGATED FARMS						
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms	1,000 farms and more
1	Enterprises, 1940.....number...	5,501	99	4,618	465	241	58	19	² 1
2	Irrigated farms, 1939.....number...	17,094	.....	4,618	1,155	2,269	2,760	5,050	1,222
3	Area irrigated, 1939.....acres...	1,711,409	.....	687,794	137,556	273,542	221,278	334,992	76,246
4	(a) From which crops were harvested.....acres...	1,501,878	.....	570,682	117,419	238,092	202,546	312,587	60,252
5	(b) On which crops failed.....acres...	7,944	.....	2,508	1,324	834	2,562	194	452
6	(c) Irrigated pasture.....acres...	201,087	.....	91,604	18,813	34,616	16,171	21,941	15,542
CAPITAL INVESTMENT, 1940									
7	Total capital investment in all enterprises.....dollars...	51,882,978	2,765,793	5,161,520	1,210,346	3,904,574	11,446,828	28,377,622	8,016,425
8	(a) Cost of irrigation works and equipment.....dollars...	51,363,783	2,763,213	4,880,323	1,107,255	3,818,677	11,401,083	28,276,807	8,016,425
9	(b) Investment in water rights.....dollars...	519,195	2,550	181,197	102,991	85,897	45,745	100,815	.....
10	Area works were capable of supplying with water.....acres...	2,344,390	38,756	797,080	166,874	317,157	400,264	519,769	104,490
11	Average investment per acre irrigated.....dollars...	36.16	.....	7.73	8.80	14.27	51.73	87.70	105.14
12	Average investment per acre which the works could supply with water.....dollars...	26.40	71.36	6.48	7.25	12.31	28.60	56.52	70.72
MAINTENANCE AND OPERATION, AND CHARGES, 1939									
13	Enterprises reporting maintenance and operation.....number...	4,818	21	4,071	428	225	54	18	² 1
14	(a) Area irrigated in these enterprises.....acres...	1,650,373	.....	627,291	130,745	268,557	215,542	334,992	76,246
15	(b) Cost of maintenance and operation.....dollars...	1,180,189	1,657	281,000	44,835	97,207	235,840	429,376	89,614
16	(c) Average cost per acre irrigated.....dollars...	0.72	.....	0.45	0.34	0.37	1.09	1.28	1.18
17	Total annual charges.....dollars...	1,057,500	500	108	183	123,984	310,116	501,601	121,008
18	Average charge per irrigated acre reporting.....dollars...	1.18	.....	1.33	0.21	0.47	1.40	1.50	1.59
19	Area against which charges were assessed.....acres...	1,065,494	4,000	86	860	282,885	248,610	423,829	105,221
20	Average annual charge per acre assessed.....dollars...	0.99	0.12	1.26	0.21	0.44	1.25	1.18	1.15
21	Total charges collected.....dollars...	729,103	.....	37	147	87,122	221,545	318,513	101,739
INDEBTEDNESS AND ARREARAGE, 1939									
22	Enterprises reporting indebtedness.....number...	94	3	² 1	.....	32	40	17	1
23	(a) Area irrigated in these enterprises.....acres...	641,746	.....	81	.....	64,350	169,177	331,892	76,246
24	(b) Indebtedness.....dollars...	41,968,921	242,323	4,759	.....	748,005	5,851,508	26,190,845	8,931,481
25	(c) Average indebtedness per acre irrigated.....dollars...	65.40	.....	58.75	.....	11.62	34.59	78.91	117.14
26	(d) Cost of irrigation works and equipment.....dollars...	51,082,213	1,722,013	6,881	.....	1,593,987	10,539,130	29,213,797	8,016,425
27	(e) Investment in water rights.....dollars...	187,305	.....	.....	.....	43,810	42,680	100,815	.....
28	(f) Total investment.....dollars...	51,279,518	1,722,013	6,881	.....	1,637,797	10,581,810	29,314,612	8,016,425
29	(g) Maintenance and operation.....dollars...	714,838	.....	84	.....	28,689	171,875	424,676	89,614
30	(h) Total annual charges.....dollars...	942,262	.....	108	.....	53,114	271,391	496,641	121,008
31	(i) Total charges collected.....dollars...	656,750	.....	37	.....	37,678	203,743	313,553	101,739
32	(j) Area against which annual charges were assessed.....acres...	791,462	.....	86	.....	72,999	192,424	420,726	105,221
33	(k) Average indebtedness per acre assessed.....dollars...	52.72	.....	55.34	.....	10.25	30.41	62.25	84.88
34	(l) Average charges per acre assessed.....dollars...	1.19	.....	1.26	.....	0.73	1.41	1.18	1.15
35	(m) Average charges per acre irrigated.....dollars...	1.47	.....	1.33	.....	0.83	1.60	1.50	1.69
36	Enterprises reporting arrearage.....number...	24	² 1	.....	.....	7	8	8	.....
37	(a) Area assessed in these enterprises.....acres...	314,973	.....	86	.....	9,810	47,183	257,894	.....
38	(b) Total arrearage.....dollars...	1,777,398	.....	149	.....	462,444	55,598	1,259,217	.....
39	(c) Average arrearage per acre assessed.....dollars...	5.64	.....	1.73	.....	47.14	1.18	4.88	.....
40	(d) Indebtedness.....dollars...	24,353,535	.....	4,759	.....	622,478	2,900,770	20,765,528	.....
TYPE, 1940									
41	Individual and partnership.....number...	5,099	41	4,547	446	55	.....	.....	.....
42	Cooperative (incorporated and unincorporated).....number...	242	4	20	14	.....	31	6	.....
43	Irrigation district.....number...	25	2	.....	.....	167	12	2	.....
44	Commercial.....number...	15	1	.....	.....	9	4	1	.....
45	U. S. Bureau of Reclamation.....number...	18	1	.....	.....	1	7	8	.....
46	U. S. Office of Indian Affairs.....number...	8	.....	1	.....	1	3	2	1
47	All other.....number...	104	50	49	4	.....	1	.....	.....
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939									
48	Enterprises reporting pay roll.....number...	235	2	² 1	2	156	55	18	1
49	Wages and salaries paid and payable for 1939.....dollars...	1,487,200	(⁵)	42	(⁵)	54,505	214,651	381,407	266,035
50	Persons employed during week ending April 29, 1939.....number...	1,893	(⁵)	.....	(⁵)	325	279	621	205
SOURCE OF WATER SUPPLY, 1939									
51	Streams, gravity.....number...	4,427	77	3,613	437	234	49	17	.....
52	Streams, pumped.....number...	381	17	348	11	1	4	.....	.....
53	Wells, pumped.....number...	62	1	58	3	.....	.....	.....	.....
54	Wells, pumped and flowing; or wells flowing.....number...	24	.....	24	.....	.....	.....	.....	.....
55	Lakes, gravity or pumped.....number...	47	1	42	1	1	2	.....	.....
56	Streams and springs; or springs.....number...	368	1	357	9	1	.....	.....	.....
57	Mixed, streams and wells.....number...	70	2	59	2	1	3	2	1
58	Other mixed or stored storm water.....number...	122	.....	117	2	3	.....	.....	.....
SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)									
		Total	IRRIGATED FARMS						
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms	1,000 farms and more
1	Enterprises, 1940.....number...	54	1	33	2	7	7	1	.....
2	Irrigated farms, 1939.....number...	1,219	.....	33	109	.....	425	652	.....
3	Area irrigated, 1939.....acres...	168,863	.....	2,411	10,756	.....	93,064	62,632	.....
CAPITAL INVESTMENT, 1940									
4	Total capital investment in all enterprises.....dollars...	5,469,527	.....	503,099	.....	114,737	1,426,857	3,424,804	.....
5	(a) Cost of irrigation works and equipment.....dollars...	5,466,626	.....	502,615	.....	112,890	1,426,357	3,424,804	.....
6	(b) Investment in water rights.....dollars...	2,901	.....	484	.....	1,917	500	.....	.....
7	Area works were capable of supplying with water.....acres...	234,269	.....	3,205	.....	16,126	111,895	103,043	.....
8	Average investment per acre irrigated.....dollars...	32.39	.....	9.57	.....	10.67	15.33	54.68	.....
9	Average investment per acre which the works could supply with water.....dollars...	23.35	.....	7.20	.....	7.12	12.75	33.24	.....

¹Relates to enterprises reporting no irrigation in 1939 but having works capable of supplying water in 1940.²Data for less than 3 enterprises shown with permission of the enterprises involved.³Annual charges, reported only by enterprises serving 5 or more farms, 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.

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CHARGES, INDEBTEDNESS AND ARREARAGE, TYPE OF ENTERPRISE, PAY ROLL, NUMBER OF EMPLOYEES, FARMS, AREAS IRRIGATED, AND COST OF WORKS: CENSUS OF 1940

ACRES IRRIGATED							COST OF IRRIGATION WORKS AND EQUIPMENT					
No acres ¹	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	
99	3,178	1,286	819	113	22	² 1	5,053	275	113	51	9	1
.....	3,374	1,702	3,091	2,971	4,734	1,222	6,452	1,388	2,035	3,399	3,820	2
.....	113,979	208,291	524,275	391,713	396,905	76,245	732,903	191,242	211,484	303,455	272,295	3
.....	99,418	177,023	459,088	351,988	354,109	60,252	633,090	169,324	187,234	263,980	248,250	4
.....	1,294	1,043	2,286	1,624	1,145	452	3,371	427	1,137	2,388	521	5
.....	13,267	30,225	62,901	38,101	41,551	15,542	95,442	21,491	23,113	37,117	23,524	6
2,765,763	1,749,738	1,630,444	6,331,452	10,905,996	30,463,160	8,016,425	3,560,515	2,107,713	3,718,816	20,006,049	32,489,865	7
2,763,213	1,690,199	1,543,683	6,219,277	10,753,141	30,377,645	8,016,425	3,376,821	1,987,067	3,620,422	19,939,594	32,439,885	8
2,550	59,509	86,761	112,175	152,855	105,315	.....	183,694	120,646	98,390	66,465	60,000	9
38,766	172,208	251,008	623,289	548,330	606,309	104,490	877,536	218,798	311,686	489,850	453,118	10
.....	15.35	7.83	12.08	27.84	76.80	105.14	4.86	11.02	17.58	65.92	119.32	11
71.33	10.16	3.50	10.16	19.89	50.28	76.72	4.06	9.63	11.95	41.35	71.70	12
21	2,737	1,159	769	110	21	² 1	4,396	260	109	45	8	13
.....	100,048	190,814	499,047	386,713	396,905	76,245	693,942	185,187	210,464	298,485	272,295	14
1,657	107,893	92,418	193,089	257,851	437,567	89,614	269,497	80,085	115,867	345,176	369,544	15
.....	1.07	0.48	0.39	0.67	1.10	1.18	0.39	0.43	0.55	1.10	1.30	16
500	863	2,359	93,654	334,028	503,985	121,008	17,427	40,325	126,155	439,474	435,118	17
.....	1.61	0.56	0.59	1.21	1.32	1.59	0.22	0.55	0.67	1.58	1.60	18
4,000	716	5,451	168,524	313,800	467,479	105,224	80,935	88,889	197,794	314,253	383,533	19
0.12	1.21	0.49	0.55	1.07	1.06	1.15	0.22	0.52	0.64	1.35	1.13	20
.....	342	1,044	276,093	241,519	308,366	101,739	9,657	20,276	119,108	316,004	233,106	21
3	² 1	.....	27	44	18	² 1	2	13	35	36	8	22
.....	81	.....	28,718	173,186	363,505	76,245	19,058	.....	66,731	253,662	272,295	23
242,323	4,759	.....	2,050,587	4,116,401	26,623,070	8,931,481	28,643	.....	234,698	9,144,981	32,500,399	24
.....	58.75	.....	71.41	23.77	75.24	117.14	1.50	.....	2.43	36.05	119.58	25
1,722,013	6,831	.....	2,487,991	8,777,889	30,081,035	8,016,425	126,341	.....	1,353,068	17,172,929	32,439,575	26
.....	.....	.....	10,035	76,455	100,815	.....	.....	.....	71,990	65,315	50,000	27
1,722,013	6,861	.....	2,498,026	8,854,343	30,181,850	8,016,425	126,341	.....	1,425,058	17,239,244	32,489,575	28
.....	84	.....	32,490	158,020	434,630	89,614	9,118	.....	54,397	281,779	369,544	29
.....	108	.....	38,945	280,397	501,804	121,008	20,778	.....	77,065	408,280	435,118	30
.....	37	.....	32,052	217,211	305,711	101,739	9,894	.....	74,697	309,013	293,156	31
.....	86	.....	32,015	205,058	449,079	105,224	20,788	.....	101,541	285,600	383,533	32
.....	55.34	.....	64.06	20.07	59.28	84.88	1.38	.....	2.17	31.22	84.90	33
.....	1.26	.....	1.22	1.37	1.12	1.15	1.00	.....	0.76	1.43	1.13	34
.....	1.33	.....	1.36	1.62	1.98	1.59	1.09	.....	0.80	1.61	1.60	35
.....	² 1	.....	7	8	8	.....	4	.....	3	12	5	36
.....	86	.....	7,801	52,127	254,659	.....	2,381	.....	5,655	110,314	190,323	37
.....	149	.....	507,774	9,745	1,259,727	.....	936	.....	9,805	646,764	1,119,893	38
.....	1.73	.....	65.09	0.19	4.84	.....	0.39	.....	1.73	5.96	5.70	39
.....	4,759	.....	1,917,895	2,737,257	19,693,624	.....	10,546	.....	33,505	5,035,578	19,273,006	40
41	3,112	1,242	655	36	1	.....	4,657	197	30	5	.....	41
4	23	18	137	53	7	.....	97	65	64	15	1	42
2	.....	.....	13	8	2	.....	1	4	11	9	.....	43
1	.....	.....	8	5	1	.....	1	2	7	5	.....	44
1	1	.....	.....	8	3	.....	.....	1	.....	11	6	45
.....	1	.....	3	.....	8	1	1	.....	.....	5	2	46
50	42	8	3	1	.....	.....	96	6	1	1	.....	47
2	5	15	127	65	20	² 1	61	54	73	39	8	48
570,864	.....	1,204	111,843	118,435	418,909	266,035	8,410	18,692	62,094	841,828	556,276	49
478	.....	13	332	222	643	205	121	113	188	656	615	50
77	2,301	1,144	762	104	19	.....	4,027	250	109	40	7	51
17	313	38	9	3	1	.....	353	10	5	3	.....	52
1	60	1	.....	.....	.....	.....	62	.....	.....	.....	.....	53
.....	24	.....	.....	.....	.....	.....	24	.....	.....	.....	.....	54
1	38	5	2	1	.....	.....	43	2	.....	2	.....	55
1	316	39	3	3	.....	.....	362	5	1	.....	.....	56
2	36	19	9	1	2	1	55	2	3	5	2	57
.....	91	22	8	1	.....	.....	114	6	1	1	.....	58
ACRES IRRIGATED							COST OF IRRIGATION WORKS AND EQUIPMENT					
No acres ¹	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	
1	25	11	3	7	7	.....	38	2	5	9	.....	1
.....	26	.....	39	232	896	.....	96	193	.....	930	.....	2
.....	921	2,055	1,734	20,927	143,226	.....	6,395	12,242	.....	150,226	.....	3
497,866	.....	14,350	50,174	396,628	4,510,509	.....	32,365	185,244	.....	5,251,918	.....	4
497,825	.....	12,640	50,024	396,128	4,510,509	.....	31,594	183,144	.....	5,251,918	.....	5
.....	541	1,710	150	500	.....	.....	801	2,100	.....	.....	.....	6
.....	1,383	3,452	2,734	28,232	188,468	.....	7,340	17,452	.....	209,468	.....	7
.....	19.37	6.98	28.94	18.85	31.49	.....	5.06	15.13	.....	34.96	.....	8
.....	12.80	4.16	18.35	14.05	22.73	.....	4.40	10.61	.....	25.07	.....	9

¹ Indebtedness and arrearage were reported only by enterprises serving 5 or more farms.
² Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION—MONTANA

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

SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)		TOTAL	IRRIGATED FARMS						
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms	1,000 farms and more
MAINTENANCE AND OPERATION, AND CHARGES, 1939									
10	Enterprises reporting maintenance and operation.....number...	49		29	2	7	7	4	
11	(a) Area irrigated in these enterprises.....acres...	168,762		2,310	10,756		93,064	62,632	
12	(b) Cost of maintenance and operation.....dollars...	20,906		1,195	2,316		10,537	6,860	
13	(c) Average cost per irrigated acre reporting.....dollars...	0.12		0.52	0.22		0.11	0.11	
14	Total annual charges ².....dollars...	83,290				2,585	31,655	59,010	
15	Average charge per acre irrigated.....dollars...	0.65				0.25	0.34	1.47	
16	Area against which charges were assessed.....acres...	176,956				14,692	93,264	60,000	
17	Average annual charge per acre assessed.....dollars...	0.53				0.18	0.34	0.86	
18	Total charges collected ².....dollars...	65,244				771	35,635	28,808	
INDEBTEDNESS AND ARREARAGE, 1939									
19	Enterprises reporting indebtedness ³.....number...	9					5	4	
20	(a) Area irrigated in these enterprises.....acres...	152,826					90,194	62,632	
21	(b) Indebtedness.....dollars...	2,573,360					687,852	1,885,508	
22	(c) Average indebtedness per acre irrigated.....dollars...	16.84					7.63	30.10	
23	(d) Cost of irrigation works and equipment.....dollars...	4,832,637					1,407,833	3,424,804	
24	(e) Investment in water rights.....dollars...								
25	(f) Total investment.....dollars...	4,832,637					1,407,833	3,424,804	
26	(g) Maintenance and operation.....dollars...	17,257					10,397	6,860	
27	(h) Total annual charges ².....dollars...	90,200					31,160	59,010	
28	(i) Total charges collected ².....dollars...	63,971					35,163	28,808	
29	(j) Area against which annual charges were assessed.....acres...	159,394					90,394	69,000	
30	(k) Average indebtedness per acre assessed.....dollars...	15.96					7.61	26.93	
31	(l) Average charges per acre assessed.....dollars...	0.57					0.34	0.86	
32	(m) Average charges per acre irrigated.....dollars...	0.69					0.35	1.47	
33	Enterprises reporting arrearage ³.....number...	3					1	2	
34	(a) Area assessed in these enterprises.....acres...	32,200						32,200	
35	(b) Total arrearage.....dollars...	42,671						42,671	
36	(c) Average arrearage per acre assessed.....dollars...	1.33						1.33	
37	(d) Indebtedness.....dollars...	576,729						676,729	
TYPE, 1940									
38	Individual and partnership.....number...	34		31	2	1			
39	Cooperative (incorporated and unincorporated).....number...	16		2		5	7	2	
40	Irrigation district.....number...	1				1			
41	Commercial.....number...	2						2	
42	All other.....number...	1	1						
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939									
43	Enterprises reporting pay roll.....number...	13				4	5	4	
44	Wages and salaries paid and payable for 1939.....dollars...	13,858				1,256	5,868	6,736	
45	Persons employed during week ending April 29, 1939.....number...	11				1	6	4	
SOURCE OF SUPPLEMENTAL WATER SUPPLY, 1939									
46	Streams, pumped.....number...	8		8					
47	Wells, pumped or flowing.....number...	2		2					
48	Streams, gravity or storage.....number...	44	1	23	2	7	7	4	

¹ Relates to enterprises reporting no irrigation in 1939 but having works capable of supplying water in 1940.² Annual charges, reported only by enterprises serving 5 or more farms, 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.

STATE TABLE 18.—CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES, 1939

DRAINAGE BASIN AND STATION	County	Elevation of station	PRECIPITATION, OCTOBER 1938—SEPTEMBER 1939										TEMPERATURES, 1939	
			Water year		Oct.-Dec.		Jan.-Mar.		Apr.-June		July.-Sept.		Annual mean	Departure ¹
			Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹		
Missouri River			Feet	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Degrees F.	Degrees F.
Lima.....	Beaverhead.....	5,265	13.63	+4.30	4.61	+3.05	1.07	+0.05	4.26	+0.17	3.69	+1.03	41.7	+2.7
Dillon.....	Beaverhead.....	5,228	12.67	-4.70	4.31	+1.65	0.89	-2.23	5.05	-2.25	2.42	-1.87	44.8	+0.7
Cut Bank.....	Glacier.....	3,762	7.96	-3.23	1.19	+0.03	0.72	-0.23	4.37	-0.76	1.68	-2.27	45.1	+4.3
Choteau.....	Teton.....	3,810	8.20	-4.39	1.04	-0.59	0.32	-1.30	5.00	-0.60	1.84	-1.90	46.2	+3.9
Helena.....	Lewis and Clark..	4,090	10.71	-2.92	2.75	+0.34	1.37	-0.94	4.78	-0.97	1.81	-1.35	46.5	+3.2
Great Falls.....	Cascade.....	3,654	10.11	-5.69	1.89	-0.44	0.86	-1.25	4.81	-2.07	2.55	-1.93	48.5	+2.8
Agricultural College.....	Gallatin.....	4,900	16.04	-0.75	5.13	+1.70	2.28	-0.59	6.61	-0.50	2.92	-1.36	44.4	+2.6
Livingston.....	Park.....	4,485	11.22	-2.93	3.55	+0.93	0.98	-0.98	4.04	-1.67	2.65	-1.21	48.2	+2.7
Stanford.....	Judith Basin.....	4,229	14.65	+0.24	3.32	+1.14	1.26	-0.51	7.44	+1.39	2.63	-1.78	45.0	+1.3
Hayre.....	Hill.....	2,488	11.19	-2.71	3.16	+1.30	1.07	-0.67	5.24	-0.65	1.69	-2.69	46.1	+4.5
Red Lodge.....	Carbon.....	5,254	15.43	-0.53	3.28	+0.01	2.59	-0.24	9.32	+0.89	3.26	-1.19	43.2	+3.1
Roundup.....	Musselshell.....	3,246	17.17	+4.68	3.13	+0.93	1.15	-0.38	9.85	+4.32	3.04	-0.19	48.6	+2.6
Billings.....	Yellowstone.....	3,570	15.88	+2.70	2.96	+0.69	1.67	-0.15	9.88	+4.28	1.37	-2.12	48.9	+2.4
Malta.....	Phillips.....	2,255	17.68	+3.72	4.40	+2.83	1.59	+0.02	9.61	+3.16	2.08	-2.29	44.0	+2.0
Jordan.....	Garfield.....	2,674	9.99	-1.55	2.30	+0.80	0.63	-1.08	6.58	+1.48	0.48	-2.75	47.2	+3.8
Prayer.....	Valley.....	2,068	15.81	+1.87	2.60	+0.80	0.87	-1.44	9.82	+3.85	2.52	-1.34	42.8	+3.9
Miles City.....	Custer.....	2,351	11.05	-2.74	1.65	-0.45	0.87	-1.14	6.40	+0.38	2.13	-1.83	48.1	+3.8
Outlook.....	Sheridan.....	2,342	14.30	+0.76	2.49	+1.21	0.79	-0.51	8.16	+2.63	2.86	-2.57	39.8	+1.5
Glendive.....	Dawson.....	2,090	11.89	-2.82	1.81	-0.02	1.34	-0.34	6.08	-0.41	2.66	-2.05	46.8	+2.8
Elkalaka.....	Carter.....	3,200	13.25	-0.44	0.85	-0.56	0.64	-0.79	6.88	+0.72	4.88	+0.19	45.8	+1.6
Clark Fork														
Missoula.....	Missoula.....	3,200	11.43	-3.16	1.81	-1.74	2.87	+0.10	5.28	+0.36	1.47	-1.88	48.5	+4.0
Hamilton.....	Ravalli.....	3,529	10.72	-0.30	3.27	+0.88	1.74	-0.48	3.81	-0.09	1.90	-0.61	48.5	+2.3
Kalispell.....	Flathead.....	2,956	13.24	-1.78	3.20	-0.66	3.04	-0.59	5.45	+1.13	1.55	-1.66	45.4	+2.9
Thompson Falls.....	Sanders.....	2,435	14.40	-7.98	5.44	-1.31	4.89	-1.26	2.70	-3.20	1.37	-2.21	49.3	+3.9
Kootenai River														
Libby.....	Lincoln.....	2,150	12.02	-7.20	4.64	-1.92	3.76	-1.58	2.81	-1.18	0.81	-2.52	(²)	(²)

¹ Departure from normal.² Not available.

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

ACRES IRRIGATED							COST OF IRRIGATION WORKS AND EQUIPMENT				
No acres ¹	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
.....	21	11	3	7	7	.....	34	2	5	8	.....
.....	820	2,055	1,734	20,927	143,226	.....	6,294	12,242		150,226	.....
.....	811	846	303	3,711	15,237	.....	1,972	2,979		15,957	.....
.....	0.99	0.41	0.17	0.18	0.11	.....	0.31	0.24		0.11	.....
.....		410	570	12,170	80,140	.....	1,416	4,534		87,340	.....
.....		0.83	0.42	0.58	0.66	.....	0.40	0.37		0.68	.....
.....		1,560	1,370	24,432	149,594	.....	3,710	16,452		156,794	.....
.....		0.26	0.42	0.50	0.54	.....	0.38	0.28		0.56	.....
.....		331	552	10,220	54,111	.....	352	3,751		61,111	.....
.....				2	7	.....			1	8	.....
.....				152,826		.....			152,826		.....
.....				2,573,360		.....			2,573,360		.....
.....				16.84		.....			16.84		.....
.....				4,832,637		.....			4,832,637		.....
.....				4,832,637		.....			4,832,637		.....
.....				17,257		.....			17,257		.....
.....				90,200		.....			90,200		.....
.....				63,971		.....			63,971		.....
.....				159,394		.....			159,394		.....
.....				15.98		.....			15.98		.....
.....				0.57		.....			0.57		.....
.....				0.69		.....			0.69		.....
.....				1	2	.....				3	.....
.....				32,200		.....				32,200	.....
.....				42,671		.....				42,671	.....
.....				1.33		.....				1.33	.....
.....				670,729		.....				670,729	.....
.....	24	8	1	1	.....	.....	34				.....
.....	1	3	2	5	5	.....	4	2	4	6	.....
.....				1	.....	.....			1		.....
.....				.....	2	.....				2	.....
.....	1			.....	.....	.....				1	.....
.....					
.....			1	5	7	.....	1	2	2	8	.....
.....		(4)		1,873	11,982	.....		1,376		12,482	.....
.....				2	9	.....		1		10	.....
.....					
.....	8					.....	8				.....
.....	2					.....	2				.....
.....	1	15	11	3	7	.....	28	2	5	9	.....

³Indebtedness and arrearage were reported only by enterprises serving 5 or more farms.

⁴Data for 1 enterprise from the "100 to 299 acres" group are included with the "1,800 to 7,499 acres" group.

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

The average precipitation in Montana for the calendar year 1938 was 1.51 inches above normal and for the calendar year 1939 was 2.40 inches below, or 84 percent of a normal of 15.23 inches, as reported by the U. S. Weather Bureau. The average precipitation for the water year (October 1938 through September 1939) for the 25 typical stations tabulated above was 12.98 inches, showing an average departure of -1.50 inches for the water year at these stations. A deficiency for the calendar year 1939 of slightly more than three inches occurred in both the western and central divisions, and slightly more than one inch in the eastern division. All months were drier than normal with the exception of February, June, and December. June was abnormally wet, particularly in the eastern division, where it was the wettest of record. November was the driest of record.

The greatest 1939 precipitation was 25.88 inches at Trout Creek (near); the least was 6.13 inches at Lonepine. The greatest monthly amount, 7.07 inches, occurred at Billings No. 2 Station in June; the least monthly amount was none at 17 stations during November.

The trend to warmer and drier weather that has been characteristic of average conditions in Montana during the last decade continued in 1939. The year was the third warmest of record since 1895, the warmest year occurring in 1934 and the next warmest in 1931. The

average temperature was above the normal for all months except February and June. January was exceptionally mild as were also November and December. Monthly record high temperatures were exceeded at many stations during the last parts of March and April and the first part of December. A new extreme high of 97° for the State for April was recorded at Winifred on the 29th of the month. February was unusually cold with two severe blizzards. No killing frosts of importance occurred after May 12 and before September 25. The average length of the frost-free season west of the Continental Divide was 129 days; central division, 135 days; and eastern division, 144 days. The fall season, September to November, inclusive, shared with 1922 the distinction of the second warmest fall of record.

Winter grain and perennial grass crops survived the winter of 1938-39 in good shape. Winter wheat matured satisfactorily but dryland spring grains were injured to considerable extent as a result of midsummer heat and drought despite excellent moisture conditions during June. Grasshoppers again caused much damage to grain crops and range grasses in the eastern part of the State. Farm operations got off to a good start and progressed satisfactorily throughout the year except as rains interfered with shearing and haying in May and June, and as drought conditions hindered plowing and seeding in the fall.

CENSUS OF IRRIGATION — MONTANA

DRAINAGE BASIN TABLE I—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND
AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drain- age basin)		STATE TOTAL	MISSOURI RIVER	
			Total	Direct ¹
IRRIGATED FARMS AND AREAS				
1	Irrigated farms.....1939...number....	17,094	11,970	751
2	Area irrigated.....1939...acres.....	1,711,409	1,369,536	73,036
3	(a) Cropland harvested.....1939...acres.....	1,601,878	1,221,347	69,007
4	(b) Crop failure.....1939...acres.....	7,944	6,048	511
5	(c) Pasture.....1939...acres.....	201,687	142,141	4,517
6	Area irrigated.....1929...acres.....	1,594,912	1,324,486	17,069
7	.....1919...acres.....	1,681,729	1,389,703	15,635
8	Increase or decrease (-), 1929-1939.....percent....	7.3	3.4	327.9
9	Irrigable area in enterprises.....1940...acres.....	2,568,214	2,132,881	155,579
10	.....1930...acres.....	2,622,423	2,188,247	19,924
11	.....1920 ² ...acres.....	4,329,148	3,713,068	34,194
12	Excess of irrigable area over the area irrigated.....1940...acres.....	876,805	763,345	82,544
13	.....1930...acres.....	1,027,511	863,761	2,855
14	.....1920 ² ...acres.....	2,647,419	2,323,305	18,559
15	Area works were capable of supplying with water...1940...acres.....	2,344,390	1,939,940	111,831
16	.....1930...acres.....	2,276,000	1,871,958	18,234
17	.....1920...acres.....	2,753,498	2,299,910	28,174
18	Increase or decrease (-), 1930-1940.....percent....	3.0	3.6	513.3
19	Excess of area works were capable of supplying with water over area irrigated.....1940...acres.....	632,981	570,404	38,796
20	.....1930...acres.....	681,088	547,472	1,165
21	.....1920...acres.....	1,071,769	910,147	12,539
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent....	73.0	70.6	65.3
23	.....1929...percent....	70.1	70.8	93.6
24	.....1919...percent....	61.1	60.4	55.5
CAPITAL INVESTED TO JANUARY 1				
25	Total investment in irrigation enterprises.....1940...dollars....	67,352,505	53,905,460	2,804,982
26	(a) Cost of irrigation works and equipment.....1940...dollars....	66,830,409	53,483,944	2,791,669
27	(b) Investment in water rights (reported).....1940...dollars....	522,096	421,516	13,263
28	Total investment in irrigation enterprises.....1930...dollars....	50,319,204	41,092,294	289,910
29	.....1920...dollars....	52,143,393	43,507,296	440,345
30	Increase or decrease (-), 1930-1940.....percent....	33.9	31.2	870.9
31	Average investment based on area works were capable of supplying with water, per acre.....1940...dollars....	28.73	27.79	25.08
32	.....1930...dollars....	22.11	21.95	15.84
33	.....1920...dollars....	18.94	18.92	15.63
34	Average investment per acre irrigated.....1939...dollars....	39.36	39.36	38.41
35	Estimated final investment in existing enterprises.....1940...dollars....	75,174,645	60,540,833	3,637,019
36	Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars....	29.04	28.38	23.38
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS				
		Primary	Supplemental	
		Enterprises		Enterprises
37	Enterprises reporting maintenance and operation.....1939...number....	4,823	49	473
38	Area irrigated in these enterprises.....1939...acres.....	1,650,379	168,762	70,138
39	Cost of maintenance and operation.....1939...dollars....	1,180,189	20,908	89,054
40	Average cost, per acre irrigated.....1939...dollars....	0.72	0.12	1.28
41	Total annual charges (reported) ⁴.....1939...dollars....	1,057,500	93,290	18,427
42	Average annual charge per acre irrigated.....1939...dollars....	1.18	0.65	0.77
43	Area against which charges were assessed.....1939...acres.....	1,085,494	176,956	27,335
44	Average annual charge per acre assessed.....1939...dollars....	0.99	0.53	0.67
45	Total charges collected ⁴.....1939...dollars....	729,103	65,214	7,355
46	Indebtedness to December 31 (reported) ⁵.....1939...dollars....	41,868,921	2,573,300	1,433,933
WATER DELIVERED TO IRRIGATORS, 1939				
47	Enterprises reporting water delivered.....1939...number....	4,931	44	508
48	Area irrigated by these enterprises.....1939...acres.....	1,524,390	123,469	70,357
49	Water delivered.....1939...acre-feet.....	3,214,146	155,543	156,282
50	Average water delivered per acre irrigated.....1939...acre-feet.....	2.1	1.3	2.2
51	Average cost of water per acre irrigated.....1939...dollars....	0.84	0.70	0.67
52	Average cost of water per acre-foot delivered.....1939...dollars....	0.40	0.56	0.30
DRAINAGE OF IRRIGATED LAND				
53	Enterprises reporting land drained or needing drainage.....1939...number....	199	152	18
54	Irrigable area in these enterprises.....1939...acres.....	822,140	673,790	8,661
55	Irrigated area in these enterprises.....1939...acres.....	473,604	396,317	5,236
56	Area for which drains have been installed.....1939...acres.....	147,151	144,517	698
57	Additional area needing drainage.....1939...acres.....	52,071	49,307	1,258

¹Data for 2 enterprises in Dog Creek Drainage Basin (17) (number refers to separate map) are included with Missouri River "Direct" Drainage Basin (1).²For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.³Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — MONTANA

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IRRIGABLE AREA, 1940, 1930, 1920, AND IRRIGATED FARMS, MAINTENANCE
IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939

MISSOURI RIVER--Continued														
Jefferson River														
Total	Direct	Reaverhead River				Big Hole River	Boulder River							
		Total	Direct	Blacktail Deer Creek	Ruby River									
	(2)		(3)	(4)	(5)	(6)	(7)							
2,206	343	523	305	5	213	293	130							
431,027	35,079	143,159	111,515	3,074	28,570	124,532	15,974							
383,850	32,111	123,146	95,585	3,037	24,414	118,152	14,534							
237	22	109	14	.....	85	20	86						
46,940	2,946	19,904	15,806	37	4,061	6,760	1,354							
363,380	16,393	131,354	.....	.....	31,071	146,730	.....						
425,685	21,276	145,673	.....	.....	34,474	184,655	.....						
18.6	114.0	9.0	.....	.....	-8.0	-14.9	.....						
510,750	47,716	169,939	133,924	3,093	32,922	127,910	22,791							
476,421	19,892	155,916	.....	.....	36,901	169,846	.....						
831,898	40,347	296,079	.....	.....	70,107	306,885	.....						
79,723	12,637	26,780	22,409	19	4,352	2,978	6,817							
113,041	3,489	24,562	.....	.....	5,830	20,110	.....						
406,213	19,071	150,406	.....	.....	41,633	123,230	.....						
498,857	47,410	163,988	128,939	3,093	31,956	127,550	18,355							
403,325	18,940	142,333	.....	.....	33,526	162,593	.....						
574,672	34,894	199,797	.....	.....	48,036	237,920	.....						
23.7	150.3	15.2	.....	.....	-4.7	-21.5	.....						
67,830	12,331	20,829	17,424	19	3,396	2,618	2,381							
39,945	2,547	10,979	.....	.....	2,455	15,707	.....						
148,987	13,618	54,124	.....	.....	13,562	43,265	.....						
86.4	74.0	87.3	86.5	99.4	89.4	97.9	87.0							
90.1	86.6	92.3	.....	.....	92.7	90.3	.....						
74.1	61.0	72.0	.....	.....	71.6	81.0	.....						
4,509,720	648,702	1,643,102	709,421	52,200	881,481	391,647	429,217							
4,430,707	640,379	1,593,273	674,408	52,200	866,305	381,780	423,600							
79,013	8,323	49,829	35,013	.....	14,816	9,867	5,617						
2,417,277	125,116	987,324	.....	.....	212,595	699,070	.....						
5,070,454	587,388	1,723,746	.....	.....	559,000	1,069,767	.....						
86.6	418.5	66.4	.....	.....	314.6	-44.0	.....						
9.04	13.68	10.02	5.50	16.88	27.59	3.07	23.38							
5.99	6.61	6.94	.....	.....	6.34	4.30	.....						
9.35	16.83	8.63	.....	.....	11.64	7.33	.....						
10.46	18.49	11.48	6.36	16.98	30.85	3.13	26.87							
4,568,705	650,952	1,661,812	727,461	52,200	882,131	407,002	446,267							
8.95	13.64	9.78	5.43	16.88	26.79	3.18	19.58							
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.					
Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises					
979	17	140	4	324	6	187	5	4	133	1	293	75	2	37
412,130	87,857	34,887	7,811	133,182	74,420	104,964	61,406	2,957	25,261	(3)	123,096	15,797	(3)	38
127,121	9,726	14,147	1,335	52,711	7,409	33,277	5,809	470	18,964	(3)	17,836	9,081	(3)	39
0.31	0.11	0.41	0.17	0.40	0.10	0.32	0.09	0.10	0.75	(3)	0.14	0.57	(3)	40
55,850	22,546	8,188	10,800	7,473	10,500	4,835	8,900	2,638	1,600	2,520	2,378	41
0.41	0.26	0.39	1.42	0.42	0.14	0.39	0.15	0.51	0.12	0.18	0.78	42
145,074	86,654	21,338	7,530	18,432	74,014	13,240	61,000	5,192	13,014	14,906	7,440	43
0.38	0.26	0.38	1.42	0.41	0.14	0.37	0.15	0.51	0.12	0.17	0.32	44
46,584	25,503	5,708	7,366	5,251	18,137	3,472	8,989	1,779	9,148	2,320	1,486	45
26,040	485,047	154,657	295	340,390	295	125,390	215,000	46
967	16	120	5	339	6	196	5	5	138	1	210	77	2	47
377,467	82,972	28,723	7,826	124,572	74,420	95,914	61,406	3,074	25,584	(3)	119,995	15,691	(3)	48
941,174	112,307	74,090	6,286	350,739	104,850	265,898	97,475	14,340	70,501	(3)	301,501	30,299	(3)	49
2.5	1.4	2.6	0.8	2.8	1.4	2.8	1.6	4.7	2.8	(3)	2.5	1.9	(3)	50
0.34	0.26	0.36	1.39	0.42	0.14	0.34	0.15	0.16	0.75	(3)	0.15	0.55	(3)	51
0.14	0.19	0.14	1.73	0.15	0.10	0.12	0.09	0.03	0.27	(3)	0.06	0.29	(3)	52
28	16	2	(3)	2	1	53
21,180	9,326	(3)	(3)	(3)	54
14,471	2,896	(3)	(3)	(3)	55
345	15	(3)	(3)	(3)	56
1,138	345	(3)	(3)	(3)	56

⁴Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
⁵Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - MONTANA

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		MISSOURI RIVER—Continued				
		Jefferson River—Continued		Smith River	Sun River	Belt River
		Madison River	Gallatin River			
IRRIGATED FARMS AND AREAS						
1	Irrigated farms.....1939..number.....	134	777	89	936	16
2	Area irrigated.....1939..acres.....	24,234	87,649	27,139	87,025	334
3	(a) Cropland harvested.....1939..acres.....	19,357	76,550	26,389	67,585	334
4	(b) Crop failure.....1939..acres.....	.....	.....	.....	308	.....
5	(c) Pasture.....1939..acres.....	4,877	11,099	750	19,132	.....
6	Area irrigated.....1929..acres.....	30,368	93,753	25,461	28,070	.....
7	.....1919..acres.....	34,425	95,063	16,861	31,785	.....
8	Increase or decrease (-), 1929-1939.....percent.....	-20.2	-6.5	6.6	210.0	.....
9	Irrigable area in enterprises.....1940..acres.....	28,728	113,666	28,057	134,879	458
10	.....1930..acres.....	46,339	120,321	31,389	121,277	.....
11	.....1920 ¹ ..acres.....	88,524	228,056	38,369	244,071	.....
12	Excess of irrigable area over the area irrigated..1940..acres.....	4,494	26,017	918	47,854	124
13	.....1930..acres.....	15,971	26,568	5,928	93,207	.....
14	.....1920 ¹ ..acres.....	54,099	132,993	21,508	212,286	.....
15	Area works were capable of supplying with water..1940..acres.....	28,649	112,905	27,760	133,715	376
16	.....1930..acres.....	37,004	114,408	31,259	67,566	.....
17	.....1920..acres.....	62,065	152,515	29,691	95,522	.....
18	Increase or decrease (-), 1930-1940.....percent.....	-22.6	-1.3	-11.2	97.9	.....
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	4,415	25,258	621	46,690	42
20	.....1930..acres.....	6,636	20,655	5,798	39,496	.....
21	.....1920..acres.....	27,640	67,452	12,830	63,737	.....
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	84.6	77.6	97.8	65.1	88.8
23	.....1929..percent.....	82.1	81.9	81.5	41.5	.....
24	.....1919..percent.....	55.5	62.3	56.8	33.3	.....
CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises.....1940..dollars....	260,091	1,136,961	358,003	9,513,431	4,843
26	(a) Cost of irrigation works and equipment.....1940..dollars....	259,025	1,132,650	349,549	9,510,558	4,815
27	(b) Investment in water rights (reported).....1940..dollars....	1,066	4,311	8,454	2,875	28
28	Total investment in irrigation enterprises.....1930..dollars....	193,345	885,558	134,099	7,048,875	.....
29	.....1920..dollars....	460,823	977,786	190,836	4,709,303	.....
30	Increase or decrease (-), 1930-1940.....percent.....	34.5	28.4	167.0	35.0	.....
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	9.08	10.07	12.90	71.15	12.88
32	.....1930..dollars....	5.22	7.74	4.29	104.33	.....
33	.....1920..dollars....	7.42	6.41	6.43	49.30	.....
34	Average investment per acre irrigated.....1939..dollars....	10.73	12.97	13.19	109.32	14.59
35	Estimated final investment in existing enterprises.....1940..dollars....	264,991	1,137,681	360,093	10,671,778	9,993
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars....	9.22	10.01	12.83	79.12	21.82
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS			Primary	Supplemental	Primary	Supplemental
			Enterprises		Enterprises	
37	Enterprises reporting maintenance and operation.....1939..number.....	54	183	5	85	1
38	Area irrigated in these enterprises.....1939..acres.....	21,871	83,297	5,182	26,248	(2)
39	Cost of maintenance and operation.....1939..dollars....	6,655	26,691	862	6,502	(2)
40	Average cost, per acre irrigated.....1939..dollars....	0.30	0.32	0.17	0.25	(2)
41	Total annual charges (reported) ³.....1939..dollars....	2,888	32,403	1,246	7,200	58,049
42	Average annual charge per acre irrigated.....1939..dollars....	0.28	0.47	0.25	1.03	0.90
43	Area against which charges were assessed.....1939..acres.....	12,488	70,470	5,060	7,200	69,698
44	Average annual charge per acre assessed.....1939..dollars....	0.23	0.46	0.25	1.00	0.83
45	Total charges collected ³.....1939..dollars....	2,320	29,499	.....	7,000	36,710
46	Indebtedness to December 31 (reported) ⁴.....1939..dollars....	.....	25,745	.....	151,221	8,625,756
WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered.....1939..number.....	41	180	3	87	1
48	Area irrigated by these enterprises.....1939..acres.....	18,352	70,134	282	26,097	(2)
49	Water delivered.....1939..acre-feet....	50,080	134,465	333	31,567	(2)
50	Average water delivered per acre irrigated.....1939..acre-feet....	2.7	1.9	1.2	1.2	(2)
51	Average cost of water per acre irrigated.....1939..dollars....	0.28	0.60	0.11	0.25	(2)
52	Average cost of water per acre-foot delivered.....1939..dollars....	0.10	0.28	0.09	0.20	(2)
DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage.....1939..number.....	5	4	.....	.....	5
54	Irrigable area in these enterprises.....1939..acres.....	2,168	4,930	.....	.....	103,451
55	Irrigated area in these enterprises.....1939..acres.....	2,068	4,799	.....	.....	63,874
56	Area for which drains have been installed.....1939..acres.....	190	170	.....	.....	48,046
57	Additional area needing drainage.....1939..acres.....	205	245	.....	.....	1,739

¹ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

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

CENSUS OF IRRIGATION — MONTANA

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IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE
IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

MISSOURI RIVER—Continued									
Marias River				Misselshell River					
Total	Direct	Teton River	Arrow River	Judith River	Total	Direct	Boxelder-Flat Willow Creeks	Dry Creek	
(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
867	543	324	26	123	315	224	91	8	1
124,176	71,833	52,943	4,275	10,320	56,460	43,613	12,847	505	2
108,406	61,796	46,610	4,075	9,951	51,496	39,350	12,146	286	3
727	689	38	.....	12	137	66	71	219	4
15,043	9,348	5,695	200	357	4,827	4,167	660	.....	5
102,334	.....	46,974	.....	7,435	59,286	.....	.....	.....	6
108,703	.....	44,945	.....	15,173	45,569	.....	.....	.....	7
21.3	.....	11.4	.....	38.8	-4.8	.....	.....	.....	8
250,540	181,358	69,181	4,601	19,752	88,682	57,747	30,945	3,300	9
169,513	.....	67,699	.....	14,603	96,570	.....	.....	.....	10
454,626	.....	146,468	.....	40,993	141,363	.....	.....	.....	11
126,373	109,525	16,848	326	9,432	32,232	14,134	18,098	2,795	12
67,179	.....	20,725	.....	7,168	37,284	.....	.....	.....	13
345,923	.....	101,523	.....	25,820	95,804	.....	.....	.....	14
209,602	140,624	68,973	4,468	18,544	83,900	55,921	27,979	1,630	15
166,723	.....	66,799	.....	13,075	94,738	.....	.....	.....	16
204,672	.....	82,241	.....	35,469	113,964	.....	.....	.....	17
25.7	.....	3.3	.....	42.6	-1.0	.....	.....	.....	18
85,426	68,791	16,635	183	8,324	27,440	12,308	15,132	1,125	19
64,889	.....	19,825	.....	5,640	25,452	.....	.....	.....	20
95,969	.....	37,296	.....	20,286	68,405	.....	.....	.....	21
59.2	51.1	75.9	95.7	55.4	67.3	78.0	45.9	31.0	22
61.4	.....	70.3	.....	56.9	70.0	.....	.....	.....	23
53.1	.....	54.7	.....	42.8	40.0	.....	.....	.....	24
5,877,681	4,249,340	1,628,341	14,705	383,014	716,804	342,162	374,642	21,322	25
5,796,138	4,194,740	1,601,398	14,705	380,699	680,171	335,601	344,570	21,296	26
81,543	54,600	26,943	.....	2,315	58,633	6,561	50,072	25	27
4,800,336	.....	1,160,236	.....	90,134	705,729	.....	.....	.....	28
6,753,900	.....	1,251,130	.....	281,842	986,755	.....	.....	.....	29
22.4	.....	40.3	.....	324.9	-6.4	.....	.....	.....	30
28.04	30.22	23.61	3.29	20.54	8.54	6.12	13.39	13.08	31
28.79	.....	17.37	.....	6.89	9.04	.....	.....	.....	32
33.00	.....	15.21	.....	7.95	8.66	.....	.....	.....	33
47.33	59.16	31.11	3.44	37.11	12.70	7.85	29.16	42.22	34
8,809,136	7,176,820	1,632,316	15,570	386,164	743,764	362,657	381,107	23,522	35
35.16	39.57	23.59	3.38	19.55	8.39	6.28	12.32	7.13	36
Primary	Supplemental	Primary	Supplemental	Primary	Supplemental	Primary	Supplemental	Primary	Supplemental
Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises
173	(2) 1	91	82	(2) 1	28	53	(2) 1	233	153
122,352	(2)	71,205	51,147	(2)	4,275	9,219	(2)	54,295	41,687
90,031	(2)	74,729	15,302	(2)	1,650	5,141	(2)	36,213	26,555
0.74	(2)	1.05	0.30	(2)	0.39	0.56	(2)	0.67	0.64
114,218	.....	82,985	31,233	.....	2,265	.....	.....	4,673	4,673
1.19	.....	1.44	0.82	.....	0.74	.....	.....	0.70	0.70
124,285	.....	82,985	41,300	.....	2,630	.....	.....	7,440	7,440
0.82	.....	1.00	0.76	.....	0.86	.....	.....	0.63	0.63
93,394	350	68,439	24,955	350	3,995	.....	.....	325	325
5,234,272	27,000	4,968,825	265,447	27,000	100,279	.....	.....	38,022	22
189	.....	93	96	.....	21	47	(2) 1	235	158
123,208	.....	71,268	51,940	.....	3,990	9,202	(2)	51,494	39,045
164,857	.....	107,201	57,656	.....	2,412	10,028	(2)	51,241	40,237
1.3	.....	1.5	1.1	.....	0.60	1.1	(2)	1.0	1.0
1.06	.....	1.51	0.72	.....	0.38	0.66	(2)	0.63	0.59
0.79	.....	0.87	0.65	.....	0.83	0.61	(2)	0.63	0.58
(2) 1	.....	(2) 1	.....	.....	(2) 1	.....	.....	5	5
(2)	.....	(2)	.....	.....	(2)	.....	.....	875	875
(2)	.....	(2)	.....	.....	(2)	.....	.....	485	485
(2)	.....	(2)	.....	.....	(2)	.....	.....	25	25
(2)	.....	(2)	.....	.....	(2)	.....	.....	75	75

³Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
⁴Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - MONTANA

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND
AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1930 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		MISSOURI RIVER—Continued					
		Milk River					
		Total	Direct	Sandy Creek	Clear Creek	Lodge-Battle Creeks	Snake Creek
		(21)	(22)	(23)	(24)	(25)	
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number....	1,178	1,061	12	18	37	6
2	Area irrigated.....1939..acres.....	110,125	82,327	2,871	1,825	3,720	914
3	(a) Cropland harvested.....1939..acres.....	94,067	68,788	1,892	1,625	3,153	486
4	(b) Crop failure.....1939..acres.....	1,576	1,189	313	.....	67	7
5	(c) Pasture.....1939..acres.....	14,482	12,350	666	.....	500	421
6	Area irrigated.....1929..acres.....	88,218	55,499	.....	.....	.....	60
7	.....1919..acres.....	108,555	19,766	.....	.....	.....	910
8	Increase or decrease (-), 1929-1939.....percent....	24.8	48.3	.....	.....	.....	(1)
9	Irrigable area in enterprises.....1940..acres.....	234,797	191,865	6,660	2,141	5,076	2,264
10	.....1930..acres.....	210,998	169,716	.....	.....	.....	180
11	.....1920 ² ..acres.....	349,718	26,358	.....	.....	.....	3,130
12	Excess of irrigable area over the area irrigated.....1940..acres.....	124,872	109,538	3,789	316	1,356	1,350
13	.....1930..acres.....	128,780	114,217	.....	.....	.....	100
14	.....1920 ² ..acres.....	241,161	6,592	.....	.....	.....	2,220
15	Area works were capable of supplying with water.....1940..acres.....	191,422	155,319	5,165	2,079	4,388	1,620
16	.....1930..acres.....	190,218	148,861	.....	.....	.....	100
17	.....1920..acres.....	179,063	23,443	.....	.....	.....	2,275
18	Increase or decrease (-), 1930-1940.....percent....	0.6	4.5	.....	.....	.....	912.5
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	81,297	72,992	2,294	254	668	708
20	.....1930..acres.....	102,000	93,162	.....	.....	.....	100
21	.....1920..acres.....	70,508	3,677	.....	.....	.....	1,365
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	57.5	53.0	55.6	87.8	84.8	56.4
23	.....1929..percent....	46.4	37.3	.....	.....	.....	37.5
24	.....1919..percent....	60.6	84.3	.....	.....	.....	40.0
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars....	11,977,397	11,410,513	204,148	21,071	67,845	6,025
26	(a) Cost of irrigation works and equipment.....1940..dollars....	11,967,598	11,401,423	204,123	21,045	67,375	5,950
27	(b) Investment in water rights (reported).....1940..dollars....	9,899	9,090	25	26	470	75
28	Total investment in irrigation enterprises.....1930..dollars....	8,561,785	5,503,687	.....	.....	.....	800
29	.....1920..dollars....	7,271,098	154,208	.....	.....	.....	8,600
30	Increase or decrease (-), 1930-1940.....percent....	39.9	107.3	.....	.....	.....	653.1
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	62.57	73.47	39.53	10.14	15.46	3.72
32	.....1930..dollars....	45.01	37.02	.....	.....	.....	5.00
33	.....1920..dollars....	40.61	6.58	.....	.....	.....	3.78
34	Average investment per acre irrigated.....1939..dollars....	108.76	138.60	71.11	11.55	18.24	6.59
35	Estimated final investment in existing enterprises.....1940..dollars....	12,173,094	11,473,553	222,155	21,321	76,645	7,825
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars....	51.85	59.80	33.36	9.96	15.10	3.46
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		Primary	Sup.	Primary	Sup.		
		Enterprises		Enterprises			
37	Enterprises reporting maintenance and operation.....1939..number....	166	2	105	1	11	16
38	Area irrigated in these enterprises.....1939..acres.....	109,446	(3)	81,929	(5)	2,889	1,825
39	Cost of maintenance and operation.....1939..dollars....	148,387	(3)	137,294	(5)	2,459	1,160
40	Average cost, per acre irrigated.....1939..dollars....	1.36	(3)	1.68	(5)	0.86	0.64
41	Total annual charges (reported) ⁴.....1939..dollars....	192,834	.....	188,359	.....	.....	1,880
42	Average annual charge per acre irrigated.....1939..dollars....	2.28	.....	2.60	.....	.....	0.94
43	Area against which charges were assessed.....1939..acres.....	128,386	.....	113,786	.....	.....	2,000
44	Average annual charge per acre assessed.....1939..dollars....	1.50	.....	1.66	.....	.....	0.94
45	Total charges collected ⁴.....1939..dollars....	41,159	.....	37,618	.....	.....	1,880
46	Indebtedness to December 31 (reported) ⁵.....1939..dollars....	8,052,472	.....	8,045,272	.....	.....	6,000
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number....	170	2	108	1	11	16
48	Area irrigated by these enterprises.....1939..acres.....	65,862	(3)	66,408	(3)	2,871	1,825
49	Water delivered.....1939..acre-feet....	82,814	(3)	61,029	(3)	2,807	1,302
50	Average water delivered per acre irrigated.....1939..acre-feet....	1.0	(3)	0.9	(3)	1.0	0.7
51	Average cost of water per acre irrigated.....1939..dollars....	2.16	(3)	2.63	(3)	0.86	0.64
52	Average cost of water per acre-foot delivered.....1939..dollars....	2.24	(3)	2.68	(3)	0.89	0.89
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number....	23	.....	18	.....	2	.....
54	Irrigable area in these enterprises.....1939..acres.....	172,902	.....	170,342	(3)	(3)	(3)
55	Irrigated area in these enterprises.....1939..acres.....	68,336	.....	67,747	(3)	(3)	(3)
56	Area for which drains have been installed.....1939..acres.....	4,924	.....	3,984	(3)	(3)	(3)
57	Additional area needing drainage.....1939..acres.....	17,605	.....	17,585	(3)	(3)	(3)

¹ Less than one-tenth of 1 percent.² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.³ Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — MONTANA

327

IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE
IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

MISSOURI RIVER—Continued										
Milk River—Continued			Redwater Creek	Poplar River	Big Muddy Creek	Yellowstone River				
Frenchman Creek	Beaver Creek	Rock Creek				Total	Direct	Shields River	Boulder River	
(26)	(27)	(28)	(29)	(30)	(31)		(33)	(34)	(35)	
14	8	22	17	9	4	5,413	2,993	200	120	
2,607	7,750	8,111	569	680	446	443,230	225,615	27,078	16,889	
2,082	7,720	8,111	404	605	431	405,271	210,698	25,197	12,729	
.....	.....	.....	5	.....	.....	2,316	1,657	.....	.....
515	30	.....	160	75	15	35,643	14,260	1,881	4,160	
.....	.....	.....	.....	.....	.....	434,550	162,312	32,866	11,309	
.....	.....	.....	.....	.....	.....	440,354	189,453	25,940	.....
.....	.....	.....	.....	.....	.....	2.0	39.6	-17.6	49.3	
4,810	12,366	9,615	3,513	787	671	691,462	326,585	37,604	18,881	
.....	.....	.....	.....	.....	.....	651,065	242,683	59,417	12,981	
2,203	4,810	1,504	2,944	107	225	868,817	279,211	94,238	.....
.....	.....	.....	.....	.....	.....	251,232	99,970	10,628	1,992	
.....	.....	.....	.....	.....	.....	216,515	80,981	26,551	1,672	
.....	.....	.....	.....	.....	.....	418,463	89,758	68,298	.....
3,870	9,366	9,615	3,133	787	471	651,505	309,863	36,675	18,418	
.....	.....	.....	.....	.....	.....	613,707	235,401	49,482	12,479	
.....	.....	.....	.....	.....	.....	668,355	262,801	53,082	.....
.....	.....	.....	.....	.....	.....	6.2	31.1	-25.9	47.6	
1,283	1,616	1,504	2,584	107	25	208,275	83,248	9,597	1,529	
.....	.....	.....	.....	.....	.....	179,157	74,089	16,596	1,170	
.....	.....	.....	.....	.....	.....	228,001	73,348	27,122	.....
67.4	82.7	84.4	18.2	86.4	94.7	68.0	73.1	73.8	81.7	
.....	.....	.....	.....	.....	.....	70.8	68.7	66.4	90.6	
.....	.....	.....	.....	.....	.....	65.9	72.1	48.9	.....
21,713	213,539	32,543	24,689	6,763	7,806	17,661,091	10,347,508	163,882	109,422	
21,700	213,422	32,500	24,667	6,750	7,800	17,493,615	10,259,196	161,045	108,000	
13	117	43	22	3	6	167,476	88,312	2,837	822	
.....	.....	.....	.....	.....	.....	12,915,910	7,070,112	397,120	92,927	
.....	.....	.....	.....	.....	.....	13,762,337	7,608,390	424,103	.....
.....	.....	.....	.....	.....	.....	36.7	46.4	-58.7	17.8	
5.61	22.80	3.38	7.88	8.58	16.57	27.11	33.39	4.47	5.94	
.....	.....	.....	.....	.....	.....	21.05	29.91	8.03	7.45	
.....	.....	.....	.....	.....	.....	20.59	28.57	7.99	.....
8.33	27.55	4.01	43.39	9.93	17.50	39.85	45.66	6.05	6.48	
24,713	314,339	32,543	26,489	6,753	8,756	19,073,603	10,662,694	168,282	111,122	
5.14	25.42	3.38	7.54	8.58	10.05	27.47	32.65	4.48	5.89	
6	7	Primary Sup.		7	7	4	Primary Sup.		108	44
		Enterprises					Enterprises			
2,607	7,732	(3)	(3)	67	605	446	929	13	221,257	2,919
1,205	2,072	(3)	(3)	550	248	380	428,150	31,505	23,641	16,138
0.46	0.27	(3)	(3)	8.21	0.41	0.85	356,758	6,100	7,567	3,294
.....	.....	.....	.....	.....	.....	.....	0.83	0.19	0.32	0.20
675	.....	1,920	.....	.....	.....	.....	370,834	37,150	1,260	1,271
0.34	.....	0.24	.....	.....	.....	.....	1.17	1.21	0.29	0.12
3,000	.....	9,600	.....	.....	.....	.....	358,929	46,600	4,286	11,170
0.22	.....	0.20	.....	.....	.....	.....	1.03	0.80	0.29	0.11
.....	.....	1,641	.....	.....	.....	.....	398,164	19,339	504	710
200	.....	1,000	.....	.....	.....	.....	7,461,575	1,401,584	41,584	.....
5	8	2	1	9	8	4	874	10	364	4
2,527	7,750	(3)	(3)	379	680	446	357,546	15,696	209,679	319
2,009	5,550	(3)	(3)	179	2,743	506	758,093	16,554	474,732	244
0.8	0.7	(3)	(3)	0.5	4.0	1.1	2.1	1.1	2.3	0.8
0.53	0.27	(3)	(3)	2.13	0.41	0.85	1.01	2.01	1.26	0.85
0.67	0.37	(3)	(3)	2.94	0.10	0.75	0.48	1.90	0.56	1.11
.....
.....	(3)	1	(3)	1	67	34
.....	(3)	(3)	348,266	170,664
.....	(3)	(3)	215,774	134,026
.....	87,860	64,925
.....	26,249	15,681
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¹ Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
² Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION—MONTANA

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND
AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drain- age basin)		MISSOURI RIVER—Continued				
		Yellowstone River—Continued				
		Stillwater River				
		Total	Direct (36)	Fishtail—West Rosebud Creeks		
Total	Direct (37)			East Rosebud Creek (38)		
IRRIGATED FARMS AND AREAS						
1	Irrigated farms.....1939...number.....	248	90	158	84	74
2	Area irrigated.....1939...acres.....	22,163	7,907	14,256	7,449	6,807
3	(a) Cropland harvested.....1939...acres.....	17,180	6,766	10,414	4,949	5,465
4	(b) Crop failure.....1939...acres.....	38	38	.....	.....	.....
5	(c) Pasture.....1939...acres.....	4,945	1,103	3,842	2,500	1,342
6	Area irrigated.....1929...acres.....	22,162	.....	.....	.....	.....
7	.....1919...acres.....	23,926	.....	.....	.....	.....
8	Increase or decrease (-), 1929-1939.....percent.....	(¹)	.....	.....	.....	.....
9	Irrigable area in enterprises.....1940...acres.....	36,151	9,805	26,346	9,048	17,298
10	.....1930...acres.....	32,327	.....	.....	.....	.....
11	.....1920 ² ...acres.....	35,043	.....	.....	.....	.....
12	Excess of irrigable area over the area irrigated.....1940...acres.....	13,988	1,698	12,090	1,599	10,491
13	.....1930...acres.....	10,165	.....	.....	.....	.....
14	.....1920 ² ...acres.....	11,717	.....	.....	.....	.....
15	Area works were capable of supplying with water.....1940...acres.....	28,595	9,749	18,846	9,048	9,798
16	.....1930...acres.....	31,087	.....	.....	.....	.....
17	.....1920...acres.....	30,969	.....	.....	.....	.....
18	Increase or decrease (-), 1930-1940.....percent.....	-8.0	.....	.....	.....	.....
19	Excess of area works were capable of supplying with water over area irrigated.....1940...acres.....	6,432	1,842	4,590	1,599	2,991
20	.....1930...acres.....	8,925	.....	.....	.....	.....
21	.....1920...acres.....	7,043	.....	.....	.....	.....
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.....	77.5	81.1	75.6	82.3	69.5
23	.....1929...percent.....	71.3	.....	.....	.....	.....
24	.....1919...percent.....	77.3	.....	.....	.....	.....
CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises.....1940...dollars.....	602,510	94,406	508,104	32,235	475,869
26	(a) Cost of irrigation works and equipment.....1940...dollars.....	595,275	94,260	501,015	32,215	468,800
27	(b) Investment in water rights (reported).....1940...dollars.....	7,235	146	7,089	20	7,069
28	Total investment in irrigation enterprises.....1930...dollars.....	674,220	.....	.....	.....	.....
29	.....1920...dollars.....	307,873	.....	.....	.....	.....
30	Increase or decrease (-), 1930-1940.....percent.....	-10.6	.....	.....	.....	.....
31	Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.....	21.07	9.68	26.96	3.56	48.57
32	.....1930...dollars.....	21.69	.....	.....	.....	.....
33	.....1920...dollars.....	9.94	.....	.....	.....	.....
34	Average investment per acre irrigated.....1939...dollars.....	27.19	11.94	35.64	4.33	66.91
35	Estimated final investment in existing enterprises.....1940...dollars.....	614,110	96,006	518,104	32,235	466,869
36	Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.....	16.99	9.79	19.67	3.56	28.09
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
		Primary	Sup.	Primary	Sup.	
		Enterprises		Enterprises		
37	Enterprises reporting maintenance and operation.....1939...number.....	105	1	34	1	71
38	Area irrigated in these enterprises.....1939...acres.....	20,459	(³)	7,096	(³)	13,363
39	Cost of maintenance and operation.....1939...dollars.....	8,105	(³)	3,065	(³)	5,040
40	Average cost, per acre irrigated.....1939...dollars.....	0.40	(³)	0.43	(³)	0.38
41	Total annual charges (reported) ⁴.....1939...dollars.....	2,837	.....	1,739	.....	1,088
42	Average annual charge per acre irrigated.....1939...dollars.....	0.36	.....	0.43	.....	0.30
43	Area against which charges were assessed.....1939...acres.....	8,235	.....	4,085	.....	4,150
44	Average annual charge per acre assessed.....1939...dollars.....	0.34	.....	0.43	.....	0.26
45	Total charges collected ⁴.....1939...dollars.....	900	.....	900	.....	.....
46	Indebtedness to December 31 (reported) ⁵.....1939...dollars.....	453,000	.....	.....	.....	453,000
WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered.....1939...number.....	80	.....	26	.....	54
48	Area irrigated by these enterprises.....1939...acres.....	15,540	.....	5,953	.....	9,587
49	Water delivered.....1939...acre-feet.....	33,287	.....	17,661	.....	15,626
50	Average water delivered per acre irrigated.....1939...acre-feet.....	2.1	.....	3.0	.....	1.6
51	Average cost of water per acre irrigated.....1939...dollars.....	0.46	.....	0.40	.....	0.49
52	Average cost of water per acre-foot delivered.....1939...dollars.....	0.21	.....	0.14	.....	0.30
DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage.....1939...number.....	10	.....	7	.....	3
54	Irrigable area in these enterprises.....1939...acres.....	1,643	.....	467	.....	1,176
55	Irrigated area in these enterprises.....1939...acres.....	1,466	.....	401	.....	1,065
56	Area for which drains have been installed.....1939...acres.....	273	.....	273	.....	.....
57	Additional area needing drainage.....1939...acres.....	138	.....	7	.....	131

² Data for 2 enterprises in Little Powder River Drainage Basin (47) (number refers to separate map) are included with Powder River Drainage Basin (46).¹ Less than one-tenth of 1 percent.³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.⁵ Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — MONTANA

329

IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE
IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

MISSOURI RIVER—Continued										
Yellowstone River—Continued										
Clarks Fork (Yellowstone)			Big Horn River				Rosebud Creek	Yellow River	Powder River	
Total	Direct	Red Lodge-Rock Creeks	Total	Direct	Shoshone River-Sage Creek	Little Horn River				
	(39)	(40)		(41)	(42)	(43)	(44)	(45)	(46)	
840	365	475	762	606	10	146	13	217	17	1
77,252	32,372	44,880	56,323	44,294	1,064	10,965	700	13,580	2,195	2
71,410	31,082	40,328	53,467	41,975	993	10,499	700	12,018	1,752	3
479	65	414	106	46	40	20	.....	11	25	4
5,363	1,225	4,138	2,760	2,273	31	446	.....	1,851	418	5
86,310	.....	.....	43,319	.....	.....	.....	.....	13,303	1,144	6
68,899	.....	.....	51,103	.....	.....	.....	.....	11,170	728	7
-10.5	.....	.....	30.0	.....	.....	.....	.....	4.3	91.9	8
97,533	37,217	60,316	147,539	123,178	1,245	23,116	1,648	23,377	4,129	9
102,285	.....	.....	87,171	.....	.....	.....	.....	18,504	1,572	10
125,367	.....	.....	92,036	.....	.....	.....	.....	31,396	6,871	11
20,281	4,845	15,436	91,216	78,884	181	12,151	948	9,497	1,894	12
15,975	.....	.....	43,852	.....	.....	.....	.....	5,301	528	13
56,328	.....	.....	40,933	.....	.....	.....	.....	20,226	5,143	14
96,097	36,105	59,992	136,641	116,252	1,245	19,144	1,111	19,271	3,819	15
100,548	.....	.....	77,447	.....	.....	.....	.....	18,487	1,217	16
116,906	.....	.....	66,206	.....	.....	.....	.....	21,403	4,841	17
-4.4	.....	.....	76.4	.....	.....	.....	.....	4.2	213.8	18
18,845	3,733	15,112	80,318	71,958	181	8,179	411	5,391	1,624	19
14,238	.....	.....	34,128	.....	.....	.....	.....	5,194	73	20
47,667	.....	.....	15,103	.....	.....	.....	.....	10,233	4,113	21
80.4	89.7	74.8	41.2	38.1	85.5	57.3	63.0	72.0	57.5	22
85.8	.....	.....	55.9	.....	.....	.....	.....	71.9	94.0	23
59.1	.....	.....	77.2	.....	.....	.....	.....	52.2	15.0	24
1,618,384	395,629	1,222,755	2,790,670	2,041,987	11,663	737,020	34,679	1,052,622	28,443	25
1,603,639	392,304	1,211,335	2,790,494	2,041,962	11,661	736,871	34,679	1,050,639	28,077	26
14,745	3,325	11,420	176	25	2	149	.....	52,983	360	27
856,462	.....	.....	2,385,806	.....	.....	.....	.....	483,979	7,200	28
1,108,191	.....	.....	2,339,457	.....	.....	.....	.....	608,504	35,402	29
89.0	.....	.....	17.0	.....	.....	.....	.....	303.5	295.0	30
16.84	10.96	20.38	20.42	17.57	9.37	36.50	31.21	101.32	7.45	31
8.52	.....	.....	30.81	.....	.....	.....	.....	26.17	5.92	32
9.51	.....	.....	35.34	.....	.....	.....	.....	28.43	7.31	33
20.95	12.22	27.24	49.55	46.10	10.96	67.22	49.54	140.68	12.06	34
1,624,084	401,329	1,222,755	3,824,038	2,767,353	11,713	1,054,973	38,872	1,984,302	30,878	35
16.65	10.78	20.27	25.92	22.39	9.41	45.64	23.59	84.88	7.48	36
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	
Enterprises		Enterprises		Enterprises		Enterprises		Enterprises		
188	6	38	2	150	4	37	13	6	18	6
75,626	15,377	32,369	(3)	43,257	15,322	55,763	44,294	504	10,965	695
38,135	2,339	20,605	(3)	17,530	2,214	85,629	62,610	334	22,285	991
0.50	0.15	0.64	(3)	0.41	0.14	1.53	1.42	0.66	2.03	1.43
32,970	31,000	23,141	.....	9,829	31,000	72,224	55,242	108	16,874	326
0.57	2.07	0.77	.....	0.35	2.07	1.37	1.27	1.33	1.85	1.88
59,697	31,000	30,663	.....	28,944	31,000	74,554	58,774	86	15,694	173
0.55	1.00	0.75	.....	0.34	1.00	0.97	0.84	1.26	1.08	1.88
32,563	14,973	17,561	.....	15,002	14,973	28,926	25,743	37	3,146	.....
26,347	700,000	17,510	.....	8,837	700,000	2,301,364	1,598,375	4,759	698,230	9,288
180	6	35	2	145	4	34	11	8	15	6
61,499	15,377	24,857	(3)	36,642	15,322	23,036	20,294	1,021	1,721	524
121,724	16,310	59,801	(3)	61,923	16,225	44,088	41,033	1,147	1,888	1,062
2.0	1.1	2.4	(3)	1.7	1.1	1.9	2.0	1.1	1.1	2.0
0.61	2.03	0.80	(3)	0.47	2.03	0.97	1.02	0.67	0.44	1.43
0.31	1.91	0.33	(3)	0.28	1.92	0.50	0.50	0.59	0.40	0.70
7	.....	(3)	2	5	.....	4	3	.....	1	2
14,800	.....	(3)	.....	5,200	.....	141,016	122,242	.....	18,774	(3)
11,640	.....	(3)	.....	4,400	.....	51,722	43,500	.....	8,222	(3)
160	.....	(3)	.....	160	.....	21,752	21,368	.....	364	(3)
990	.....	(3)	.....	490	.....	6,415	4,934	.....	1,481	(3)

¹ Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
² Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.
³ Data for less than 3 enterprises shown with permission of the enterprise involved.

CENSUS OF IRRIGATION - MONTANA

DRAINAGE BASIN TABLE I--AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND
AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		MISSOURI RIVER—Continued				COLUMBIA RIVER	
		Yellowstone River—Con.	Little Missouri River			Total	Kootenai River
		O'Fallon Creek	Total	Direct ¹	Beaver Creek		
		(48)		(49)	(52)		(54)
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number.....	3	12	8	4	5,124	202
2	Area irrigated.....1939..acres.....	135	190	152	38	341,873	7,163
3	(a) Cropland harvested.....1939..acres.....	120	190	152	38	280,531	6,558
4	(b) Crop failure.....1939..acres.....	.....	.....	.....	.....	1,796	8
5	(c) Pasture.....1939..acres.....	15	.....	.....	.....	59,546	597
6	Area irrigated.....1929..acres.....	.....	1,462	.....	.....	270,426	7,590
7	.....1919..acres.....	.....	360	.....	.....	291,966	5,982
8	Increase or decrease (-), 1929-1939.....percent.....	.....	-87.0	.....	.....	26.4	-5.6
9	Irrigable area in enterprises.....1940..acres.....	1,015	2,034	1,619	415	455,333	10,035
10	.....1930..acres.....	.....	2,127	.....	.....	434,176	10,330
11	.....1920 ² ..acres.....	.....	3,205	.....	.....	616,080	14,423
12	Excess of irrigable area over the area irrigated..1940..acres.....	880	1,844	1,467	377	113,460	2,872
13	.....1930..acres.....	.....	665	.....	.....	163,750	2,740
14	.....1920 ² ..acres.....	.....	2,825	.....	.....	324,114	8,441
15	Area works were capable of supplying with water...1940..acres.....	1,015	1,839	1,479	360	404,450	8,835
16	.....1930..acres.....	.....	1,962	.....	.....	404,042	9,432
17	.....1920..acres.....	.....	1,480	.....	.....	453,588	9,724
18	Increase or decrease (-), 1930-1940.....percent.....	.....	-6.3	.....	.....	0.1	-6.3
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	880	1,649	1,327	322	62,577	1,672
20	.....1930..acres.....	.....	500	.....	.....	133,616	1,842
21	.....1920..acres.....	.....	1,100	.....	.....	161,622	3,742
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	13.3	10.3	10.3	10.6	84.5	81.1
23	.....1929..percent.....	.....	74.5	.....	.....	66.9	80.5
24	.....1919..percent.....	.....	25.7	.....	.....	64.4	61.5
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars.....	12,971	23,269	7,154	16,115	13,447,045	222,549
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	12,971	23,269	7,154	16,115	13,348,465	220,514
27	(b) Investment in water rights (reported).....1940..dollars.....	.....	.....	.....	.....	100,580	2,035
28	Total investment in irrigation enterprises.....1930..dollars.....	.....	28,656	.....	.....	9,226,910	230,555
29	.....1920..dollars.....	.....	15,064	.....	.....	8,636,067	221,976
30	Increase or decrease (-), 1930-1940.....percent.....	.....	-18.8	.....	.....	45.7	-3.5
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	12.78	12.65	4.84	44.76	33.25	25.19
32	.....1930..dollars.....	.....	14.61	.....	.....	22.84	24.44
33	.....1920..dollars.....	.....	10.18	.....	.....	19.04	22.83
34	Average investment per acre irrigated.....1939..dollars.....	96.08	122.47	47.07	424.08	39.33	31.07
35	Estimated final investment in existing enterprises.....1940..dollars.....	15,221	26,394	9,804	16,590	14,633,812	234,524
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	15.00	12.98	6.06	39.98	32.14	23.37
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
37	Enterprises reporting maintenance and operation...1939..number.....	1	5	2	3	Primary Enterprises	Supplemental Enterprises
38	Area irrigated in these enterprises.....1939..acres.....	(4)	94	(4)	17	1,579	12
39	Cost of maintenance and operation.....1939..dollars.....	(4)	225	(4)	125	325,653	19,461
40	Average cost, per acre irrigated.....1939..dollars.....	(4)	2.39	(4)	7.35	247,990	3,699
41	Total annual charges (reported) ⁵.....1939..dollars.....	.....	.....	.....	.....	0.76	0.19
42	Average annual charge per acre irrigated.....1939..dollars.....	.....	.....	.....	.....	240,350	26,394
43	Area against which charges were assessed.....1939..acres.....	.....	.....	.....	.....	1.44	1.36
44	Average annual charge per acre assessed.....1939..dollars.....	.....	.....	.....	.....	201,717	36,502
45	Total charges collected ⁵.....1939..dollars.....	.....	.....	.....	.....	1.19	0.72
46	Indebtedness to December 31 (reported) ⁶.....1939..dollars.....	.....	.....	.....	.....	161,437	13,022
47	Enterprises reporting water delivered.....1939..number.....	1	6	2	4	1,695	12
48	Area irrigated by these enterprises.....1939..acres.....	(4)	115	(4)	38	329,838	17,394
49	Water delivered.....1939..acre-feet.....	(4)	164	(4)	59	867,046	18,841
50	Average water delivered per acre irrigated.....1939..acre-feet.....	(4)	1.4	(4)	1.6	2.6	1.1
51	Average cost of water per acre irrigated.....1939..dollars.....	(4)	1.86	(4)	2.14	0.92	1.51
52	Average cost of water per acre-foot delivered.....1939..dollars.....	(4)	1.31	(4)	2.50	0.35	1.39
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number.....	.....	2	.....	2	47	4
54	Irrigable area in these enterprises.....1939..acres.....	(4)	.....	(4)	.....	148,350	520
55	Irrigated area in these enterprises.....1939..acres.....	(4)	.....	(4)	.....	87,287	442
56	Area for which drains have been installed.....1939..acres.....	(4)	.....	(4)	.....	2,634	100
57	Additional area needing drainage.....1939..acres.....	(4)	.....	(4)	.....	2,764	44

¹Data for 2 enterprises in Boxelder Creek Drainage Basin (50) (number refers to separate map) and 1 enterprise in Little Beaver Creek Drainage Basin (51) are included with Little Missouri River "Direct" Drainage Basin (49).

²Data for the 1930 and 1920 Censuses for Upper Clark Fork Drainage Basin (58) (number refers to separate map) are included with Lower Clark Fork "Direct" Drainage Basin (55).

³For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION — MONTANA

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IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE
IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

COLUMBIA RIVER—Continued												
Lower Clark Fork												
Total	Direct ² (55)	Upper Clark Fork ² (56)	Blackfoot River (57)	Bitterroot River (58)	Flathead River				Total	Direct (59)	Swan River (60)	Little Bitterroot River (61)
4,822	535	789	174	1,786	1,636	1,402	28	210	1,636	1,402	28	210
334,710	22,865	83,073	30,062	113,822	84,888	75,139	887	8,662	84,888	75,139	887	8,662
273,873	20,655	72,337	28,621	84,248	67,812	59,574	887	7,451	67,812	59,574	887	7,451
1,788	46	668	200	356	518	482	.....	36	518	482	.....	36
58,849	2,164	10,068	1,041	28,218	16,458	15,083	.....	1,375	16,458	15,083	.....	1,375
262,836	12,771	.....	32,435	89,762	50,787	.....	.....	.....	89,762	.....	.....	.....
265,884	5,432	.....	40,804	112,622	44,333	.....	.....	.....	112,622	.....	.....	.....
27.3	79.0	.....	-7.3	26.8	67.1	.....	.....	.....	26.8	.....	.....	.....
445,298	37,931	91,519	40,862	128,827	148,050	131,024	1,165	15,870	148,050	131,024	1,165	15,870
423,846	16,919	.....	45,246	114,631	143,787	.....	.....	.....	143,787	.....	.....	.....
601,857	14,403	.....	83,716	168,241	154,233	.....	.....	.....	168,241	.....	.....	.....
110,588	15,066	8,446	10,800	13,005	63,171	55,885	276	7,008	63,171	55,885	276	7,008
161,010	4,148	.....	12,811	24,869	93,000	.....	.....	.....	24,869	.....	.....	.....
315,673	8,971	.....	43,112	45,619	109,900	.....	.....	.....	45,619	.....	.....	.....
395,615	31,986	90,271	40,053	120,292	113,013	98,970	943	13,100	120,292	98,970	943	13,100
394,610	15,417	.....	43,572	109,782	128,588	.....	.....	.....	109,782	.....	.....	.....
443,864	10,499	.....	61,476	139,481	113,150	.....	.....	.....	139,481	.....	.....	.....
0.3	107.5	.....	-8.1	9.6	-12.1	.....	.....	.....	-8.1	.....	.....	.....
60,905	9,121	7,198	9,991	6,470	26,125	23,831	56	4,238	6,470	23,831	56	4,238
131,774	2,646	.....	11,137	20,030	77,801	.....	.....	.....	20,030	.....	.....	.....
157,880	5,067	.....	20,872	26,869	68,817	.....	.....	.....	26,869	.....	.....	.....
84.6	71.5	92.0	75.1	94.6	75.1	75.9	94.1	67.6	75.1	75.9	94.1	67.6
86.6	82.8	.....	74.4	81.8	39.5	.....	.....	.....	81.8	.....	.....	.....
64.4	51.7	.....	66.0	80.7	39.2	.....	.....	.....	80.7	.....	.....	.....
13,224,496	715,657	1,607,241	474,512	2,340,188	8,086,898	6,701,159	9,212	1,376,527	8,086,898	6,701,159	9,212	1,376,527
13,125,951	704,762	1,548,773	462,913	2,325,717	8,063,786	6,698,316	8,985	1,376,485	8,063,786	6,698,316	8,985	1,376,485
98,545	10,895	58,468	11,599	14,471	3,112	2,843	227	42	14,471	2,843	227	42
8,996,375	453,769	.....	233,832	1,935,651	5,603,512	.....	.....	.....	1,935,651	.....	.....	.....
8,414,091	362,027	.....	624,291	1,138,329	4,737,311	.....	.....	.....	1,138,329	.....	.....	.....
47.0	57.7	.....	102.9	20.9	44.3	.....	.....	.....	20.9	.....	.....	.....
33.43	22.37	17.80	11.85	19.45	71.56	67.71	9.77	105.08	19.45	67.71	9.77	105.08
22.80	29.43	.....	5.37	17.63	43.58	.....	.....	.....	17.63	.....	.....	.....
18.96	34.48	.....	10.16	8.16	41.87	.....	.....	.....	8.16	.....	.....	.....
39.51	31.30	19.35	15.76	20.56	95.27	89.18	10.39	155.33	20.56	89.18	10.39	155.33
14,399,288	887,297	1,614,893	487,687	2,344,838	9,064,573	7,582,019	11,327	1,471,227	2,344,838	7,582,019	11,327	1,471,227
32.34	23.39	17.65	11.91	18.49	61.22	57.87	9.72	92.70	18.49	57.87	9.72	92.70
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary
Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises
1,446	12	250	3	379	114	473	8	230	379	11	.....	37
318,668	19,461	22,113	361	79,322	23,558	111,054	6,980	82,821	79,322	281	8,228	38
241,740	3,699	15,038	75	37,494	8,400	83,550	1,325	97,198	37,494	165	12,229	39
0.76	0.19	0.68	0.20	0.47	0.36	0.75	0.19	1.17	0.47	0.59	1.49	40
236,067	26,394	14,616	370	6,474	24,760	83,959	1,274	123,018	6,474	.....	13,541	41
1.43	1.36	1.30	1.00	0.87	2.05	1.35	0.18	1.60	0.87	.....	1.73	42
199,298	36,502	14,461	370	10,046	25,000	64,171	11,132	105,620	10,046	.....	11,775	43
1.18	0.72	1.01	1.00	0.84	0.99	1.31	0.11	1.16	0.84	.....	1.15	44
157,769	13,022	9,276	352	7,212	11,979	36,367	691	104,894	7,212	.....	11,269	45
10,984,172	498,508	497,525	.....	3,000	498,508	220,234	1,507,567	8,755,846	498,508	.....	1,441,614	46
1,537	12	278	4	399	129	481	7	250	399	15	.....	47
322,675	17,394	22,592	366	80,918	29,859	106,892	4,908	82,414	80,918	887	8,257	48
842,572	18,841	61,579	513	271,680	93,687	320,784	6,228	124,842	271,680	3,471	11,866	49
2.6	1.1	2.7	1.3	8.4	.....	2.1	3.0	1.3	8.4	.....	1.4	50
0.91	1.51	0.98	1.12	0.51	.....	0.51	0.79	1.58	0.51	.....	1.71	51
0.35	1.39	0.36	0.84	0.15	.....	0.24	0.26	1.05	0.15	.....	1.19	52
43	.....	.....	.....	27	.....	8	.....	6	.....	.....	.....	53
147,830	.....	.....	.....	8,740	.....	4,308	.....	134,347	.....	.....	.....	54
86,845	.....	.....	.....	8,195	.....	3,778	.....	74,437	.....	.....	.....	55
2,534	.....	.....	.....	1,694	.....	.....	.....	760	.....	.....	.....	56
2,720	.....	.....	.....	433	.....	237	.....	2,050	.....	.....	.....	57

¹Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

²Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

³Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

⁴Data for less than 3 enterprises shown with permission of the enterprise involved.

CENSUS OF IRRIGATION — MONTANA

DRAINAGE BASIN TABLE II—ENTERPRISES AND IRRIGATION

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		STATE TOTAL	MISSOURI RIVER					
			Total	Direct ¹	Jefferson River			
					Total	Direct	Beaverhead River	
							Total	Direct
ENTERPRISES AND IRRIGATION WORKS JANUARY 1			(1)	(2)	(3)			
1	Enterprises.....1940..number.....	25,560	3,759	540	1,138	152	379	226
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	422	516	207	438	312	433	571
3	Diversion dams.....1940..total number.....	6,136	4,013	464	1,588	128	695	561
4	1930..total number.....	2,856	2,377	6	728	22	298	.....
5	1920..total number.....	3,545	2,805	19	1,174	23	516	.....
6	(a) Concrete and masonry.....1940..number.....	254	220	26	78	2	49	15
7	(b) Timber.....1940..number.....	1,067	611	55	368	79	93	35
8	(c) Earth and rock.....1940..number.....	3,217	2,200	229	901	27	468	445
9	(d) Other, mixed, and not reported.....1940..number.....	1,598	982	154	241	20	82	66
10	Main canals and laterals.....1940..total length, miles.....	15,702.5	11,822.7	1,128.9	2,537.2	379.1	807.2	440.8
11	1930..total length, miles.....	15,957	12,468	131	2,969	142	930	.....
12	1920..total length, miles.....	22,496	18,150	511	4,312	228	1,373	.....
13	(a) Earth.....1940..length, miles.....	15,555	11,736	1,122	2,510	372	796	437
14	(b) Lined.....1940..length, miles.....	147.5	86.7	6.9	27.2	7.1	9.2	3.8
15	1940..capacity, c.f.s. ³	66,745	55,287	4,446	20,526	1,823	5,350	3,937
16	1930..capacity, c.f.s. ³	53,253	45,956	543	9,440	766	3,258	.....
17	1920..capacity, c.f.s. ³	94,429	78,815	778	25,319	1,331	5,340	.....
18	Pipe lines ⁴.....1940..total length, miles.....	148.1	91.8	11.4	4.7	1.1	0.9	0.3
19	1930..total length, miles.....	64.9	26.7	0.7	0.5	.....	.....	.....
20	1920..total length, miles.....	48.0	17.6	4.0	0.1	0.1	.....	.....
21	(a) Concrete.....1940..length, miles.....	14.5	9.9	0.4	0.1	.....	.....	.....
22	(b) Metal.....1940..length, miles.....	78.7	42.5	9.5	2.1	0.1	0.4	0.3
23	(c) Wood-stave.....1940..length, miles.....	26.1	10.8	1.5	2.5	1.0	0.5	.....
24	(d) Other.....1940..length, miles.....	28.8	28.6	.....	.....	.....	.....	.....
25	Storage dams.....1940..total number.....	468	358	45	37	1	15	4
26	1930..total number.....	325	263	.....	41	.....	12	.....
27	1920..total number.....	523	414	11	45	2	15	.....
28	(a) Concrete and masonry.....1940..number.....	19	9	.....	1	.....	.....	2
29	(b) Earth and rock.....1940..number.....	385	311	42	25	1	13	2
30	(c) Other, mixed, and not reported.....1940..number.....	64	38	3	11	.....	2	2
31	Reservoirs.....1940..total number.....	517	402	51	39	1	14	3
32	(a) 1-99 acre-feet capacity.....1940..number.....	294	236	38	15	.....	3	.....
33	(b) 100-999 acre-feet capacity.....1940..number.....	149	116	12	16	.....	8	1
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	74	50	1	8	1	3	2
35	1940..total capacity, ac.-ft. ⁵	1,301,422	1,061,882	7,093	209,094	(⁶)	168,229	127,150
36	1930..total number.....	292	227	.....	40	.....	13	.....
37	1920..total capacity, ac.-ft. ⁵	857,087	694,023	.....	65,327	.....	54,025	.....
38	Wells, flowing.....1940..number.....	44	5	1	.....	.....	.....	.....
39	1930..number.....	40	3	.....	.....	.....	.....	.....
40	1920..number.....	41	28	.....	2	.....	1	.....
41	1940..yield, g.p.m.....	9,834	234	(⁶)	.....	.....	.....	.....
42	1930..yield, g.p.m.....	4,106	308	.....	.....	.....	.....	.....
43	1920..yield, g.p.m.....	4,608	1,245	.....	2	.....	.....	.....
44	Wells, pumped.....1940..number.....	102	65	29	2	.....	.....	.....
45	1930..number.....	49	32	.....	7	.....	.....	.....
46	1920..number.....	22	19	.....	.....	.....	.....	.....
47	1940..yield, g.p.m.....	33,883	23,145	8,105	(⁶)	.....	.....	.....
48	1930..yield, g.p.m.....	18,853	12,750	.....	978	.....	.....	.....
49	1920..yield, g.p.m.....	11,085	11,005	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number.....	651	526	134	8	1	2	.....
51	1930..total number.....	198	154	9	7	2	.....	.....
52	Prime movers.....1940..capacity, hp.....	29,110	18,996	6,829	105	(⁶)	(⁶)	.....
53	1930..capacity, hp.....	9,085	8,755	646	64	40	.....	.....
54	1920..capacity, hp.....	10,341	10,058	4,494	135	25	.....	.....
55	(a) Electric.....1940..number.....	165	103	35	2	.....	.....	.....
56	1940..capacity, hp.....	19,413	9,835	4,745	(⁶)	.....	.....	.....
57	(b) Internal-combustion.....1940..number.....	480	403	97	6	1	2	.....
58	1940..capacity, hp.....	8,223	7,802	1,894	102	(⁶)	(⁶)	.....
59	(c) Other.....1940..number.....	26	20	2	.....	.....	.....	.....
60	1940..capacity, hp.....	1,474	1,359	(⁶)	.....	.....	.....	.....
61	Pumps.....1940..total number.....	560	356	143	8	1	2	.....
62	1930..number.....	233	188	9	9	2	.....	.....
63	1920..number.....	299	271	34	4	2	.....	.....
64	1940..capacity, g.p.m.....	1,809,014	1,152,731	335,840	12,796	(⁶)	(⁶)	.....
65	1930..capacity, g.p.m.....	523,494	498,089	42,310	3,230	2,250	.....	.....
66	1920..capacity, g.p.m.....	453,231	440,779	115,975	4,968	1,968	.....	.....
67	(a) Centrifugal.....1940..number.....	595	504	128	4	1	2	.....
68	1940..capacity, g.p.m.....	1,192,870	1,061,611	322,828	7,000	(⁶)	(⁶)	.....
69	1940..average capacity, g.p.m.....	2,005	2,106	2,522	1,750	(⁶)	(⁶)	.....
70	(b) Turbine.....1940..number.....	27	21	9	2	.....	.....	.....
71	1940..capacity, g.p.m.....	66,084	54,872	10,602	(⁶)	.....	.....	.....
72	1940..average capacity, g.p.m.....	2,448	2,613	1,178	(⁶)	.....	.....	.....
73	(c) Plunger.....1940..number.....	34	16	5	2	.....	.....	.....
74	1940..capacity, g.p.m.....	1,869	607	210	(⁶)	.....	.....	.....
75	1940..average capacity, g.p.m.....	55	38	42	(⁶)	.....	.....	.....
76	(d) Other.....1940..number.....	24	15	1	.....	.....	.....	.....
77	1940..capacity, g.p.m.....	48,191	35,641	(⁶)	.....	.....	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	21	18	22	18	(⁶)	(⁶)	.....
79	1930..average, feet.....	22	19	31	31	6	.....	.....
80	1920..average, feet.....	20	19	24	25	24	.....	.....
81	from pumped wells.....1940..average, feet.....	24	20	23	(⁶)	.....	(⁶)	.....
82	from surface sources.....1940..average, feet.....	20	18	22	14	(⁶)	(⁶)	.....

¹ Data for 4 enterprises in Dog Creek Drainage Basin (17) (number refers to separate map) are included with Missouri River "Direct" Drainage Basin (1).² Includes interdrainage basin projects counted as independent enterprises in each basin into which they extend. For actual number of enterprises see State table 1.³ Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

CENSUS OF IRRIGATION — MONTANA

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WORKS, 1940, 1930, AND 1920

MISSOURI RIVER—Continued														
Jefferson River—Continued						Marion River								
Beaverhead River—Con.		Big Hole River	Boulder River	Madison River	Gallatin River	Smith River	Sun River	Belt River	Total	Direct	Teton River	Arrow River	Judith River	
Blacktail Deer Creek	Ruby River													
(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)		
5	148	217	86	74	230	90	96	16	198	97	101	26	66	1
619	216	598	213	387	491	308	1,393	24	1,059	1,450	683	172	282	2
36	98	432	74	71	188	105	67	14	197	107	90	32	57	3
41	287	.....	23	159	34	27	.....	.....	49	.....	19	.....	38	4
54	442	48	100	88	65	91	.....	.....	59	.....	21	.....	147	5
30	4	1	1	10	15	.....	.....	.....	5	4	1	.....	2	6
6	55	104	6	28	55	.....	.....	.....	24	7	17	.....	4	7
.....	23	268	38	27	73	92	53	8	139	73	66	6	37	8
.....	16	59	29	6	45	13	10	4	29	23	6	26	14	9
69.0	298.4	470.8	203.5	183.6	493.0	169.8	837.3	10.5	1,406.4	1,015.4	391.0	29.0	159.2	10
.....	203	674	.....	283	818	225	471	.....	801	.....	291	.....	155	11
.....	359	1,612	187	672	1,113	449	512	.....	1,324	.....	378	.....	395	12
68	293	468	202	180	480	169	830	10	1,404	1,018	391	29	157	13
.....	5.4	2.8	1.5	3.6	3.0	0.8	7.3	0.5	2.4	.....	.....	.....	2.2	14
106	1,307	8,812	688	845	3,008	274	2,604	30	3,938	1,990	1,948	245	732	15
.....	793	3,612	.....	1,005	3,040	603	1,829	.....	2,830	.....	1,383	.....	423	16
.....	1,456	7,171	649	2,709	4,243	983	2,467	.....	5,200	.....	2,566	.....	1,479	17
0.5	0.1	0.2	.....	.....	2.5	1.3	7.8	.....	11.0	9.9	1.1	1.0	.....	18
.....	.....	.....	.....	0.2	0.2	.....	3.3	.....	1.0	.....	.....	.....	1.1	19
.....	.....	.....	.....	.....	0.5	.....	1.2	.....	2.1	.....	0.5	.....	2.4	20
.....	.....	.....	.....	.....	0.1	.....	0.3	.....	3.0	.....	.....	.....	.....	21
.....	0.1	0.2	.....	.....	1.4	0.2	6.3	.....	7.0	5.9	1.1	.....	.....	22
0.5	.....	.....	.....	.....	1.0	1.1	1.2	.....	1.0	.....	.....	1.0	.....	23
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
.....	11	8	10	1	2	7	3	.....	32	19	13	4	2	25
7	9	.....	.....	6	1	5	5	.....	19	.....	4	.....	3	26
7	8	3	10	5	4	14	1	.....	22	.....	7	.....	5	27
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
11	2	7	1	1	3	2	2	.....	28	15	13	4	2	29
.....	6	2	.....	1	4	.....	.....	.....	4	.....	.....	.....	.....	30
11	8	12	1	3	7	3	3	.....	34	20	14	5	3	31
3	.....	10	1	1	7	2	2	.....	14	10	4	5	2	32
7	8	.....	.....	.....	.....	.....	.....	.....	12	6	6	.....	.....	33
.....	1	2	.....	.....	2	.....	1	.....	8	4	4	.....	1	34
41,069	4,448	10,092	(6)	9,501	31	90,011	.....	.....	277,892	179,839	98,039	180	6,016	35
7	8	.....	7	.....	2	4	.....	.....	22	.....	4	.....	1	36
985	2,965	791	.....	700	127,600	.....	.....	.....	238,320	.....	96,001	.....	1	37
.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	3	.....	.....	39
.....	.....	.....	.....	.....	.....	.....	(6)	.....	.....	.....	.....	.....	.....	40
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
.....	.....	.....	.....	.....	.....	.....	.....	.....	1,000	.....	1,000	.....	.....	42
.....	.....	.....	1	1	.....	.....	.....	.....	4	1	3	.....	1	44
.....	.....	.....	.....	.....	.....	.....	2	.....	2	.....	2	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	1	.....	1	46
.....	.....	.....	(6)	(6)	.....	.....	.....	.....	1,995	(6)	1,815	.....	(6)	47
.....	.....	.....	.....	.....	.....	.....	660	.....	1,600	.....	1,600	.....	.....	48
.....	.....	.....	.....	.....	.....	.....	.....	.....	8,010	.....	10	.....	1,500	49
.....	2	1	2	2	2	41	1	.....	52	36	16	.....	7	50
.....	(6)	(6)	(6)	(6)	1	12	(6)	.....	15	.....	10	.....	2	51
.....	.....	.....	.....	.....	15	640	.....	.....	1,118	826	292	.....	110	52
.....	.....	110	.....	.....	70	74	.....	.....	295	.....	112	.....	18	53
.....	.....	.....	.....	.....	1	326	.....	.....	753	.....	130	.....	72	54
.....	.....	(6)	(6)	(6)	1	31	.....	.....	6	(6)	4	.....	1	55
.....	2	1	1	1	1	432	.....	.....	87	.....	52	.....	(6)	56
.....	(6)	(6)	(6)	(6)	(6)	8	.....	.....	42	31	11	.....	6	57
.....	.....	.....	.....	.....	.....	68	(6)	.....	889	651	238	.....	102	58
.....	.....	.....	.....	.....	.....	.....	2	.....	4	3	1	.....	.....	59
.....	2	1	2	2	2	42	1	.....	142	140	(6)	.....	.....	60
.....	.....	.....	.....	.....	1	56	.....	.....	56	37	19	.....	7	61
.....	(6)	(6)	(6)	(6)	4	18	.....	.....	18	.....	13	.....	2	62
.....	.....	2	.....	.....	.....	20	.....	.....	30	.....	8	.....	16	63
.....	.....	.....	.....	.....	2,300	41,190	(6)	.....	88,919	61,880	27,036	.....	9,260	64
.....	.....	3,000	.....	.....	5,329	5,358	.....	.....	16,340	.....	7,800	.....	2,450	65
.....	.....	.....	.....	.....	.....	20,210	.....	.....	50,575	.....	13,410	.....	10,800	66
.....	2	1	2	2	2	41	1	.....	52	36	16	.....	7	67
.....	(6)	(6)	(6)	(6)	.....	41,115	(6)	.....	86,506	60,480	26,026	.....	9,260	68
.....	(6)	.....	.....	.....	.....	1,003	(6)	.....	1,664	1,680	1,627	.....	1,323	69
.....	.....	1	.....	.....	.....	.....	.....	.....	(6)	(6)	.....	.....	.....	70
.....	.....	(6)	.....	.....	(6)	.....	.....	.....	(6)	(6)	.....	.....	.....	71
.....	.....	(6)	.....	.....	(6)	.....	.....	.....	(6)	(6)	.....	.....	.....	72
.....	.....	.....	.....	.....	1	.....	.....	.....	(6)	.....	.....	.....	.....	73
.....	.....	.....	.....	.....	(6)	.....	.....	.....	(6)	.....	(6)	.....	.....	74
.....	.....	.....	.....	.....	.....	.....	.....	.....	(6)	.....	(6)	.....	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	(6)	.....	(6)	2	.....	76
.....	.....	.....	.....	.....	.....	.....	.....	.....	(6)	.....	(6)	.....	.....	77
.....	(6)	(6)	(6)	(6)	.....	.....	.....	.....	16	17	15	.....	14	78
.....	.....	.....	.....	.....	13	.....	.....	.....	17	.....	17	.....	8	79
.....	.....	24	.....	.....	16	.....	.....	.....	16	.....	17	.....	11	80
.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	7	.....	.....	81
.....	(6)	(6)	(6)	(6)	.....	.....	.....	.....	17	17	16	.....	14	82

Includes siphons and farm pipe lines reported.

Total capacity of all reservoirs regardless of size.

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

CENSUS OF IRRIGATION—MONTANA

DRAINAGE BASIN TABLE II—ENTERPRISES AND IRRIGATION

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		MISSOURI RIVER—Continued						
		Musselshell River			Dry Creek	Milk River		
		Total	Direct	Boxelder-Flat Willow Creeks		Total	Direct	Sandy Creek
		(16)	(19)	(20)		(21)	(22)	
ENTERPRISES AND IRRIGATION WORKS								
JANUARY 1								
1	Enterprises.....1940..number.....	255	168	87	12	187	120	12
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	329	333	322	136	1,024	1,294	430
3	Diversion dams.....1940..total number.....	300	180	120	12	175	101	12
4	.....1930..total number.....	202	.....	.....	.....	151	25	.....
5	.....1920..total number.....	182	.....	.....	.....	201	5	.....
6	(a) Concrete and masonry.....1940..number.....	6	6	.....	.....	32	25	2
7	(b) Timber.....1940..number.....	3	3	.....	.....	3	.....	.....
8	(c) Earth and rock.....1940..number.....	175	72	103	12	116	66	4
9	(d) Other, mixed, and not reported.....1940..number.....	116	99	17	.....	24	10	6
10	Main canals and laterals.....1940..total length, miles.....	880.2	504.2	176.0	20.0	958.0	768.0	36.0
11	.....1930..total length, miles.....	615	.....	.....	.....	1,051	748	.....
12	.....1920..total length, miles.....	1,152	.....	.....	.....	1,246	39	.....
13	(a) Earth.....1940..length, miles.....	677	501	176	20	951	762	36
14	(b) Lined.....1940..length, miles.....	3.2	3.2	.....	.....	7.0	6.0	.....
15	.....1940..capacity, c.f.s. ¹	2,820	1,658	1,262	95	3,728	2,360	95
16	.....1930..capacity, c.f.s. ¹	3,153	.....	.....	.....	4,429	2,230	.....
17	.....1920..capacity, c.f.s. ¹	4,277	.....	.....	.....	7,416	200	.....
18	Pipe lines ².....1940..total length, miles.....	1.1	0.6	0.5	1.1	32.2	31.5	0.2
19	.....1930..total length, miles.....	0.4	.....	.....	.....	10.2	10.2	.....
20	.....1920..total length, miles.....	.....	.....	.....	.....	1.2	.....	.....
21	(a) Concrete.....1940..length, miles.....	.....	.....	.....	.....	3.3	3.1	.....
22	(b) Metal.....1940..length, miles.....	1.1	0.6	0.5	1.1	3.1	2.6	0.2
23	(c) Wood-stave.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
24	(d) Other.....1940..length, miles.....	.....	.....	.....	.....	25.8	25.8	.....
25	Storage dams.....1940..total number.....	26	8	18	8	73	34	8
26	.....1930..total number.....	14	.....	.....	.....	74	9	.....
27	.....1920..total number.....	35	.....	.....	.....	104	.....	.....
28	(a) Concrete and masonry.....1940..number.....	.....	.....	.....	.....	7	5	1
29	(b) Earth and rock.....1940..number.....	19	7	12	7	66	29	7
30	(c) Other, mixed, and not reported.....1940..number.....	7	1	6	1	.....	.....	.....
31	Reservoirs.....1940..total number.....	35	13	22	8	82	38	8
32	(a) 1-99 acre-feet capacity.....1940..number.....	24	11	13	4	35	19	4
33	(b) 100-999 acre-feet capacity.....1940..number.....	8	1	7	4	28	11	4
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	3	1	2	.....	19	8	.....
35	.....1940..total capacity, ac.-ft. ³	32,665	3,809	28,856	1,102	297,423	271,782	2,036
36	.....1930..total capacity, ac.-ft.....	9	.....	.....	.....	63	6	.....
37	.....1920..total capacity, ac.-ft.....	30,164	.....	.....	.....	181,490	80,870	.....
38	Wells, flowing.....1940..number.....	1	.....	1	.....	1	.....	.....
39	.....1930..number.....	1	.....	.....	.....	1	.....	.....
40	.....1920..number.....	1	.....	.....	.....	1	.....	.....
41	.....1940..yield, g.p.m.....	(⁴)	.....	(⁴)	.....	(⁴)	.....	.....
42	.....1930..yield, g.p.m.....	.....	.....	.....	.....	8	.....	.....
43	.....1920..yield, g.p.m.....	.....	.....	.....	.....	50	.....	.....
44	Wells, pumped.....1940..number.....	11	11	.....	.....	11	4	2
45	.....1930..number.....	5	.....	.....	.....	3	.....	.....
46	.....1920..number.....	.....	.....	.....	.....	.....	.....	.....
47	.....1940..yield, g.p.m.....	3,785	3,785	.....	.....	6,226	2,826	(⁴)
48	.....1930..yield, g.p.m.....	2,765	.....	.....	.....	4,176	.....	.....
49	.....1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number.....	46	37	9	.....	78	55	5
51	.....1930..total number.....	19	.....	.....	.....	19	7	.....
52	Prime movers.....1940..capacity, hp.....	708	511	197	.....	1,379	1,092	39
53	.....1930..capacity, hp.....	234	.....	.....	.....	454	230	.....
54	.....1920..capacity, hp.....	178	.....	.....	.....	377	70	.....
55	(a) Electric.....1940..number.....	9	.....	.....	.....	8	7	.....
56	.....1940..capacity, hp.....	91	91	.....	.....	314	284	.....
57	(b) Internal-combustion.....1940..number.....	37	29	8	.....	68	48	5
58	.....1940..capacity, hp.....	581	420	161	.....	1,063	808	39
59	(c) Other.....1940..number.....	1	.....	1	.....	2	.....	.....
60	.....1940..capacity, hp.....	(⁴)	.....	(⁴)	.....	.....	.....	.....
61	Pumps.....1940..total number.....	48	39	9	.....	83	59	5
62	.....1930..number.....	19	.....	.....	.....	23	11	.....
63	.....1920..number.....	12	.....	.....	.....	23	4	.....
64	.....1940..capacity, g.p.m.....	62,275	47,525	14,750	.....	134,310	110,802	4,400
65	.....1930..capacity, g.p.m.....	18,713	.....	.....	.....	56,654	35,810	.....
66	.....1920..capacity, g.p.m.....	16,250	.....	.....	.....	24,345	2,570	.....
67	(a) Centrifugal.....1940..number.....	44	35	9	.....	73	55	3
68	.....1940..capacity, g.p.m.....	55,325	40,575	14,750	.....	131,326	109,326	4,200
69	.....1940..average capacity, g.p.m.....	1,257	1,159	1,639	.....	1,799	1,988	1,400
70	(b) Turbine.....1940..number.....	.....	.....	.....	.....	2	1	.....
71	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
72	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
73	(c) Plunger.....1940..number.....	1	1	.....	.....	6	1	2
74	.....1940..capacity, g.p.m.....	(⁴)	(⁴)	.....	.....	288	(⁴)	(⁴)
75	.....1940..average capacity, g.p.m.....	(⁴)	(⁴)	.....	.....	48	(⁴)	(⁴)
76	(d) Other.....1940..number.....	3	3	.....	.....	2	2	.....
77	.....1940..capacity, g.p.m.....	6,900	6,900	.....	.....	(⁴)	(⁴)	.....
78	Pumping lift, from all sources.....1940..average, feet.....	14	14	17	.....	18	17	23
79	.....1930..average, feet.....	14	.....	.....	.....	17	14	.....
80	.....1920..average, feet.....	19	.....	.....	.....	18	18	.....
81	from pumped wells.....1940..average, feet.....	14	14	.....	.....	27	19	(⁴)
82	from surface sources.....1940..average, feet.....	14	14	17	.....	17	17	24

¹Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.²Includes siphons and farm pipe lines reported.

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MISSOURI RIVER—Continued												
Milk River—Continued									Yellowstone River			
Clear Creek	Lodge-Battle Creeks	SNAKE Creek	FRENCHMAN Creek	BEAVER Creek	ROCK Creek	Redwater Creek	Poplar River	Big Muddy Creek	Total	Direct	Shields River	
(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)		(33)	(34)	
18	16	5	6	8	4	22	8	4	1,065	466	122	1
130	274	324	645	1,171	2,404	142	98	118	600	665	301	2
13	29	6	6	7	1	6	3	5	983	379	193	3
.....	.....	.....	.....	.....	.....	.....	.....	.....	508	23	161	4
.....	.....	13	.....	.....	.....	.....	.....	.....	449	14	88	5
2	3	.....	1	.....	.....	.....	.....	.....	70	21	1	6
7	27	3	.....	7	.....	6	3	5	149	54	39	7
4	.....	3	.....	.....	1	.....	.....	.....	415	158	55	8
.....	.....	.....	.....	.....	.....	.....	.....	.....	349	146	98	9
35.6	53.2	5.1	12.0	34.1	14.0	22.0	7.0	4.0	3,845.2	1,714.7	283.6	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	3,995	1,096	453	11
.....	.....	61	.....	.....	.....	.....	.....	.....	4,683	1,167	532	12
35	53	5	12	34	14	22	7	4	3,816	1,699	255	13
0.6	0.2	0.1	.....	0.1	.....	.....	.....	.....	29.2	15.7	8.6	14
53	341	37	29	70	743	98	40	13	15,547	7,769	905	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	15,936	5,349	1,166	16
.....	.....	72	.....	.....	.....	.....	.....	.....	19,605	5,508	1,620	17
.....
.....	0.3	0.2	.....	.....	.....	.....	.....	.....	20.1	15.3	0.1	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	2.4	1.0	.....	19
.....	.....	.....	.....	.....	.....	.....	.....	.....	2.7	2.0	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	2.8	2.7	.....	21
.....	0.3	.....	.....	.....	.....	.....	.....	.....	12.0	8.4	0.1	22
.....	.....	.....	.....	.....	.....	.....	.....	.....	3.5	2.4	.....	23
.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	1.8	.....	24
2	10	2	.....	16	1	17	1	1	92	60	2	25
.....	.....	1	.....	.....	.....	.....	.....	.....	40	2	2	26
.....	.....	6	.....	.....	.....	.....	.....	.....	86	11	1	27
.....
2	9	2	.....	16	1	16	1	.....	87	57	2	29
.....	.....	.....	.....	.....	.....	1	.....	1	5	3	.....	30
3	14	2	.....	16	1	21	1	1	98	61	2	31
1	7	1	.....	2	1	17	1	.....	62	37	1	32
2	5	1	.....	5	.....	4	.....	1	27	18	1	33
.....
571	10,908	(*)	.....	11,809	(*)	2,145	(*)	(*)	9	6	.....	34
.....	.....	1	.....	.....	.....	.....	.....	.....	136,697	42,364	(*)	35
.....	.....	5	.....	.....	.....	.....	.....	.....	29	2	1	36
.....	.....	.....	.....	.....	.....	.....	.....	.....	17,068	1,700	800	37
.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	39
.....	(*)								

³Total capacity of all reservoirs regardless of size.

⁴Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — MONTANA

DRAINAGE BASIN TABLE II—ENTERPRISES AND IRRIGATION

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		MISSOURI RIVER—Continued					
		Yellowstone River—Continued					
		Stillwater River					
		Boulder River (35)	Total	Direct	Fishtail—West Rosebud Creeks		
Total	Direct (37)				East Rosebud Creek (38)		
ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1	Enterprises.....1940..number.....	46	118	42	76	40	36
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	400	242	232	248	226	272
3	Diversion dams.....1940..total number.....	14	101	32	69	27	42
4	.....1930..total number.....	3	57	.....	.....	.....	.....
5	.....1920..total number.....	.....	16	.....	.....	.....	.....
6	(a) Concrete and masonry.....1940..number.....	2	15	1	15	.....	15
7	(b) Timber.....1940..number.....	4	11	2	9	1	8
8	(c) Earth and rock.....1940..number.....	5	53	22	31	25	6
9	(d) Other, mixed, and not reported.....1940..number.....	3	21	7	14	1	13
10	Main canals and laterals.....1940..total length, miles.....	127.0	358.0	74.4	283.6	51.0	232.6
11	.....1930..total length, miles.....	93	332	.....	.....	.....	.....
12	.....1920..total length, miles.....	.....	346	.....	.....	.....	.....
13	(a) Earth.....1940..length, miles.....	127	357	74	283	51	232
14	(b) Lined.....1940..length, miles.....	.....	1.0	0.4	0.6	.....	0.6
15	.....1940..capacity, c.f.s. ¹	686	1,019	379	640	248	392
16	.....1930..capacity, c.f.s. ¹	524	1,168	.....	.....	.....	.....
17	.....1920..capacity, c.f.s. ¹.....	.....	1,357	.....	.....	.....	.....
18	Pipe lines ².....1940..total length, miles.....	.....	0.9	.....	0.9	.....	0.9
19	.....1930..total length, miles.....	.....	.....	.....	.....	.....	.....
20	.....1920..total length, miles.....	.....	.....	.....	.....	.....	.....
21	(a) Concrete.....1940..length, miles.....	.....	.....	.....	.....	.....	.....
22	(b) Metal.....1940..length, miles.....	.....	.....	.....	.....	.....	.....
23	(c) Wood-stave.....1940..length, miles.....	.....	0.9	.....	0.9	.....	0.9
24	(d) Other.....1940..length, miles.....	.....	.....	.....	.....	.....	.....
25	Storage dams.....1940..total number.....	.....	.....	.....	.....	.....	.....
26	.....1930..total number.....	.....	1	.....	.....	.....	.....
27	.....1920..total number.....	.....	2	.....	.....	.....	.....
28	(a) Concrete and masonry.....1940..number.....	.....	.....	.....	.....	.....	.....
29	(b) Earth and rock.....1940..number.....	.....	.....	.....	.....	.....	.....
30	(c) Other, mixed, and not reported.....1940..number.....	.....	.....	.....	.....	.....	.....
31	Reservoirs.....1940..total number.....	.....	.....	.....	.....	.....	.....
32	(a) 1-99 acre-feet capacity.....1940..number.....	.....	.....	.....	.....	.....	.....
33	(b) 100-999 acre-feet capacity.....1940..number.....	.....	.....	.....	.....	.....	.....
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	.....	.....	.....	.....	.....	.....
35	.....1940..total capacity, ac.-ft. ³.....	.....	.....	.....	.....	.....	.....
36	.....1930..total capacity, ac.-ft. ³.....	.....	.....	.....	.....	.....	.....
37	.....1920..total capacity, ac.-ft. ³.....	.....	.....	.....	.....	.....	.....
38	Wells, flowing.....1940..number.....	.....	.....	.....	.....	.....	.....
39	.....1930..number.....	.....	.....	.....	.....	.....	.....
40	.....1920..number.....	.....	.....	.....	.....	.....	.....
41	.....1940..yield, g.p.m.....	.....	.....	.....	.....	.....	.....
42	.....1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....
43	.....1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	.....	.....	.....	.....	.....	.....
45	.....1930..number.....	.....	.....	.....	.....	.....	.....
46	.....1920..number.....	.....	.....	.....	.....	.....	.....
47	.....1940..yield, g.p.m.....	.....	.....	.....	.....	.....	.....
48	.....1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....
49	.....1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number.....	1	.....	.....	.....	.....	.....
51	.....1930..total number.....	.....	1	.....	.....	.....	.....
52	Prime movers.....1940..capacity, hp.....	(4)	.....	.....	.....	.....	.....
53	.....1930..capacity, hp.....	.....	9	.....	.....	.....	.....
54	.....1920..capacity, hp.....	.....	.....	.....	.....	.....	.....
55	(a) Electric.....1940..number.....	.....	.....	.....	.....	.....	.....
56	.....1940..capacity, hp.....	.....	.....	.....	.....	.....	.....
57	(b) Internal-combustion.....1940..number.....	.....	1	.....	.....	.....	.....
58	.....1940..capacity, hp.....	(4)	.....	.....	.....	.....	.....
59	(c) Other.....1940..number.....	.....	.....	.....	.....	.....	.....
60	.....1940..capacity, hp.....	.....	.....	.....	.....	.....	.....
61	Pumps.....1940..total number.....	1	.....	.....	.....	.....	.....
62	.....1930..number.....	.....	1	.....	.....	.....	.....
63	.....1920..number.....	.....	.....	.....	.....	.....	.....
64	.....1940..capacity, g.p.m.....	(4)	.....	.....	.....	.....	.....
65	.....1930..capacity, g.p.m.....	.....	160	.....	.....	.....	.....
66	.....1920..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....
67	(a) Centrifugal.....1940..number.....	1	.....	.....	.....	.....	.....
68	.....1940..capacity, g.p.m.....	(4)	.....	.....	.....	.....	.....
69	.....1940..average capacity, g.p.m.....	(4)	.....	.....	.....	.....	.....
70	(b) Turbine.....1940..number.....	.....	.....	.....	.....	.....	.....
71	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....
72	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	.....
73	(c) Plunger.....1940..number.....	.....	.....	.....	.....	.....	.....
74	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....
75	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	.....
76	(d) Other.....1940..number.....	.....	.....	.....	.....	.....	.....
77	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	(4)	.....	.....	.....	.....	.....
79	.....1930..average, feet.....	.....	12	.....	.....	.....	.....
80	.....1920..average, feet.....	.....	.....	.....	.....	.....	.....
81	from pumped wells.....1940..average, feet.....	.....	.....	.....	.....	.....	.....
82	from surface sources.....1940..average, feet.....	(4)	.....	.....	.....	.....	.....

* Data for 2 enterprises in Little Powder River Drainage Basin (47) (number refers to separate map) are included with Powder River Drainage Basin (46).

¹ Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

² Includes siphons and farm pipe lines reported.

CENSUS OF IRRIGATION — MONTANA

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WORKS, 1940, 1930, AND 1920—Continued

MISSOURI RIVER—Continued												
Yellowstone River—Continued												
Clarks Fork (Yellowstone)			Big Horn River				Rosebud Creek	Tongue River	Powder River*			O'Fallon Creek
Total	Direct	Red Lodge-Rock Creeks	Total	Direct	Shoshone River-Sage Creek	Little Horn River			Total	Direct		
(39)	(40)		(41)	(42)	(43)	(44)	(45)		(46)	(48)		(48)
207	41	166	40	13	9	18	7	47	25	25	7	1
464	881	361	3,416	8,942	138	1,064	159	410	153	153	145	2
176	28	148	24	7	3	14	6	65	22	22	3	3
47			18					28	8			4
101			45					23	17			5
27	3	24					2	1				6
36		36	3		2	1		2				7
66	14	52	10	4		6	2	43	22	22	1	8
47	11	36	11	3	1	7	2	19			2	9
746.0	153.6	592.4	434.6	292.4	22.2	120.0	21.0	153.2	21.1	21.1	6.0	10
727			439					93	3			11
924			416					158	26			12
745	153	592	433	291	22	120	21	152	21	21	6	13
1.0	0.6	0.4	1.6	1.4	0.2			1.2	0.1	0.1		14
2,698	1,067	1,631	1,340	977	38	325	68	928	102	102	31	15
3,093			1,110					429	18			16
3,139			1,675					974	111			17
0.9	0.5	0.4	0.3	0.2		0.1		0.3	2.3	2.3		18
0.4								1.0				19
			0.1					0.1				20
0.1	0.1											21
0.6	0.2	0.4	0.3	0.2		0.1		0.3	2.3	2.3		22
0.2	0.2											23
												24
4	2	2	2			2		8	12	12	4	25
								4	3			26
5			1					12	13			27
												28
2	2	2	2			2		6	12	12	4	29
												30
4	2	2	2			2		10	14	14	5	31
2	2		1			1		8	10	10	3	32
			1			1		1	4	4	2	33
2		2						1				34
31,020	(*)	(*)	(*)			(*)		60,535	1,044	1,044	904	35
			1					2	4			36
			2					10	60			37
									1	1		38
1									1			39
									15			40
									(*)	(*)		41
100									200			42
									119			43
												44
												45
									1			46
												47
												48
									10			49
4	4		4	2		2	3	20	4	4		50
2				(*)		(*)		6				51
86	86		50	(*)		(*)	60	307	142	142		52
12								96				53
10			38					286	221			54
								1				55
								(*)				56
4	4		4	2		2	3	19	4	4		57
86	86		50	(*)		(*)	60	277	142	142		58
												59
												60
4	4		4	2		2	3	20	5	5		61
2								6				62
2								16	13			63
3,995	3,995		5,400	(*)		(*)	2,040	24,000	12,745	12,745		64
1,410								5,900				65
470			1,850					14,575	13,365			66
												67
4	4		3	1		2	3	18	5	5		68
3,995	3,995		4,200	(*)		(*)	2,040	20,300	12,745	12,745		69
999	999		1,400	(*)		(*)	680	1,122	2,549	2,549		70
			1					1				71
			(*)	(*)				(*)				72
												73
												74
												75
												76
								(*)				77
22	22		13	(*)		(*)	18	14	12	12		78
9								12				79
8			17					15	15			80
												81
22	22		13	(*)		(*)	18	14	12	12		82

*Total capacity of all reservoirs regardless of size.

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

CENSUS OF IRRIGATION - MONTANA

DRAINAGE BASIN TABLE II.—ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920—Continued

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	MISSOURI RIVER—Continued			COLUMBIA RIVER			
	Little Missouri River			Total	Kootenai River	Lower Clark Fork	
	Total	Direct ¹	Beaver Creek			Total	Direct ²
		(49)	(52)		(54)		(55)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1 Enterprises.....1940..number.....	16	9	7	1,801	162	1,639	294
2 Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	115	164	51	225	55	241	109
3 Diversion dams.....1940..total number.....	5	3	2	2,123	164	1,959	327
4 .....1930..total number.....	14			479	85	394	6
5 .....1920..total number.....	12			740	30	710	1
6 (a) Concrete and masonry.....1940..number.....				34	6	28	8
7 (b) Timber.....1940..number.....				450	78	378	89
8 (c) Earth and rock.....1940..number.....	3	1	2	1,017	52	965	170
9 (d) Other, mixed, and not reported.....1940..number.....	2	2		616	28	588	54
10 Main canals and laterals.....1940..total length, miles.....	8.0	5.0	3.0	3,879.8	148.3	3,731.5	343.4
11 .....1930..total length, miles.....	5			3,489	106	3,383	118
12 .....1920..total length, miles.....	29			4,346	119	4,227	74
13 (a) Earth.....1940..length, miles.....	8	5	3	3,819	140	3,679	335
14 (b) Lined.....1940..length, miles.....				60.8	8.3	52.5	8.4
15 .....1940..capacity, c.f.s. ³	51	33	18	11,458	437	11,021	1,307
16 .....1930..capacity, c.f.s. ³	54			7,297	286	7,011	426
17 .....1920..capacity, c.f.s. ³	70			15,614	1,095	14,519	1,300
18 Pipe lines ⁴.....1940..total length, miles.....	0.1		0.1	56.3	8.8	47.5	13.1
19 .....1930..total length, miles.....	2.0			38.2	4.9	33.3	0.3
20 .....1920..total length, miles.....				30.4	3.6	26.8	1.5
21 (a) Concrete.....1940..length, miles.....				4.6		4.6	
22 (b) Metal.....1940..length, miles.....	0.1		0.1	36.2	3.2	33.0	8.5
23 (c) Wood-stave.....1940..length, miles.....				15.3	5.6	9.7	4.5
24 (d) Other.....1940..length, miles.....				0.2		0.2	0.1
25 Storage dams.....1940..total number.....	10	5	5	110	12	98	15
26 .....1930..total number.....	12			63	6	57	2
27 .....1920..total number.....	7			109	7	102	
28 (a) Concrete and masonry.....1940..number.....				10		10	
29 (b) Earth and rock.....1940..number.....	9	4	5	74	4	70	12
30 (c) Other, mixed, and not reported.....1940..number.....	1	1		26	8	18	
31 Reservoirs.....1940..total number.....	14	5	9	115	10	105	16
32 (a) 1-30 acre-foot capacity.....1940..number.....	10	2	8	58	9	49	11
33 (b) 100-899 acre-foot capacity.....1940..number.....	4	3	1	33		33	5
34 (c) 1,000 and over acre-foot capacity.....1940..number.....				24	1	23	
35 .....1940..total capacity, ac.-ft. ⁵	1,183	914	269	239,740	3,107	236,633	822
36 .....1930..total number.....	4			55	3	52	1
37 .....1930..total capacity, ac.-ft. ⁵	120			163,044	6,503	156,541	500
38 Wells, flowing.....1940..number.....				39		39	1
39 .....1930..number.....				37		37	
40 .....1920..number.....				13		11	
41 .....1940..yield, g.p.m.....				9,600	2	9,600	(⁶)
42 .....1930..yield, g.p.m.....				3,798		3,798	
43 .....1920..yield, g.p.m.....				3,353	30	3,333	
44 Wells, pumped.....1940..number.....				37	3	34	14
45 .....1930..number.....				17		17	7
46 .....1920..number.....				3		3	
47 .....1940..yield, g.p.m.....				10,738	740	9,998	3,888
48 .....1930..yield, g.p.m.....				5,903		5,903	1,200
49 .....1920..yield, g.p.m.....				80		80	
50 Pumping plants.....1940..total number.....	1	1		125	8	117	32
51 .....1930..total number.....				44	4	40	5
52 Prime movers.....1940..capacity, hp.....	(⁶)	(⁶)		10,114	39	10,075	243
53 .....1930..capacity, hp.....				340	11	329	53
54 (a) Electric.....1940..number.....				283		283	
55 .....1940..capacity, hp.....				62		62	16
56 (b) Internal-combustion.....1940..number.....				9,578		9,578	103
57 .....1940..capacity, hp.....	1	1		57	6	51	15
58 (c) Other.....1940..number.....	(⁶)	(⁶)		421	32	389	125
59 .....1940..capacity, hp.....				6	2	4	1
60 Pumps.....1940..total number.....	1	1		115	(⁶)	108	(⁶)
61 .....1930..number.....				124	8	116	31
62 .....1920..number.....				45	4	41	5
63 .....1940..capacity, g.p.m.....	(⁶)	(⁶)		28	1	27	
64 .....1930..capacity, g.p.m.....				156,283	2,480	153,803	16,168
65 .....1920..capacity, g.p.m.....				26,405	4,650	20,755	1,930
66 (a) Centrifugal.....1940..number.....	1	1		12,452	5	12,447	
67 .....1940..capacity, g.p.m.....	(⁶)	(⁶)		91	5	86	21
68 .....1940..average capacity, g.p.m.....	(⁶)	(⁶)		131,259	1,880	129,379	9,830
69 (b) Turbine.....1940..number.....				1,442	376	1,066	473
70 .....1940..capacity, g.p.m.....				6		6	4
71 .....1940..average capacity, g.p.m.....				11,212		11,212	5,740
72 (c) Plunger.....1940..number.....				1,869		1,869	1,435
73 .....1940..capacity, g.p.m.....				15	2	16	3
74 .....1940..average capacity, g.p.m.....				1,262	(⁶)	1,112	280
75 (d) Other.....1940..number.....				70	(⁶)	70	3
76 .....1940..capacity, g.p.m.....				9	1	8	
77 .....1940..average capacity, g.p.m.....				12,550	(⁶)	12,100	218
78 Pumping lift, from all sources.....1940..average, feet.....	(⁶)	(⁶)		32	15	33	26
79 .....1930..average, feet.....				28	15	29	30
80 .....1920..average, feet.....				31	10	8	8
81 from pumped wells.....1940..average, feet.....				29	15	30	36
82 from surface sources.....1940..average, feet.....	(⁶)	(⁶)		33	15	34	20

¹Data for 2 enterprises in Boxelder Creek Drainage Basin (50) (number refers to separate map) and 1 enterprise in Little Beaver Creek Drainage Basin (51) are included with Little Missouri River "Direct" Drainage Basin (49). ²Data for the 1930 and 1920 Censuses for Upper Clark Fork Drainage Basin (58) (number refers to separate map) are included with Lower Clark Fork "Direct" Drainage Basin (55). ³Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources. ⁴Includes siphons and farm pipe lines reported. ⁵Total capacity of all reservoirs regardless of size. ⁶Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — MONTANA

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DRAINAGE BASIN TABLE II.—ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920—Continued

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		COLUMBIA RIVER—Continued						
		Lower Clark Fork—Continued						Flathead River
		Upper Clark Fork ¹	Blackfoot River	Bitterroot River	Total	Direct	Swan River	
		(56)	(57)	(58)		(59)	(60)	Little Bitterroot River (61)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
1	Enterprises.....1940..number.....	412	131	505	297	239	23	35
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	219	306	238	381	414	41	374
3	Diversion dams.....1940..total number.....	696	208	556	173	133	22	17
4	1930..total number.....	78	67	87	.....	.....	.....	.....
5	1920..total number.....	137	173	100	.....	.....	.....	.....
6	(a) Concrete and masonry.....1940..number.....	4	3	4	9	7	1	1
7	(b) Timber.....1940..number.....	100	71	47	71	49	20	2
8	(c) Earth and rock.....1940..number.....	323	93	306	61	48	1	12
9	(d) Other, mixed, and not reported..1940..number.....	263	41	199	31	28	.....	2
10	Main canals and laterals.....1940..total length, miles.....	1,046.8	222.7	918.9	1,199.7	1,046.1	18.0	135.6
11	1930..total length, miles.....	272	963	1,089	.....	.....	.....	.....
12	1920..total length, miles.....	412	1,028	1,131	.....	.....	.....	.....
13	(a) Earth.....1940..length, miles.....	1,040	221	906	1,177	1,027	18	122
14	(b) Lined.....1940..length, miles.....	6.8	1.7	12.9	22.7	19.1	.....	3.6
15	1940..capacity, c.f.s. ²	3,644	1,025	3,475	1,570	1,276	70	224
16	1930..capacity, c.f.s. ²	751	2,088	1,115	.....	.....	.....	.....
17	1920..capacity, c.f.s. ²	2,378	4,073	1,221	.....	.....	.....	.....
18	Pipe lines ³.....1940..total length, miles.....	3.4	1.3	3.1	26.6	24.3	2.2	0.1
19	1930..total length, miles.....	.....	0.8	2.9	21.8	.....	.....	.....
20	1920..total length, miles.....	.....	0.4	3.4	8.1	.....	.....	.....
21	(a) Concrete.....1940..length, miles.....	0.2	.....	0.2	4.2	4.2	.....	.....
22	(b) Metal.....1940..length, miles.....	1.8	1.1	2.7	18.9	17.4	1.4	0.1
23	(c) Wood-stave.....1940..length, miles.....	1.4	0.2	0.2	3.4	2.6	0.8	.....
24	(d) Other.....1940..length, miles.....	.....	.....	.....	0.1	0.1	.....	.....
25	Storage dams.....1940..total number.....	29	5	22	27	20	4	3
26	1930..total number.....	1	1	18	17	.....	.....	.....
27	1920..total number.....	10	37	23	.....	.....	.....	.....
28	(a) Concrete and masonry.....1940..number.....	1	1	5	3	2	.....	.....
29	(b) Earth and rock.....1940..number.....	26	4	12	16	13	.....	3
30	(c) Other, mixed, and not reported..1940..number.....	2	1	9	6	4	2	.....
31	Reservoirs.....1940..total number.....	29	5	22	33	24	5	4
32	(a) 1-99 acre-feet capacity.....1940..number.....	15	4	2	17	12	5	.....
33	(b) 100-999 acre-feet capacity.....1940..number.....	12	.....	16	.....	.....	.....	.....
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	2	1	4	16	12	.....	4
35	1940..total capacity, ac.-ft. ⁴	25,483	12,099	46,297	151,932	115,062	45	36,825
36	1930..total capacity, ac.-ft.....	1	14	18	.....	.....	.....	.....
37	1920..total capacity, ac.-ft.....	40	46,453	104,828	.....	.....	.....	.....
38	Wells, flowing.....1940..number.....	.....	.....	38	2 ⁵	.....	.....	36
39	1930..number.....	1	.....	36	.....	.....	.....	.....
40	1920..number.....	.....	.....	10	.....	.....	.....	.....
41	1940..yield, g.p.m.....	.....	.....	9,500	(⁵)	.....	.....	8,950
42	1930..yield, g.p.m.....	.....	125	3,673	.....	.....	.....	.....
43	1920..yield, g.p.m.....	.....	.....	1,083	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	7	.....	2	11	10	.....	1
45	1930..number.....	.....	.....	.....	.....	.....	.....	.....
46	1920..number.....	.....	.....	.....	.....	.....	.....	.....
47	1940..yield, g.p.m.....	3,410	.....	(⁵)	1,975	1,475	(⁵)	.....
48	1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
49	1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number.....	12	2	5	66	64	.....	2
51	1930..total number.....	.....	2	.....	18	.....	.....	.....
52	Prime movers.....1940..capacity, hp.....	120	(⁵)	21	9,626	9,521	(⁵)	.....
53	1930..capacity, hp.....	26	.....	160	.....	.....	.....	.....
54	1920..capacity, hp.....	16	1	177	.....	.....	.....	.....
55	(a) Electric.....1940..number.....	7	.....	38	37	.....	(⁵)	1
56	1940..capacity, hp.....	54	(⁵)	9,361	9,261	.....	(⁵)	.....
57	(b) Internal-combustion.....1940..number.....	4	1	26	25	.....	(⁵)	1
58	1940..capacity, hp.....	65	(⁵)	173	168	.....	(⁵)	.....
59	(c) Other.....1940..number.....	(⁵)	.....	2	2	.....	.....	.....
60	1940..capacity, hp.....	.....	.....	(⁵)	(⁵)	.....	.....	.....
61	Pumps.....1940..total number.....	11	2	5	67	65	.....	2
62	1930..number.....	.....	1	.....	18	.....	.....	.....
63	1920..number.....	.....	1	.....	16	.....	.....	.....
64	1940..capacity, g.p.m.....	9,160	(⁵)	1,695	124,780	120,308	(⁵)	.....
65	1930..capacity, g.p.m.....	1,702	.....	11,160	.....	.....	.....	.....
66	1920..capacity, g.p.m.....	650	.....	1,406	9,165	.....	.....	.....
67	(a) Centrifugal.....1940..number.....	11	1	3	50	49	.....	1
68	1940..capacity, g.p.m.....	9,160	(⁵)	1,300	108,489	107,989	(⁵)	.....
69	1940..average capacity, g.p.m.....	833	(⁵)	433	2,170	2,204	(⁵)	.....
70	(b) Turbine.....1940..number.....	.....	1	.....	1	.....	(⁵)	1
71	1940..capacity, g.p.m.....	.....	(⁵)	(⁵)	.....	.....	(⁵)	.....
72	1940..average capacity, g.p.m.....	.....	(⁵)	.....	.....	.....	(⁵)	.....
73	(c) Plunger.....1940..number.....	.....	.....	1	12	12	.....	.....
74	1940..capacity, g.p.m.....	.....	(⁵)	.....	562	562	.....	.....
75	1940..average capacity, g.p.m.....	.....	(⁵)	.....	47	47	.....	.....
76	(d) Other.....1940..number.....	.....	.....	1	4	4	.....	.....
77	1940..capacity, g.p.m.....	.....	(⁵)	.....	11,757	11,757	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	24	(⁵)	13	39	39	(⁵)	.....
79	1930..average, feet.....	.....	42	.....	23	.....	.....	.....
80	1920..average, feet.....	.....	12	7	37	.....	.....	.....
81	from pumped wells.....1940..average, feet.....	32	.....	(⁵)	23	23	(⁵)	.....
82	from surface sources.....1940..average, feet.....	14	(⁵)	15	42	42	(⁵)	.....

¹Data for the 1930 and 1920 Censuses for Upper Clark Fork Drainage Basin (56) (number refers to separate map) are included with Lower Clark Fork "Direct" Drainage Basin (55). ²Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources. ³Includes siphons and farm pipe lines reported. ⁴Total capacity of all reservoirs regardless of size. ⁵Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — MONTANA

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS,

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1932]

ITEM (For definitions and explanations, see text)		STATE TOTAL	Beaverhead	Big Horn			
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms.....1940...number.....	41,823	457	1,103			
2	.....1930...number.....	47,495	581	1,086		
3	Irrigated farms.....1940...number.....	15,087	407	511			
4	.....1930...number.....	11,925	481	420		
5	Increase or decrease (-), 1930-1940.....percent.....	26.5	-15.4	21.7			
6	Operated by—						
7	(a) Owners and managers.....1940...number.....	10,858	341	196			
8	.....1930...number.....	8,701	410	231		
9	(b) Tenants.....1940...number.....	4,229	66	315			
10	.....1930...number.....	3,224	71	189		
11	Land in all farms.....1940...acres.....	46,451,594	1,294,488	1,646,014			
12	Land in irrigated farms.....1940...acres.....	16,022,060	1,257,327	448,528			
13	Average per farm.....1940...acres.....	1,062	3,089	878			
14	(a) Operated by owners and managers.....1940...acres.....	14,015,361	1,193,301	363,149			
15	Average per farm.....1940...acres.....	1,291	3,499	1,853			
16	(b) Operated by tenants.....1940...acres.....	2,006,689	64,026	85,379			
17	Average per farm.....1940...acres.....	475	970	271			
17	Approximate land area.....1940...acres.....	2 93,642,240	3,555,840	3,221,120			
IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated.....1939...acres.....	1,711,409	209,548	56,380			
19	(a) Cropland harvested.....1939...acres.....	1,501,578	192,414	53,523			
20	(b) Crop failure.....1939...acres.....	7,844	25	69			
21	(c) Pasture.....1939...acres.....	201,687	17,109	2,788			
22	Area irrigated.....1929...acres.....	1,594,912	250,895	43,492			
23	.....1919...acres.....	1,681,729	302,375	48,306		
24	Increase or decrease (-), 1929-1939.....percent.....	7.3	-15.5	23.6			
25	Irrigable area in enterprises.....1940...acres.....	2,588,214	230,743	149,446			
26	.....1930...acres.....	2,622,423	229,704	85,487		
27	.....1920 ³ ...acres.....	4,329,148	525,181	87,765		
28	Excess of irrigable area over the area irrigated.....1940...acres.....	876,805	21,195	93,066			
29	.....1930...acres.....	1,027,511	38,909	42,945		
30	Area works were capable of supplying with water.....1940...acres.....	2,344,390	226,343	138,167			
31	.....1930...acres.....	2,276,000	275,300	76,773		
32	.....1920...acres.....	2,753,498	385,619	60,581		
33	Increase or decrease (-), 1930-1940.....percent.....	3.0	-17.8	80.0			
34	Excess, capability of works over area irrigated.....1940...acres.....	632,981	16,795	81,787			
35	.....1930...acres.....	681,088	24,405	33,281		
36	Proportion which area irrigated is of all lands in irrigated farms.....1939...percent.....	10.7	16.7	12.6			
37	.....1929...percent.....	13.3	26.2	6.8		
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.....	73.0	92.6	40.8			
39	.....1929...percent.....	70.1	91.1	56.7		
CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises.....1940...dollars.....	67,352,505	992,068	2,891,329			
41	(a) Cost of irrigation works and equipment.....1940...dollars.....	66,830,409	949,008	2,888,753			
42	(b) Investment in water rights (reported).....1940...dollars.....	522,096	43,060	2,576			
43	Total investment in all enterprises.....1930...dollars.....	50,319,204	1,489,426	2,360,150			
44	.....1920...dollars.....	52,143,363	2,385,045	2,311,418		
45	Increase or decrease (-), 1930-1940.....percent.....	33.9	-33.4	22.5			
46	Average investment, based on area works were capable of supplying with water, per acre.....1940...dollars.....	28.73	4.38	20.93			
47	.....1930...dollars.....	22.11	5.41	30.74		
48	.....1920...dollars.....	18.94	6.18	38.15		
49	Average investment per acre irrigated.....1939...dollars.....	39.36	4.73	51.28			
50	Estimated final investment in existing enterprises.....1940...dollars.....	75,174,645	1,020,538	3,904,348			
51	.....1930...dollars.....	58,480,575	1,494,726	2,967,656		
52	.....1920...dollars.....	70,079,028	2,433,395	2,686,470		
53	Increase or decrease (-), 1930-1940.....percent.....	28.5	-31.7	33.6			
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940...dollars.....	29.04	4.42	26.53			
55	.....1930...dollars.....	22.30	5.16	34.33		
56	.....1920 ³ ...dollars.....	16.19	4.63	30.61		
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Supplemental	Primary	Supplemental	Primary	Supplemental
		Enterprises		Enterprises		Enterprises	
57	Enterprises reporting maintenance and operation.....1939...number.....	4,837	53	297	3	34	1
58	Area irrigated in these enterprises.....1939...acres.....	1,650,373	168,762	201,865	61,160	56,330	(5)
59	Cost of maintenance and operation.....1939...dollars.....	1,180,189	20,908	40,559	5,699	87,602	(5)
60	Average cost, per acre irrigated.....1939...dollars.....	0.72	0.12	0.20	0.09	1.56	(5)
611929...dollars.....	0.87	0.32	1.86
62	Total annual charges (reported) ⁶.....1939...dollars.....	1,057,500	93,290	6,069	8,900	73,959	30
63	Average annual charge per acre irrigated.....1939...dollars.....	1.18	0.65	0.45	0.15	1.37	0.10
64	Area against which charges were assessed.....1939...acres.....	1,065,494	176,956	15,060	61,000	76,454	300
65	Average annual charge per acre assessed.....1939...dollars.....	0.99	0.53	0.40	0.15	0.97	0.10
66	Total charges collected ⁶.....1939...dollars.....	729,103	65,214	5,022	8,989	29,078	13
67	Indebtedness to December 31 (reported) ⁷.....1939...dollars.....	41,968,921	2,573,360	295	125,390	2,383,795	5,683
WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered.....1939...number.....	4,945	45	326	3	30
69	Area irrigated in these enterprises.....1939...acres.....	1,524,390	123,469	195,192	61,160	22,059
70	Water delivered in these enterprises.....1939...acre-feet.....	3,214,146	155,843	515,029	96,940	43,361
71	Average water delivered per acre irrigated.....1939...acre-feet.....	2.1	1.3	2.6	1.6	2.0
72	Average cost of water per acre irrigated.....1939...dollars.....	0.84	0.70	0.21	0.15	0.98
DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage.....1939...number.....	205	3
74	Irrigable area in these enterprises.....1939...acres.....	822,140	143,360
75	Irrigated area in these enterprises.....1939...acres.....	473,604	52,750
76	Area for which drains have been installed.....1939...acres.....	147,151	21,800
77	Additional area needing drainage.....1939...acres.....	52,071	6,600

* Census of Agriculture.

¹ Data are included only in State totals because less than 3 farms reported in the 1940 Census.

² Includes 172,100 acres in Yellowstone National Park (part of) not shown in detail.

³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION - MONTANA

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1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE 1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939

irrigation data omitted from any of the counties listed are included under "All other counties"

Blaine	Broadwater	Carbon	Carter	Cascade	Chouteau	Custer	Daniels	Dawson	Deer Lodge	
1,078	268	1,074	637	1,401	1,383	496	804	834	179	1
1,288	328	1,170	848	1,404	1,587	715	906	1,018	142	2
464	204	799	4	381	84	148	2	36	137	3
280	198	746	12	227	40	116	2	16	104	4
60.0	3.0	7.1	-60.7	67.8	71.4	25.9	.....	125.0	31.7	5
360	148	528	3	288	65	110	(1)	29	110	6
216	140	518	11	169	44	97	.....	12	85	7
104	56	271	1	93	19	36	.....	7	27	8
74	58	228	1	58	5	19	.....	4	19	9
1,628,690	326,993	583,341	1,272,843	1,276,707	2,074,470	1,306,480	699,978	942,918	59,605	10
770,170	270,489	393,709	17,552	417,895	259,619	365,994	(1)	64,903	53,049	11
1,660	1,325	493	4,388	1,097	3,093	2,438	(1)	1,803	387	12
719,685	240,893	316,487	(1)	370,900	231,523	327,702	(1)	52,283	43,087	13
1,999	1,628	599	(1)	1,288	3,562	2,679	(1)	1,803	392	14
50,485	29,597	77,222	(1)	46,935	28,296	28,296	.....	12,620	9,962	15
485	529	285	(1)	505	1,489	786	.....	1,893	369	16
2,730,880	795,520	1,324,800	2,120,320	1,701,120	2,508,800	2,409,600	923,520	1,509,120	472,320	17
46,917	27,617	84,179	127	31,515	5,085	14,851	487	1,705	18,371	18
38,076	25,445	77,214	127	27,728	4,520	13,815	412	1,682	15,032	19
1,132	48	519	.....	190	241	217	.....	3	227	20
9,709	2,124	6,446	.....	3,597	324	819	75	20	3,112	21
41,734	35,745	90,514	1,407	13,638	7,638	13,365	.....	1,728	19,048	22
59,119	25,733	99,336	380	14,804	6,029	8,469	.....	1,674	13,474	23
17.2	-22.7	-7.0	-81.0	131.1	-33.4	11.0	.....	-1.3	-3.6	24
90,449	54,269	114,904	1,246	50,120	10,837	29,516	500	21,102	21,593	25
86,828	43,735	112,872	1,927	66,574	10,042	23,263	.....	4,638	27,351	26
190,347	109,435	156,675	3,045	144,378	40,244	25,872	.....	7,663	40,125	27
41,532	26,632	30,725	1,119	18,605	5,752	14,665	13	19,397	3,222	28
45,094	7,990	22,358	520	52,936	2,404	9,878	.....	2,910	8,303	29
67,525	32,638	105,965	1,106	49,086	9,494	22,163	500	14,096	20,727	30
74,441	43,735	109,985	1,762	37,247	9,461	21,404	.....	3,398	25,532	31
99,764	61,175	147,195	1,320	53,163	18,790	21,960	.....	6,800	24,271	32
-9.3	-25.4	-3.7	-37.2	31.8	0.3	3.5	.....	322.5	-22.0	33
18,608	5,021	21,786	979	17,581	4,409	7,312	13	12,391	2,365	34
32,707	7,990	19,481	355	23,609	1,823	8,019	.....	1,608	7,514	35
6.4	10.2	21.4	0.7	7.5	2.0	4.2	15.1	2.6	34.6	36
15.3	13.2	36.5	4.6	6.0	2.9	6.4	.....	3.1	17.0	37
72.4	84.6	79.4	11.5	64.2	53.6	67.0	97.4	12.1	88.6	38
56.1	81.7	82.3	79.9	36.6	80.7	62.5	.....	51.8	71.7	39
4,396,820	824,671	2,120,840	6,078	2,597,353	111,215	1,134,699	3,403	1,141,772	177,967	40
4,387,692	822,209	2,098,771	6,078	2,594,859	110,775	1,082,593	3,400	1,141,758	160,555	41
9,128	2,402	22,069	.....	2,494	440	52,306	3	14	17,412	42
2,125,834	254,171	1,899,627	22,656	799,292	107,372	613,502	.....	28,494	148,485	43
2,549,735	476,675	1,456,985	14,095	2,555,563	640,666	299,355	.....	154,334	354,148	44
106.8	224.5	67.0	-73.2	225.0	3.6	85.0	.....	(4)	19.9	45
65.11	25.27	20.01	5.50	52.90	11.71	51.21	6.81	81.00	8.59	46
28.56	5.81	11.54	12.86	21.46	11.35	28.66	.....	8.54	5.59	47
25.56	7.79	9.90	10.68	48.07	34.10	13.63	.....	22.50	14.59	48
89.88	29.86	25.19	47.86	82.42	21.87	76.42	6.99	699.66	9.69	49
4,430,620	1,196,052	2,136,590	6,228	2,620,003	136,475	1,231,117	3,403	1,289,026	180,967	50
2,489,334	254,171	1,362,127	22,766	805,445	113,422	638,002	.....	28,494	148,485	51
2,737,185	482,625	1,463,610	18,095	5,120,595	1,051,398	376,180	.....	189,070	356,338	52
78.0	370.6	56.9	-72.6	230.1	20.3	93.0	.....	(4)	21.6	53
48.98	22.04	18.59	5.0	56.27	12.59	41.71	6.81	61.09	8.39	54
23.67	5.81	12.07	11.81	12.10	11.69	27.42	.....	6.14	5.43	55
14.98	4.41	9.34	5.94	35.47	20.13	14.54	.....	24.67	8.88	56
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	
Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	
56	122	229	6	82	1	70	36	14	77	57
48,522	26,264	81,977	15,377	31,163	(5)	4,931	13,318	1,390	17,268	58
85,340	11,342	42,456	2,339	32,334	(5)	8,109	7,913	1,487	9,548	59
1.76	0.43	0.52	0.15	1.04	(5)	1.64	0.59	1.07	0.55	60
1.70	0.45	0.68	0.92	1.14	.....	0.86	2.39	0.33	0.70	61
103,696	1,244	33,134	31,000	23,796	.....	8,814	1,476	787	75	62
2.48	0.15	0.56	2.07	0.85	.....	1.00	0.30	1.21	0.15	63
55,309	8,320	61,649	31,000	29,389	.....	9,793	4,862	787	500	64
1.87	0.15	0.54	1.00	0.81	.....	0.90	0.30	1.00	0.15	65
24,267	4,422	31,956	14,973	16,052	.....	10,246	728	911	.....	66
2,041,959	4,000	484,106	700,000	1,896,974	.....	63,000	317,968	152,389	.....	67
60	134	224	6	90	1	72	49	17	78	68
39,622	26,767	68,183	15,377	31,602	(5)	5,078	14,716	487	1,545	69
56,517	81,730	134,433	16,310	57,209	(5)	5,892	27,540	203	2,044	70
1.4	3.1	2.0	1.1	1.8	(5)	1.2	1.9	0.4	1.3	71
2.34	0.35	0.61	2.03	1.02	(5)	1.62	1.12	0.69	1.06	72
12	.....	7	.....	5	.....	3	4	.....	.....	73
73,945	.....	14,800	.....	39,945	.....	2,141	10,703	(5)	1,486	74
95,699	.....	11,640	.....	23,356	.....	392	9,234	(5)	995	75
965	.....	160	.....	12,431	.....	721	500	(5)	1,486	76
15,420	.....	990	.....	1,700	.....	20	530	.....	.....	77

1 Percent not shown when more than 1,000.

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

3 Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

4 Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION — MONTANA

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, [Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		Fallon	Fergus	Flathead	Gallatin	Garfield
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*						
1	All farms.....1940..number.....	510	1,486	1,701	1,242	587
2	.....1930..number.....	650	2,073	1,349	1,336	1,077
3	Irrigated farms.....1940..number.....	2	148	212	866	8
4	.....1930..number.....	2	99	97	840	5
5	Increase or decrease (-), 1930-1940.....percent.....		49.5	118.6	1.9	33.3
6	Operated by—					
7	(a) Owners and managers.....1940..number.....		104	179	537	7
8	.....1930..number.....		75	77	523	5
9	(b) Tenants.....1940..number.....		44	33	319	1
10	.....1930..number.....		24	20	317	1
11	Land in all farms.....1940..acres.....	770,487	1,718,623	281,018	853,033	887,075
12	Land in irrigated farms.....1940..acres.....		398,285	53,917	622,731	9,644
13	Average per farm.....1940..acres.....		2,691	254	727	1,206
14	(a) Operated by owners and managers.....1940..acres.....		328,501	45,331	429,111	(2)
15	Average per farm.....1940..acres.....		3,159	253	799	(2)
16	(b) Operated by tenants.....1940..acres.....		69,784	8,586	193,620	(2)
17	Average per farm.....1940..acres.....		1,586	250	607	(2)
17	Approximate land area.....1940..acres.....	1,045,120	2,720,000	3,313,280	1,610,880	3,087,520
IRRIGATED AND IRRIGABLE AREAS						
18	Area irrigated.....1939..acres.....	90	14,495	7,376	104,705	313
19	(a) Cropland harvested.....1939..acres.....	90	13,597	6,532	88,863	253
20	(b) Crop failure.....1939..acres.....		12	30		60
21	(c) Pasture.....1939..acres.....		826	814	15,842	
22	Area irrigated.....1929..acres.....		8,857	3,703	112,792	145
23	.....1919..acres.....		33,499	11,244	103,975	370
24	Increase or decrease (-), 1929-1939.....percent.....		46.4	99.2	-7.2	115.9
25	Irrigable area in enterprises.....1940..acres.....	1,308	24,978	9,221	139,864	3,300
26	.....1930..acres.....		17,333	7,792	147,638	783
27	.....1920 ³ ..acres.....		96,690	33,787	287,590	4,090
28	Excess of irrigable area over the area irrigated.....1940..acres.....	1,218	10,543	1,848	35,259	2,987
29	.....1930..acres.....		7,476	4,089	35,046	638
30	Area works were capable of supplying with water.....1940..acres.....	1,308	22,625	8,502	138,918	1,553
31	.....1930..acres.....		16,395	7,177	130,631	600
32	.....1920 ³ ..acres.....		82,521	24,642	174,906	390
33	Increase or decrease (-), 1930-1940.....percent.....		38.0	18.5	1.7	160.5
34	Excess, capability of works over area irrigated.....1940..acres.....	1,218	8,190	1,126	34,213	1,250
35	.....1930..acres.....		6,538	3,474	23,829	455
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent.....		3.6	13.7	16.8	3.2
37	.....1929..percent.....		5.2	17.3	31.6	1.4
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	6.9	63.8	86.8	75.4	20.0
39	.....1929..percent.....		60.1	51.6	82.6	24.2
CAPITAL INVESTED TO JANUARY 1						
40	Total investment in all enterprises.....1940..dollars.....	11,810	359,401	149,240	1,359,186	30,686
41	(a) Cost of irrigation works and equipment.....1940..dollars.....	11,810	309,319	147,993	1,351,664	30,476
42	(b) Investment in water rights (reported).....1940..dollars.....		50,082	1,247	7,522	210
43	Total investment in all enterprises.....1930..dollars.....		165,382	146,533	930,207	20,687
44	.....1920 ³ ..dollars.....		729,436	836,723	1,176,492	50,385
45	Increase or decrease (-), 1930-1940.....percent.....		117.3	1.8	46.1	48.3
46	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars.....	9.03	15.89	17.55	9.78	19.63
47	.....1930..dollars.....		10.09	20.42	6.81	34.48
48	.....1920 ³ ..dollars.....		8.84	33.96	6.73	129.19
49	Average investment per acre irrigated.....1939..dollars.....	131.22	24.90	20.23	12.08	98.01
50	Estimated final investment in existing enterprises.....1940..dollars.....	16,310	369,379	158,993	1,362,063	35,300
51	.....1930..dollars.....		170,442	147,383	930,527	23,687
52	.....1920 ³ ..dollars.....		743,186	1,234,630	1,211,747	50,885
53	Increase or decrease (-), 1930-1940.....percent.....		113.0	7.9	46.4	55.6
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars.....	12.47	14.79	17.24	9.73	10.70
55	.....1930..dollars.....		10.01	18.91	6.89	28.97
56	.....1920 ³ ..dollars.....		7.63	36.54	4.21	12.44
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
57	Enterprises reporting maintenance and operation.....1939..number.....		105	1	111	8
58	Area irrigated in these enterprises.....1939..acres.....		13,996	(*)	6,956	9,150
59	Cost of maintenance and operation.....1939..dollars.....		11,269	(*)	8,205	1,553
60	Average cost, per acre irrigated.....1939..dollars.....		0.81	(*)	1.18	0.17
61	.....1929..dollars.....		0.82		1.53	0.56
62	Total annual charges (reported) ⁵.....1939..dollars.....		705		5,011	6,761
63	Average annual charge per acre irrigated.....1939..dollars.....		0.66		3.97	0.77
64	Area against which charges were assessed.....1939..acres.....		1,070		1,960	8,931
65	Average annual charge per acre assessed.....1939..dollars.....		0.66		2.56	0.76
66	Total charges collected ⁵.....1939..dollars.....		455		4,005	3,708
67	Indebtedness to December 31 (reported) ⁵.....1939..dollars.....		17,305		25,515	78,983
WATER DELIVERED TO IRRIGATORS						
68	Enterprises reporting water delivered.....1939..number.....		92	1	134	7
69	Area irrigated in these enterprises.....1939..acres.....		13,047	(*)	7,106	83,825
70	Water delivered in these enterprises.....1939..acre-feet.....		13,449	(*)	13,302	157,895
71	Average water delivered per acre irrigated.....1939..acre-feet.....		1.0	(*)	1.9	0.8
72	Average cost of water per acre irrigated.....1939..dollars.....		0.83	(*)	1.36	1.31
DRAINAGE OF IRRIGATED LAND						
73	Enterprises reporting land drained or needing drainage.....1939..number.....		(*)	1	3	(*)
74	Irrigable area in these enterprises.....1939..acres.....		(*)		425	13,090
75	Irrigated area in these enterprises.....1939..acres.....		(*)		400	6,674
76	Area for which drains have been installed.....1939..acres.....		(*)		60	185
77	Additional area needing drainage.....1939..acres.....		(*)		40	410

* Census of Agriculture.

¹ Percent not shown when more than 1,000.² Data are included only in State totals because less than 3 farms reported in the 1940 Census.³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION - MONTANA

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1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE
WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939-Continued

tion data omitted from any of the counties listed are included under "All other counties"]

	Golden Valley	Granite	Hill	Jefferson	Judith Basin	Lake	Lewis and Clark	Liberty	Lincoln	McCone	
495	268	205	1,245	331	599	1,673	532	420	534	754	1
455	387	247	1,423	385	776	1,197	612	402	503	1,041	2
64	63	173	66	191	51	1,211	374	4	187	29	3
21	47	177	49	207	41	723	308	10	125	2	4
04.8	34.0	-2.3	34.7	-7.7	24.4	67.5	21.4	-60.0	57.6	(1)	5
53	51	144	48	144	38	918	288	4	162	22	6
18	37	128	35	163	30	553	235	10	99	.....	7
11	12	29	18	47	13	293	86	.....	35	7	8
3	10	49	14	44	11	170	73	.....	26	.....	9
3,373	611,842	297,103	1,416,912	296,337	825,076	472,296	938,186	810,386	105,377	1,012,434	10
093	213,486	283,969	139,680	211,921	180,804	272,482	607,305	20,910	52,556	51,121	11
330	3,389	1,641	2,116	1,110	3,645	225	2,159	5,228	267	1,763	12
286	206,059	254,444	121,642	149,460	162,851	228,658	748,919	20,910	43,780	40,597	13
704	4,040	1,767	2,504	1,036	4,286	249	2,600	5,228	270	1,845	14
807	7,427	29,535	18,038	62,461	17,953	43,824	58,366	.....	8,876	10,524	15
528	619	1,018	1,002	1,329	1,381	150	679	.....	254	1,503	16
3,360	753,920	1,098,880	1,884,160	1,056,640	1,203,200	960,000	2,225,920	933,760	2,377,600	1,688,320	17
822	3,459	24,004	6,592	22,869	7,984	71,193	37,268	355	6,408	1,440	18
444	2,662	20,429	4,790	20,989	7,724	56,290	36,126	355	5,883	992	19
12	15	329	86	86	.....	485	130	.....	8	248	20
366	552	3,246	1,414	1,794	260	14,428	1,012	.....	517	200	21
760	3,561	24,503	6,641	25,783	6,617	41,237	33,708	761	6,960	.....	22
767	.....	31,177	2,528	24,946	.....	.....	33,228	.....	5,923	.....	23
35.8	-2.9	-2.0	-0.7	-11.3	20.7	72.6	10.6	-52.7	-7.9	.....	24
239	4,307	25,681	10,795	32,529	12,336	125,625	56,555	1,005	9,219	5,553	25
602	6,011	28,556	8,063	81,771	10,194	121,502	52,122	1,161	9,200	.....	26
500	.....	58,394	14,824	86,086	.....	.....	94,133	.....	13,737	.....	27
417	848	4,203	9,600	4,352	4,352	54,432	19,287	650	2,611	4,123	28
842	2,450	4,053	1,422	55,988	3,577	80,265	18,413	400	2,240	.....	29
504	4,097	25,169	7,418	28,093	11,418	94,035	48,157	955	6,019	4,701	30
467	5,472	26,394	7,563	31,314	8,744	108,452	45,327	1,001	6,302	.....	31
600	.....	38,500	12,033	45,553	.....	.....	69,907	.....	9,353	.....	32
-2.8	-25.1	-4.6	-1.9	-10.3	30.6	-13.3	4.0	4.8	-3.4	.....	33
4,982	608	1,165	826	5,224	3,434	22,842	10,889	600	1,611	3,261	34
7,707	1,911	1,881	922	5,531	2,127	67,215	12,618	250	1,342	.....	35
5.2	1.6	8.5	4.7	10.8	4.4	26.1	4.6	1.7	12.2	2.8	36
8.7	2.4	12.0	7.6	17.7	4.8	16.5	5.4	0.8	19.6	.....	37
34.3	84.4	95.4	88.9	81.4	66.9	75.7	77.4	37.2	79.9	30.6	38
24.5	65.1	92.9	87.8	82.3	75.7	38.0	72.8	75.0	83.8	.....	39
3,246	17,049	914,321	280,768	504,512	151,489	6,575,603	486,891	9,750	219,869	47,913	40
3,244	17,045	889,564	280,233	492,825	149,284	6,573,618	477,261	9,750	217,924	46,260	41
2	4	24,757	535	11,687	2,205	1,985	9,630	.....	1,945	72	42
3,416	46,115	303,679	87,342	359,178	56,526	4,358,604	711,720	23,237	217,635	.....	43
5,069	.....	344,544	189,822	685,014	.....	.....	784,413	.....	195,752	.....	44
-79.7	-63.0	201.2	221.5	40.5	168.0	50.9	-31.6	-58.0	1.0	.....	45
32.15	4.16	36.33	37.85	17.96	13.27	69.93	10.11	10.21	27.42	8.98	46
53.55	8.43	11.50	11.55	11.47	6.46	40.19	15.36	23.21	26.21	.....	47
38.48	.....	8.85	15.69	15.04	.....	.....	11.22	.....	20.93	.....	48
93.74	4.93	38.69	42.59	22.06	18.97	92.36	13.06	27.46	34.31	23.43	49
7,566	19,349	915,671	304,476	521,662	151,854	7,448,840	492,099	9,750	231,829	56,563	50
8,072	49,205	318,773	87,487	569,628	59,376	6,605,429	723,570	24,437	223,135	.....	51
9,059	.....	355,744	208,222	699,794	.....	.....	819,113	.....	197,902	.....	52
-40.4	-60.7	187.2	246.1	-8.4	185.7	12.8	-32.0	-60.1	4.4	.....	53
58.07	4.49	35.65	28.21	16.04	12.31	59.29	8.70	9.70	25.15	9.13	54
63.15	8.20	11.16	10.85	6.97	5.82	54.36	13.88	21.23	24.14	.....	55
90.92	.....	6.09	14.05	8.13	.....	.....	8.70	.....	14.41	.....	56
	Primary	Sup.		Primary	Sup.		Primary	Sup.			
	Enterprises			Enterprises			Enterprises				
3	27	103	1	44	108	34	120	.....	268	4	18
7,822	3,999	23,340	(*)	6,456	22,371	7,427	69,768	340	35,145	340	57
5,207	1,734	6,698	(*)	6,819	12,699	2,568	77,512	.....	58,900	800	58
0.67	0.51	0.29	(*)	1.06	0.58	0.35	1.11	.....	1.68	2.35	59
4.59	1.27	0.84	.....	0.99	0.62	1.90	1.28	.....	1.47	4.41	60
7,748	348	180	24,750	651	4,779	1,560	104,466	.....	14,813	.....	61
1.00	0.63	0.08	2.05	0.31	0.58	0.78	1.54	.....	1.41	.....	62
7,748	1,160	2,450	25,000	2,100	12,892	1,560	91,885	.....	13,891	.....	63
1.00	0.30	0.08	0.99	0.31	0.37	1.00	1.14	.....	1.07	.....	64
.....	325	.....	11,979	631	3,363	3,540	89,620	.....	800	.....	65
14,924	22	.....	488,508	4,000	.....	82,974	7,288,717	.....	30	.....	66
											67
3	27	108	1	45	113	33	126	.....	294	4	68
7,822	3,206	23,304	(*)	4,489	22,564	7,669	69,509	.....	37,023	340	69
7,879	4,042	91,103	(*)	5,040	50,003	6,031	103,501	.....	69,241	698	70
1.0	1.3	3.9	(*)	1.1	2.2	0.8	1.5	.....	1.9	2.1	71
1.00	0.54	0.29	(*)	1.42	0.56	0.45	1.55	.....	0.80	2.35	72
		13	.....				3	.....	8	.....	73
		5,130	.....				119,621	.....	7,781	.....	74
		5,089	.....				66,566	.....	4,733	.....	75
		75	.....				700	.....	188	.....	76
		182	.....				1,250	.....	1,115	.....	77

Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.
Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - MONTANA

COUNTY TABLE I—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, [Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		Madison	Meagher	Mineral	Missoula
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*					
1 All farms.....	1940...number....	655	228	112	776
2	1930...number....	748	276	96	688
3 Irrigated farms.....	1940...number....	576	126	49	619
4	1930...number....	576	111	30	500
5	Increase or decrease (-), 1930-1940.....		13.5	53.3	23.8
Operated by—					
6 (a) Owners and managers.....	1940...number....	419	117	43	496
7	1930...number....	461	101	25	401
8 (b) Tenants.....	1940...number....	157	9	6	123
9	1930...number....	115	10	5	99
10 Land in all farms.....	1940...acres....	810,416	900,573	28,155	251,684
11 Land in irrigated farms.....	1940...acres....	746,775	815,040	14,882	205,805
12	Average per farm.....	1,296	6,469	304	332
13 (a) Operated by owners and managers.....	1940...acres....	671,338	756,992	13,220	177,543
14	Average per farm.....	1,602	6,470	307	358
15 (b) Operated by tenants.....	1940...acres....	75,437	58,048	1,662	28,259
16	Average per farm.....	460	5,450	277	230
17 Approximate land area.....	1940...acres....	2,259,200	1,506,560	782,720	1,682,560
IRRIGATED AND IRRIGABLE AREAS					
18 Area irrigated.....	1939...acres....	88,007	40,056	1,241	30,867
19 (a) Cropland harvested.....	1939...acres....	76,196	39,166	987	28,405
20 (b) Crop failure.....	1939...acres....	123	50		145
21 (c) Pasture.....	1939...acres....	11,688	820	254	2,317
22 Area irrigated.....	1929...acres....	96,290	39,633	1,039	19,038
23	1919...acres....	115,568	25,075	967	50,237
24	Increase or decrease (-), 1929-1939.....	-8.6	1.1	19.4	62.1
25 Irrigable area in enterprises.....	1940...acres....	102,614	44,787	1,761	44,277
26	1930...acres....	123,497	50,027	1,214	29,956
27	1920 ² ...acres....	265,103	60,348	6,690	156,883
28 Excess of irrigable area over the area irrigated.....	1940...acres....	14,607	4,731	520	13,410
29	1930...acres....	27,301	10,394	175	10,918
30 Area works were capable of supplying with water.....	1940...acres....	100,963	44,226	1,549	38,922
31	1930...acres....	111,105	45,772	1,184	27,472
32	1920...acres....	172,083	48,175	2,105	120,456
33	Increase or decrease (-), 1930-1940.....	-9.1	-3.4	30.8	41.7
34 Excess, capability of works over area irrigated.....	1940...acres....	12,956	4,170	308	8,055
35	1930...acres....	14,809	6,139	145	8,434
36 Proportion which area irrigated is of all lands in	1939...percent....	11.8	4.9	8.3	15.0
37 irrigated farms.....	1929...percent....	18.3	6.0	14.2	10.8
38 Proportion which area irrigated is of area works	1939...percent....	87.2	90.6	80.1	79.3
39 were capable of supplying with water.....	1929...percent....	86.7	88.6	87.8	69.3
CAPITAL INVESTED TO JANUARY 1					
40 Total investment in all enterprises.....	1940...dollars....	1,604,247	419,048	25,734	767,176
41 (a) Cost of irrigation works and equipment.....	1940...dollars....	1,587,645	411,044	25,280	753,625
42 (b) Investment in water rights (reported).....	1940...dollars....	18,177	8,004	454	13,551
43 Total investment in all enterprises.....	1930...dollars....	649,263	301,941	19,880	595,095
44	1920...dollars....	2,566,017	346,257	41,481	3,975,483
45	Increase or decrease (-), 1930-1940.....	147.1	38.8	28.4	28.9
46 Average investment, based on area works were	1940...dollars....	15.99	9.48	16.61	19.71
47 capable of supplying with water, per acre.....	1930...dollars....	5.84	6.60	16.79	21.66
48	1920...dollars....	14.91	7.19	19.71	33.00
49 Average investment per acre irrigated.....	1939...dollars....	18.35	10.46	20.74	24.85
50 Estimated final investment in existing enterprises.....	1940...dollars....	1,606,797	430,698	28,359	830,201
51	1930...dollars....	656,613	301,941	19,880	625,945
52	1920...dollars....	2,567,647	363,507	47,646	5,909,973
53	Increase or decrease (-), 1930-1940.....	145.2	42.6	41.9	48.6
54 Average investment, based on estimated final	1940...dollars....	15.79	9.61	16.1	21.01
55 investment and irrigable area, per acre.....	1930...dollars....	5.32	6.04	16.46	20.90
56	1920 ² ...dollars....	9.76	6.02	7.12	37.67
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
		Primary	Supplemental	Primary	Supplemental
		Enterprises		Enterprises	
57 Enterprises reporting maintenance and operation.....	1939...number....	332	5	117	1
58 Area irrigated in these enterprises.....	1939...acres....	83,336	17,103	39,165	(*)
59 Cost of maintenance and operation.....	1939...dollars....	40,305	2,354	12,947	(*)
60	1939...dollars....	0.48	0.14	0.33	(*)
61	1929...dollars....	0.41		0.50	0.92
62 Total annual charges (reported) ³	1939...dollars....	11,557	6,885	7,200	20,233
63 Average annual charge per acre irrigated.....	1939...dollars....	0.29	0.41	1.03	1.43
64 Area against which charges were assessed.....	1939...acres....	41,362	16,723	7,200	17,696
65 Average annual charge per acre assessed.....	1939...dollars....	0.28	0.41	1.00	1.14
66 Total charges collected.....	1939...dollars....	8,500	12,806	7,000	14,893
67 Indebtedness to December 31 (reported) ³	1939...dollars....	280,674		151,221	465,525
WATER DELIVERED TO IRRIGATORS					
68 Enterprises reporting water delivered.....	1939...number....	282	5	119	1
69 Area irrigated in these enterprises.....	1939...acres....	69,960	17,103	39,014	(*)
70 Water delivered in these enterprises.....	1939...acre-feet....	205,832	10,979	44,337	(*)
71	1939...acre-feet....	2.9	0.6	1.1	(*)
72	1939...dollars....	0.48	0.41	0.33	(*)
DRAINAGE OF IRRIGATED LAND					
73 Enterprises reporting land drained or needing	1939...number....	21			2
74 Irrigable area in these enterprises.....	1939...acres....	8,090			(*)
75 Irrigated area in these enterprises.....	1939...acres....	7,797			(*)
76 Area for which drains have been installed.....	1939...acres....	160			(*)
77	1939...acres....	728			(*)

* Census of Agriculture.

¹ Data are included only in State totals because less than 3 farms reported in the 1940 Census.² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.³ Percent not shown when more than 1,000.

CENSUS OF IRRIGATION - MONTANA

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1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE 1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939-Continued
irrigation data omitted from any of the counties listed are included under "All other counties"]

Mussel- shell	Park	Petroleum	Phillips	Pondera	Powder River	Powell	Prairie	Ravalli	Richland	Roosevelt	
314	623	180	1,046	879	688	309	257	1,501	1,218	1,043	1
525	656	363	1,476	919	896	343	559	1,286	1,341	1,276	2
50	480	26	304	415	23	261	9	1,427	393	16	3
30	462	24	157	377	4	231	3	1,154	274	7	4
66.7	3.9	8.3	93.6	10.1	475.0	13.0	200.0	23.7	43.4	128.6	5
40	311	19	225	282	21	213	9	1,082	256	14	6
25	334	13	121	252	.....	195	3	850	183	6	7
10	169	7	79	133	2	48	.....	345	127	2	8
5	128	11	36	125	.....	36	.....	304	91	1	9
724,016	714,116	268,171	1,371,941	826,512	1,947,101	645,243	388,234	318,633	901,588	801,804	10
147,173	626,406	77,270	539,755	449,641	86,047	603,462	27,594	305,633	138,095	6,937	11
2,943	1,305	2,972	1,776	1,083	3,741	2,312	3,066	214	351	434	12
121,094	514,362	37,270	511,408	387,007	(1)	542,509	27,594	246,213	103,109	(1)	13
3,027	1,654	2,273	1,301	1,301	(1)	2,547	3,066	228	388	(1)	14
26,079	112,044	20,000	28,347	82,634	(1)	60,953	.....	59,620	34,986	(1)	15
2,808	663	2,857	359	621	(1)	1,270	.....	173	275	(1)	16
1,207,040	1,681,280	1,064,960	3,368,960	1,051,520	2,102,400	1,495,680	1,105,280	1,525,760	1,321,600	1,526,400	17
4,400	51,047	5,320	36,567	57,245	1,156	60,630	736	109,752	30,021	360	18
3,256	46,356	5,049	34,305	52,291	737	57,386	579	80,890	30,007	326	19
41	1	71	51	678	29	217	.....	353	.....	5	20
1,103	4,690	200	2,228	4,279	390	3,027	167	28,570	17	29	21
2,381	55,165	5,412	29,639	54,366	.....	58,045	515	67,068	18,157	3,715	22
4,139	52,854	.....	28,047	55,764	.....	64,045	480	107,025	15,450	1,190	23
84.8	-7.5	-1.7	22.5	5.3	.....	4.5	42.9	26.1	65.4	-90.3	24
5,034	70,356	18,336	90,569	125,944	2,886	73,728	1,853	121,182	38,609	21,732	25
5,934	89,623	16,527	84,694	100,205	.....	74,614	737	110,132	38,380	42,000	26
19,285	125,767	.....	85,132	212,743	.....	134,742	834	143,892	41,385	115,955	27
1,534	19,309	13,016	63,992	68,699	1,830	13,098	1,217	11,430	8,665	21,372	28
3,353	34,458	11,115	54,855	45,839	.....	16,669	222	23,074	20,223	38,287	29
5,416	69,181	17,365	74,627	115,076	2,810	73,313	1,953	114,838	37,941	14,937	30
4,539	77,005	15,427	75,209	98,465	.....	73,681	720	105,395	38,380	16,890	31
11,659	88,940	.....	43,748	103,411	.....	93,120	834	128,401	35,835	7,637	32
19.3	-10.2	12.8	-0.8	17.9	.....	-0.5	171.2	9.0	-1.1	-11.6	33
1,016	18,134	12,045	38,060	58,831	1,654	12,683	1,217	5,086	7,917	14,577	34
2,168	21,840	10,015	45,370	44,099	.....	15,636	205	18,337	20,223	13,177	35
3.0	8.1	6.9	6.8	12.7	1.3	10.0	2.7	35.9	21.7	5.2	36
3.7	9.9	7.8	8.0	16.5	.....	8.9	6.5	33.4	25.3	39.3	37
81.2	73.8	30.6	49.0	49.3	41.1	82.7	37.7	95.6	79.1	2.4	38
52.5	71.6	35.1	39.7	55.2	.....	78.8	71.5	82.6	47.3	22.0	39
69,410	549,970	266,896	4,465,191	3,769,440	20,359	926,306	445,760	2,286,758	2,531,900	455,292	40
68,935	517,707	266,896	4,845,017	3,719,375	20,227	899,739	445,749	2,275,367	2,531,249	455,292	41
475	32,283	.....	174	50,065	132	26,567	11	11,391	651	.....	42
75,362	753,057	226,045	2,759,930	3,600,100	.....	401,212	10,827	1,904,534	2,265,671	469,208	43
155,256	672,677	.....	1,417,559	4,919,860	.....	877,108	66,866	994,246	2,442,376	713,197	44
-7.9	-27.0	18.1	75.6	4.7	.....	1,809	(3)	20.1	11.7	3.0	45
12.82	7.95	15.37	64.93	32.47	7.25	12.63	228.24	19.91	66.73	30.48	46
15.60	9.78	14.65	36.70	16.56	.....	5.44	15.04	18.07	56.06	27.78	47
13.32	7.56	.....	32.40	47.58	.....	9.42	80.18	7.87	68.16	94.63	48
15.78	10.77	50.17	132.50	65.85	17.61	15.28	606.65	20.84	84.33	1,264.70	49
73,210	555,410	267,133	4,964,681	4,313,660	21,074	941,358	460,393	2,390,308	2,539,075	760,189	50
78,012	766,442	226,045	2,957,815	3,602,600	.....	401,812	10,827	2,190,617	2,404,069	469,208	51
160,209	691,027	.....	1,430,709	5,204,860	.....	929,633	66,866	998,697	2,684,362	4,327,335	52
-6.2	-27.5	18.2	67.8	18.7	.....	134.3	(3)	4.6	5.6	62.0	53
12.34	7.89	14.57	54.82	34.25	7.06	12.77	235.74	18.90	65.76	34.98	54
13.60	8.55	13.68	34.92	35.95	.....	5.38	14.69	19.89	62.64	11.17	55
8.39	5.49	.....	16.81	24.75	.....	6.90	80.18	6.94	64.38	37.32	56
Primary Sup.		Primary Sup.		Primary Sup.		Primary Sup.		Primary Sup.		Primary Sup.	
Enterprises		Enterprises		Enterprises		Enterprises		Enterprises		Enterprises	
38	221	1	25	36	22	14	223	7	427	7	57
3,815	46,020	(4)	5,181	36,450	56,939	795	55,638	736	107,430	6,765	58
3,204	13,972	(4)	3,003	40,334	66,143	1,085	22,108	721	82,064	1,038	59
0.64	0.30	(4)	0.68	1.11	1.16	136	0.40	0.98	0.76	0.16	60
3.12	0.76	.....	1.23	1.09	1.32	.....	0.47	1.26	0.87	.....	61
325	8,085	2,860	59,175	93,325	.....	8,567	.....	83,959	1,014	30,992	62
0.10	0.62	1.10	2.41	1.77	.....	0.97	.....	1.35	0.15	1.06	63
2,280	15,146	2,600	42,517	81,327	.....	8,810	.....	64,171	9,862	30,992	64
0.14	0.53	1.10	1.39	1.15	.....	0.97	.....	1.31	0.10	1.00	65
.....	4,062	2,860	9,000	85,939	126	1,870	.....	36,487	360	49,005	66
.....	67,000	41,584	38,000	4,080,449	4,263,801	9,720	220,234	84,323	1,507,567	1,961,428	67
37	199	.....	24	33	24	17	226	6	434	6	68
4,230	42,678	.....	5,112	31,692	57,045	971	60,326	868	103,258	4,693	69
4,712	89,496	.....	4,206	17,215	92,331	1,069	147,275	381	310,588	5,908	70
1.1	2.1	.....	0.8	0.5	1.6	1.1	2.4	0.6	3.0	2.0	71
0.84	0.43	.....	0.55	1.79	1.67	1.24	0.48	1.05	0.81	1.08	72
(1)	(1)	1	.....	8	.....	.....	4	.....	8	.....	73
(1)	(1)	.....	66,109	.....	.....	.....	2,046	.....	4,306	(4)	74
(1)	(1)	.....	23,374	.....	.....	.....	2,042	.....	8,778	(4)	75
(1)	(1)	.....	2,001	.....	.....	.....	25	.....	.....	(4)	76
(1)	(1)	.....	2,120	.....	.....	.....	251	.....	237	.....	77

* Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.
 * Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
 * Annual charges and indebtedness were reported only by enterprises serving 5 or more farms; and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION — MONTANA

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS,

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		Rosebud	Sanders	Sheridan	Silver Bow	Stillwater
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*						
1	All farms.....1940..number.....	690	854	1,238	202	796
2	.....1930..number.....	940	663	1,492	212	962
3	Irrigated farms.....1940..number.....	188	365	7	96	360
4	.....1930..number.....	94	234	5	88	283
5	Increase or decrease (-), 1930-1940.....percent.....	100.0	56.0	40.0	9.1	27.2
6	Operated by—					
7	(a) Owners and managers.....1940..number.....	122	287	6	73	249
8	.....1930..number.....	54	197	.....	68	207
9	(b) Tenants.....1940..number.....	66	78	1	23	111
10	.....1930..number.....	40	37	.....	20	76
11	Land in all farms.....1940..acres.....	1,664,342	307,775	873,137	86,842	808,439
12	Land in irrigated farms.....1940..acres.....	325,600	142,698	12,830	59,849	257,079
13	Average per farm.....1940..acres.....	1,731	391	1,833	623	714
14	(a) Operated by owners and managers.....1940..acres.....	290,232	130,515	(3)	42,924	209,430
15	Average per farm.....1940..acres.....	2,379	455	(3)	568	841
16	(b) Operated by tenants.....1940..acres.....	35,278	12,183	(3)	18,925	47,649
17	Average per farm.....1940..acres.....	535	156	(3)	736	429
17	Approximate land area.....1940..acres.....	3,220,480	1,799,040	1,088,000	458,240	1,150,080
IRRIGATED AND IRRIGABLE AREAS						
18	Area irrigated.....1939..acres.....	20,712	11,785	431	7,873	32,362
19	(a) Cropland harvested.....1939..acres.....	17,059	10,095	431	5,402	28,263
20	(b) Crop failure.....1939..acres.....	1,300	.....	.....	3	38
21	(c) Pasture.....1939..acres.....	2,353	1,687	.....	2,468	4,141
22	Area irrigated.....1929..acres.....	15,428	9,243	.....	9,468	31,690
23	.....1919..acres.....	20,814	6,373	.....	11,519	33,039
24	Increase or decrease (-), 1929-1939.....percent.....	34.2	27.5	.....	-16.8	1.5
25	Irrigable area in enterprises.....1940..acres.....	33,829	22,028	1,112	8,461	38,545
26	.....1930..acres.....	21,689	20,123	.....	10,483	36,487
27	.....1920 ¹ ..acres.....	36,733	26,537	.....	20,386	49,432
28	Excess of irrigable area over the area irrigated.....1940..acres.....	13,117	10,243	681	588	6,163
29	.....1930..acres.....	6,261	10,880	.....	1,015	4,597
30	Area works were capable of supplying with water.....1940..acres.....	28,906	18,701	912	8,361	38,339
31	.....1930..acres.....	20,289	17,456	.....	9,613	36,243
32	.....1920..acres.....	29,670	13,291	.....	15,521	44,926
33	Increase or decrease (-), 1930-1940.....percent.....	42.5	7.1	.....	-13.0	5.8
34	Excess, capability of works over area irrigated.....1940..acres.....	8,194	6,916	481	488	5,957
35	.....1930..acres.....	4,861	8,223	.....	145	4,353
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent.....	6.4	8.3	3.4	13.2	12.6
37	.....1929..percent.....	7.2	7.0	.....	16.4	16.0
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	71.7	63.0	47.3	94.2	84.5
39	.....1929..percent.....	76.0	52.9	.....	98.5	88.0
CAPITAL INVESTED TO JANUARY 1						
40	Total investment in all enterprises.....1940..dollars.....	1,934,760	1,447,805	41,918	30,252	378,671
41	(a) Cost of irrigation works and equipment.....1940..dollars.....	1,934,531	1,445,620	41,912	30,140	378,456
42	(b) Investment in water rights (reported).....1940..dollars.....	229	2,185	6	112	215
43	Total investment in all enterprises.....1930..dollars.....	681,945	1,160,384	.....	70,238	461,608
44	.....1920..dollars.....	1,024,981	595,212	.....	292,302	402,941
45	Increase or decrease (-), 1930-1940.....percent.....	183.7	24.7	.....	-56.8	-18.0
46	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars.....	66.93	77.42	45.96	3.62	9.88
47	.....1930..dollars.....	33.61	56.44	.....	7.31	12.74
48	.....1920..dollars.....	34.55	44.78	.....	18.63	8.97
49	Average investment per acre irrigated.....1939..dollars.....	93.41	122.65	97.26	3.84	11.69
50	Estimated final investment in existing enterprises.....1940..dollars.....	1,974,228	1,549,620	42,868	34,197	381,671
51	.....1930..dollars.....	667,195	1,228,134	.....	70,363	467,008
52	.....1920..dollars.....	1,040,341	854,850	.....	296,527	407,541
53	Increase or decrease (-), 1930-1940.....percent.....	187.3	26.2	.....	-51.4	-18.3
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars.....	58.36	70.35	38.55	4.04	9.90
55	.....1930..dollars.....	31.68	61.03	.....	6.71	12.60
56	.....1920 ¹ ..dollars.....	28.32	32.21	.....	14.56	8.24
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
		Primary	Supplemental			
		Enterprises				
57	Enterprises reporting maintenance and operation.....1939..number.....	47	1	124	3	66
58	Area irrigated in these enterprises.....1939..acres.....	20,240	(5)	11,266	431	5,220
59	Cost of maintenance and operation.....1939..dollars.....	26,365	(5)	14,477	375	4,994
60	Average cost, per acre irrigated.....1939..dollars.....	1.30	(5)	1.29	0.87	0.96
61	.....1929..dollars.....	1.43	.....	1.60	.....	0.94
62	Total annual charges (reported) ².....1939..dollars.....	26,392	1,784	13,566	.....	12,533
63	Average annual charge per acre irrigated.....1939..dollars.....	1.86	0.23	1.73	.....	0.63
64	Area against which charges were assessed.....1939..acres.....	15,835	7,838	11,826	.....	20,935
65	Average annual charge per acre assessed.....1939..dollars.....	1.67	0.23	1.15	.....	0.60
66	Total charges collected ³.....1939..dollars.....	42,966	767	11,294	.....	10,835
67	Indebtedness to December 31 (reported) ³.....1939..dollars.....	436,504	336,369	1,456,614	34,212	30,200
WATER DELIVERED TO IRRIGATORS						
68	Enterprises reporting water delivered.....1939..number.....	45	.....	138	3	77
69	Area irrigated in these enterprises.....1939..acres.....	19,129	.....	10,992	431	6,588
70	Water delivered in these enterprises.....1939..acre-feet.....	48,772	.....	19,669	491	14,749
71	Average water delivered per acre irrigated.....1939..acre-feet.....	2.5	.....	1.8	1.1	2.2
72	Average cost of water per acre irrigated.....1939..dollars.....	1.79	.....	1.53	0.87	0.97
DRAINAGE OF IRRIGATED LAND						
73	Enterprises reporting land drained or needing drainage.....1939..number.....	14	.....	1	1	3
74	Irrigable area in these enterprises.....1939..acres.....	15,299	(5)	(5)	69	5,930
75	Irrigated area in these enterprises.....1939..acres.....	11,032	(5)	(5)	69	4,666
76	Area for which drains have been installed.....1939..acres.....	3,484	.....	(5)	69	873
77	Additional area needing drainage.....1939..acres.....	2,245	(5)	.....	.....	448

* Census of Agriculture.

¹ Data between census years not comparable (see headnote).² Percent not shown when more than 1,000.³ Data are included only in State totals because less than 3 farms reported in the 1940 Census.

CENSUS OF IRRIGATION - MONTANA

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1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE 1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939-Continued

Irrigation data omitted from any of the counties listed are included under "All other counties"

Sweet Grass	Teton	Toole	Treasure	Valley	Wheatland	Wibaux	Yellowstone	All other counties ¹	
463	1,081	569	303	1,297	229	373	1,703	.....	1
532	1,023	597	256	1,633	324	469	1,748	.....	2
294	529	55	97	159	70	14	1,297	.....	3
260	236	9	80	88	90	1	1,102	.....	4
13.1	124.2	511.1	21.2	80.7	-22.2	(²)	14.1	.....	5
194	387	49	60	132	58	11	794	.....	6
180	188	7	52	73	69	.....	701	.....	7
100	142	6	37	27	12	3	459	.....	8
80	48	2	28	15	21	.....	401	.....	9
1,045,591	1,101,546	1,042,688	299,702	1,253,311	820,394	365,542	1,253,023	.....	10
795,400	590,729	214,970	116,485	148,631	474,304	12,232	299,866	.....	11
2,705	1,117	3,909	1,201	935	6,776	874	239	.....	12
693,213	507,801	193,209	104,495	141,562	461,465	10,792	207,050	.....	13
3,573	1,312	3,043	1,742	1,072	7,956	981	261	.....	14
102,187	82,928	21,761	11,990	7,069	12,839	1,440	92,916	.....	15
1,022	584	3,627	324	262	1,070	480	201	.....	16
1,181,440	1,468,160	1,257,600	629,760	3,252,480	912,000	568,960	1,686,400	.....	17
44,883	105,477	8,130	8,331	19,318	24,759	98	94,727	.....	18
35,391	83,011	2,832	7,782	19,027	22,357	98	91,068	.....	19
7	15	2	102	72	.....	.....	85	.....	20
9,485	22,445	5,296	447	219	2,402	.....	3,574	.....	21
49,060	58,241	438	9,350	12,185	29,744	.....	97,116	.....	22
47,306	55,433	839	7,788	20,800	14,478	.....	101,378	.....	23
-8.5	81.1	(²)	-10.9	58.5	-16.8	.....	-2.5	.....	24
63,735	142,640	9,788	9,222	53,880	31,063	490	117,410	.....	25
67,452	119,213	653	13,150	45,794	42,749	.....	145,591	.....	26
146,265	222,521	1,291	21,462	93,308	45,001	.....	135,190	.....	27
18,852	37,103	1,668	891	34,562	7,204	392	22,683	.....	28
18,392	60,972	215	3,900	33,609	13,005	.....	48,475	.....	29
53,135	142,343	9,328	9,107	47,191	31,482	420	116,435	.....	30
52,745	92,786	653	12,160	41,119	38,086	.....	144,431	.....	31
79,069	119,332	976	21,017	38,336	36,646	.....	123,506	.....	32
0.6	53.4	(²)	-25.0	14.8	-17.3	.....	-19.4	.....	33
18,252	36,866	1,196	776	27,876	6,793	322	21,708	.....	34
13,686	34,545	215	2,800	28,934	8,342	.....	47,315	.....	35
5.6	17.9	3.8	7.2	13.0	5.2	0.8	31.6	.....	36
11.2	17.5	1.0	13.4	4.8	4.9	.....	40.7	.....	37
71.1	74.1	67.2	91.5	40.9	78.6	23.3	81.4	.....	38
78.2	62.8	67.1	77.0	29.6	78.1	.....	67.2	.....	39
652,079	8,261,810	99,010	493,781	3,204,966	161,145	21,422	3,371,236	.....	40
617,102	8,255,045	94,401	474,512	3,204,596	155,273	21,422	3,369,465	.....	41
34,977	26,765	4,609	19,269	390	5,872	.....	1,765	.....	42
692,702	7,499,377	18,050	413,225	1,456,828	162,070	.....	3,351,972	.....	43
1,032,451	2,698,814	26,231	483,790	1,006,823	234,750	.....	3,303,880	.....	44
-5.9	10.4	448.5	19.5	120.0	-0.6	.....	0.6	.....	45
10.33	58.18	10.62	54.22	67.91	5.12	51.00	28.95	.....	46
11.04	80.62	27.64	34.01	35.43	4.26	.....	23.21	.....	47
13.06	22.62	26.88	23.02	27.71	6.35	.....	25.75	.....	48
14.53	78.52	12.18	50.27	165.91	6.51	218.59	35.59	.....	49
663,029	9,226,498	110,700	494,651	3,338,836	161,170	22,022	3,372,850	.....	50
695,552	9,549,493	18,050	413,225	1,521,528	187,070	.....	3,393,472	.....	51
1,032,951	4,731,005	28,731	485,340	2,097,253	246,350	.....	3,491,298	.....	52
-4.7	-3.4	513.3	19.7	119.4	-13.8	.....	-0.6	.....	53
10.40	64.68	11.31	53.64	61.97	5.04	44.94	28.73	.....	54
10.31	80.10	27.64	31.42	33.22	4.38	.....	23.31	.....	55
7.06	21.26	20.71	22.61	22.46	5.12	.....	25.63	.....	56
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.		
Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises		
149	84	55	10	35	50	5	40	.....	57
42,582	(⁵)	103,941	(⁵)	8,130	23,545	77	94,415	.....	58
14,737	(⁵)	46,031	(⁵)	10,583	13,542	180	101,213	.....	59
0.35	(⁵)	0.44	(⁵)	1.27	0.58	2.34	1.07	.....	60
0.54	.....	0.47	.....	1.18	0.55	.....	1.28	.....	61
7,201	.....	48,398	.....	15,673	4,000	.....	153,264	.....	62
0.40	.....	0.64	.....	2.08	1.73	.....	1.60	.....	63
19,772	.....	79,332	.....	8,024	29,656	.....	98,542	.....	64
0.36	.....	0.61	.....	1.95	1.03	.....	1.55	.....	65
6,071	.....	28,113	.....	11,294	9,084	.....	141,109	.....	66
3,775	.....	6,984,229	17,280	72,983	2,740,350	.....	1,732,072	.....	67
143	(⁵)	97	55	36	52	5	43	.....	68
33,627	(⁵)	104,679	8,130	10,022	20,655	68	87,665	.....	69
49,843	(⁵)	140,456	7,737	5,560	18,305	89	229,869	.....	70
1.5	(⁵)	1.3	1.0	0.5	0.9	1.3	2.6	.....	71
0.41	(⁵)	0.51	0.82	2.12	0.49	2.23	1.63	.....	72
8	.....	3	.....	8	(⁵)	1	13	.....	73
9,822	.....	81,506	7,954	29,275	(⁵)	110	102,521	.....	74
8,531	.....	58,518	7,525	8,113	(⁵)	46	80,361	.....	75
80	.....	38,115	1,792	1,577	(⁵)	39	49,627	.....	76
2,606	.....	1,239	3,120	143	(⁵)	51	9,680	.....	77

⁴For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

⁵Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.

⁶Annual charges may include costs of maintenance and operation, and assessments on principal and interest on bonds, notes, warrants, and for special reasons.

⁷Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION — MONTANA

COUNTY TABLE II.—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920 irrigation data omitted from any of the counties listed are included under "All other counties"]

ITEM (For definitions and explanations, see text)		STATE TOTAL	Beaverhead	Big Horn	Blaine	Broadwater	Carbon	Carter
FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	350,178,461	9,224,365	11,865,291	9,024,697	3,060,747	8,297,067	3,416,128
2	Land and buildings, irrigated farms.....dollars..	163,836,136	9,003,680	4,027,444	4,479,584	2,648,697	6,964,651	72,580
3	Operated by—							
4	(a) Owners and managers.....dollars..	129,235,314	8,198,230	2,780,510	3,856,267	2,101,171	4,917,916	(1)
5	(b) Tenants.....dollars..	34,610,822	805,450	2,146,934	623,317	547,526	2,046,735	(1)
6	Average, land and buildings, per farm.....dollars..	10,859.42	22,122.06	9,642.75	9,654.28	12,983.81	8,716.71	18,145.00
	per acre in farms.....dollars..	10.23	7.16	10.99	5.82	9.79	17.69	4.14
7	Buildings, irrigated farms reporting value.....number..	14,813	402	500	440	202	789	4
8	Total reported.....dollars..	33,750,271	1,439,938	773,522	799,027	505,323	1,440,865	8,800
9	Average, per irrigated farm reporting.....dollars..	2,278.42	3,581.94	1,547.04	1,815.97	2,501.60	1,826.19	2,200.00
10	per acre on all irrigated farms.....dollars..	2.11	1.15	1.72	1.04	1.87	3.66	0.50
11	Buildings, nonirrigated farms reporting value.....number..	25,333	49	568	579	61	264	621
12	Total reported.....dollars..	32,860,604	82,745	614,551	689,200	87,400	247,867	576,460
13	Average, per nonirrigated farm reporting.....dollars..	1,297.15	1,688.67	1,081.96	1,190.33	1,432.79	938.89	928.28
14	per acre on all nonirrigated farms.....dollars..	1.08	2.23	0.51	0.80	1.55	1.31	0.45
15	Implements and machinery, irrigated farms reporting value.....number..	13,990	392	451	438	200	763	4
16	Total reported.....dollars..	16,967,155	707,545	749,167	612,255	255,064	827,031	8,200
17	Average, per irrigated farm reporting.....dollars..	1,212.81	1,804.96	1,661.12	1,466.94	1,275.32	1,083.92	2,050.00
18	per acre, on all irrigated farms.....dollars..	1.06	0.56	1.67	0.83	0.94	2.10	0.47
19	Implements and machinery, nonirrigated farms reporting value.....number..	24,144	36	510	573	56	244	589
20	Total reported.....dollars..	26,226,447	19,455	537,725	595,620	59,550	195,375	305,866
21	Average, per acre, on all nonirrigated farms.....dollars..	0.86	0.52	0.45	0.69	1.05	1.03	0.24
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
22	Enterprises.....1940.....number.....	5,581	345	38	63	139	253	8
23	.....1930.....number.....	4,474	427	37	47	143	220	14
24	.....1920.....number.....	6,035	521	38	87	211	258	10
25	Average size of enterprise based on irrigable area.....1940.....acres.....	464	669	4,151	1,436	390	454	156
26	.....1930.....acres.....	585	678	2,336	1,847	306	513	138
27	.....1920.....acres.....	717	1,008	2,310	2,188	519	607	304
28	Diversion dams.....1940.....number.....	6,136	922	31	75	185	217	3
29	Main canals and laterals.....1940.....length, miles.....	15,702.5	762.8	416.4	325.5	396.8	1,006.8	3.0
30	.....1930.....length, miles.....	15,957	1,399	413	449	339	899	5
31	.....1920.....length, miles.....	22,496	2,673	413	657	640	1,061	26
32	.....1940.....capacity, c.f.s. 4.....	66,745	11,746	1,683	851	1,763	3,164	22
33	.....1930.....capacity, c.f.s. 4.....	53,253	5,809	1,080	1,145	1,107	4,068	54
34	.....1920.....capacity, c.f.s. 4.....	94,429	10,119	1,540	2,110	1,883	3,772	70
35	Pipe lines 5.....1940.....length, miles.....	148.1	1.0	0.3	0.6	0.1	2.1	.....
36	Storage dams.....1940.....number.....	468	11	3	23	2	4	4
37	Reservoirs.....1940.....number.....	517	10	3	25	2	4	5
38	.....1930.....number.....	282	19	2	21	1	2	3
39	.....1920.....number.....	468	25	8	45	4	1	13
40	.....1940.....capacity, acre-feet.....	1,301,422	131,441	60,580	17,144	(6)	31,020	850
41	.....1930.....capacity, acre-feet.....	857,067	56,947	10	15,434	1	3	113
42	.....1920.....capacity, acre-feet.....	1,571,720	136,446	128	15,671	211	91	1,513
43	Wells, flowing.....1940.....number.....	44	.....	.....	1	.....	.....	.....
44	.....1930.....number.....	40	.....	.....	.....	.....	1	.....
45	.....1920.....number.....	41	1	.....	.....	.....	.....	.....
46	.....1940.....yield, g.p.m.	9,894	.....	.....	(6)	.....	.....	.....
47	.....1930.....yield, g.p.m.	4,106	.....	.....	.....	.....	100	.....
48	.....1920.....yield, g.p.m.	4,608	.....	.....	.....	.....	.....	.....
49	Wells, pumped.....1940.....number.....	102	.....	.....	.....	.....	.....	.....
50	.....1930.....number.....	49	.....	.....	.....	.....	.....	.....
51	.....1920.....number.....	22	.....	.....	.....	5	.....	.....
52	.....1940.....yield, g.p.m.	33,883	.....	.....	.....	.....	.....	.....
53	.....1930.....yield, g.p.m.	18,653	.....	.....	.....	.....	.....	.....
54	.....1920.....yield, g.p.m.	11,085	.....	.....	.....	.....	.....	.....
55	Pumping plants.....1940.....number.....	651	.....	6	22	2	7	1
56	.....1930.....number.....	198	.....	4	.....	.....	2	.....
57	.....1920.....number.....	253	.....	9	7	8	4	.....
58	Prize movers.....1940.....capacity, hp.....	28,110	.....	85	636	(6)	121	(6)
59	.....1930.....capacity, hp.....	9,005	.....	46	145	.....	12	.....
60	.....1920.....capacity, hp.....	10,341	.....	172	136	.....	26	.....
61	Pumps.....1940.....capacity, g.p.m.	1,309,014	.....	7,600	76,956	(6)	5,895	(6)
62	.....1930.....capacity, g.p.m.	523,494	.....	2,600	29,150	.....	1,410	.....
63	.....1920.....capacity, g.p.m.	453,231	.....	10,225	8,785	(6)	1,741	.....
64	Pumping lift, from all sources.....1940.....average, feet.....	21	.....	14	14	(6)	18	(6)
65	.....1930.....average, feet.....	22	.....	9	10	.....	9	.....
66	.....1920.....average, feet.....	20	.....	14	20	16	10	.....
67	from pumped wells.....1940.....average, feet.....	24	.....	.....	.....	.....	.....	.....
PAY ROLL AND NUMBER OF EMPLOYEES 1939*								
68	Enterprises reporting pay roll.....number.....	260	6	6	8	3	36	.....
69	Irrigated area in these enterprises.....acres.....	827,767	13,360	53,797	41,606	6,170	48,003	.....
70	Wages and salaries paid and payable.....dollars..	1,501,148	6,581	107,603	39,399	1,267	20,527	.....
71	Persons employed during week ending April 28.....number..	1,904	18	164	49	6	125	.....

* Census of Agriculture. ¹ Data are included only in State totals because less than 3 farms reported in the 1940 Census. ² Includes intercounty projects counted as independent enterprises for each county into which they extend. For actual number of enterprises see State table 1. ³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ⁴ Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources. ⁵ Includes siphons and farm pipe lines reported. ⁶ Data are included only in State totals because less than 3 enterprises reported in the 1940 Census. ⁷ Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION - MONTANA

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COUNTY TABLE II.—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920; AND PAY ROLL
AND NUMBER OF EMPLOYEES, 1939—Continued[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920 irrigation data omitted
from any of the counties listed are included under "All other counties"]

ITEM (For definitions and explanations, see text)		Cascade	Chouteau	Custer	Daniels	Dawson	Deer Lodge	Fallon	Fergus
FARM VALUES, 1940*									
1	Land and buildings, all farms.....dollars..	14,353,419	15,298,607	4,490,508	5,338,365	4,149,392	1,362,225	3,472,845	14,126,965
2	Land and buildings, irrigated farms.....dollars..	3,694,956	1,492,594	1,778,771	(1)	289,276	1,204,065	.....	2,570,593
3	Operated by—								
4	(a) Owners and managers.....dollars..	3,287,696	1,342,294	1,583,741	(1)	235,276	1,033,505	.....	2,139,302
5	(b) Tenants.....dollars..	607,260	150,300	185,030	.....	54,000	180,530	.....	431,291
6	Average, land and buildings, per farm.....dollars..	10,222.98	17,768.98	12,183.36	(1)	8,035.44	8,788.80	.....	17,368.87
7	per acre in farms.....dollars..	9.32	5.74	5.00	(1)	4.46	22.70	.....	6.45
8	Buildings, irrigated farms reporting value.....number..	376	84	143	(1)	36	136	.....	117
9	Total reported.....dollars..	910,905	190,835	425,540	(1)	60,691	366,250	.....	428,678
10	Average, per irrigated farm reporting.....dollars..	2,422.62	2,271.83	2,975.80	(1)	1,685.86	2,693.01	.....	2,916.18
11	per acre on all irrigated farms.....dollars..	2.18	0.73	1.20	(1)	0.84	6.90	.....	1.08
12	Buildings, nonirrigated farms reporting value.....number..	987	1,217	345	(1)	734	42	474	1,235
13	Total reported.....dollars..	2,223,940	1,695,202	475,152	(1)	875,295	89,220	571,875	1,908,445
14	Average, per nonirrigated farm reporting.....dollars..	2,253.23	1,392.94	1,377.25	(1)	1,192.50	2,124.29	1,206.49	1,471.47
15	per acre on all nonirrigated farms.....dollars..	2.59	0.93	0.50	(1)	1.00	13.61	0.74	1.45
16	Implements and machinery, irrigated farms reporting value.....number..	363	80	114	(1)	35	106	.....	146
17	Total reported.....dollars..	448,402	145,478	155,426	(1)	43,450	128,680	.....	266,467
18	Average, per irrigated farm reporting.....dollars..	1,235.27	1,818.18	1,383.39	(1)	1,241.43	1,213.06	.....	1,825.25
19	per acre, on all irrigated farms.....dollars..	1.07	0.56	0.44	(1)	0.67	2.43	.....	0.67
20	Implements and machinery, nonirrigated farms reporting value.....number..	946	1,232	334	(1)	699	22	465	1,205
21	Total reported.....dollars..	1,238,465	2,072,724	208,300	(1)	635,641	18,910	414,526	1,495,646
22	Average, per acre, on all nonirrigated farms.....dollars..	1.44	1.14	0.22	(1)	0.72	2.88	0.54	1.13
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
23	Enterprises.....1940...number.....	97	77	62	3	27	81	7	116
24	.....1930...number.....	36	58	25	1	11	75	1	84
25	.....1920...number.....	100	98	44	.....	14	90	.....	232
26	Average size of enterprise based on								
27	irrigable area.....1940...acres.....	517	141	476	167	782	287	187	215
28	.....1930...acres.....	1,849	173	931	.....	422	365	.....	206
29	.....1920 ² ...acres.....	1,444	411	588	.....	547	446	.....	417
30	Diversion dams.....1940...number.....	51	50	57	2	11	109	3	129
31	.....1940...length, miles.....	286.3	132.6	122.6	5.0	101.0	214.2	7.0	194.1
32	.....1930...length, miles.....	198	240	57	.....	15	266	.....	185
33	.....1920...length, miles.....	260	692	92	.....	20	350	.....	775
34	.....1940...capacity, c.f.s. ³	657	261	757	25	951	714	36	691
35	.....1930...capacity, c.f.s. ³	411	238	463	.....	66	690	.....	469
36	.....1920...capacity, c.f.s. ³	1,264	972	892	.....	83	1,304	.....	3,283
37	Pipe lines ⁴.....1940...length, miles.....	12.6	0.3	3.5	.....	1.9	0.5	.....	0.5
38	Storage dams.....1940...number.....	8	20	24	1	17	10	4	12
39	Reservoirs.....1940...number.....	840	25	27	1	19	9	4	2
40	.....1930...number.....	2	11	3	.....	4	2	.....	2
41	.....1920...number.....	15	27	18	.....	2	9	.....	16
42	.....1940...capacity, acre-feet..	57	1,031	2,587	(5)	1,655	1,691	717	587
43	.....1930...capacity, acre-feet..	16,600	3,170	177	.....	18	61	.....	201
44	.....1920...capacity, acre-feet..	218,086	3,124	844	.....	2	109	.....	31,638
45	Wells, flowing.....1940...number.....	1	.....	1	.....	.....	.....	.....	1
46	.....1930...number.....	.....	.....	.....	.....	.....	.....	.....	.....
47	.....1920...number.....	.....	.....	1	.....	.....	1	.....	.....
48	.....1940...yield, g.p.m.....	(5)	.....	(5)	.....	.....	.....	.....	(5)
49	.....1930...yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
50	.....1920...yield, g.p.m.....	.....	.....	1	.....	.....	2,250	.....	.....
51	Wells, pumped.....1940...number.....	3	.....	.....	.....	5	2	.....	1
52	.....1930...number.....	2	2	.....	.....	.....	.....	.....	.....
53	.....1920...number.....	1	.....	.....	.....	.....	.....	.....	1
54	.....1940...yield, g.p.m.....	.....	380	.....	.....	1,238	(5)	.....	(5)
55	.....1930...yield, g.p.m.....	650	1,600	.....	.....	.....	.....	.....	.....
56	.....1920...yield, g.p.m.....	.....	10	.....	.....	.....	.....	.....	1,500
57	Pumping plants.....1940...number.....	63	47	21	.....	10	2	.....	13
58	.....1930...number.....	13	17	8	.....	.....	1	.....	3
59	.....1920...number.....	22	26	12	.....	4	.....	.....	14
60	Prime movers.....1940...capacity, hp.....	915	1,095	683	.....	82	(5)	.....	225
61	.....1930...capacity, hp.....	115	247	446	.....	.....	8	.....	24
62	.....1920...capacity, hp.....	565	577	375	.....	487	.....	.....	204
63	Pumps.....1940...capacity, g.p.m.....	61,590	84,876	78,635	.....	5,028	(5)	.....	18,410
64	.....1930...capacity, g.p.m.....	9,613	17,400	62,097	.....	.....	75	.....	2,635
65	.....1920...capacity, g.p.m.....	32,310	42,260	28,250	.....	7,750	.....	.....	16,180
66	Pumping lift, from all sources.....1940...average, feet.....	19	19	15	.....	19	(5)	.....	16
67	.....1930...average, feet.....	20	16	17	.....	.....	180	.....	7
68	.....1920...average, feet.....	18	18	14	.....	41	.....	.....	14
69	from pumped wells.....1940...average, feet.....	.....	18	.....	.....	18	(5)	.....	.....
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁵									
70	Enterprises reporting pay roll.....number.....	4	.....	2	.....	2	1	.....	1
71	Irrigated area in these enterprises.....acres.....	24,138	.....	(5)	.....	(5)	(5)	.....	(5)
72	Wages and salaries paid and payable.....dollars..	22,500	.....	(5)	.....	(5)	(5)	.....	(5)
73	Persons employed during week ending April 29.....number..	25	.....	(5)	.....	(5)	.....	.....	.....

*Census of Agriculture. ¹Data are included only in State totals because less than 3 farms reported in the 1940 Census. ²For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ³Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources. ⁴Includes siphons and farm pipe lines reported. ⁵Data are included only in State totals because less than 3 enterprises reported in the 1940 Census. ⁶Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION — MONTANA

COUNTY TABLE II.—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940,

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920

ITEM (For definitions and explanations, see text)		Flathead	Callatin	Garfield	Glacier	Golden Valley	Granite	Hill
FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	9,580,230	18,125,468	1,657,211	4,809,140	1,536,919	2,981,917	9,195,041
2	Land and buildings, irrigated farms.....dollars..	1,459,955	14,621,463	30,060	792,836	614,640	2,871,862	1,098,043
3	Operated by—							
4	(a) Owners and managers.....dollars..	1,270,475	7,858,518	(1)	732,486	571,303	2,540,602	924,243
5	(b) Tenants.....dollars..	189,480	6,762,945	(1)	60,350	43,337	331,260	173,800
6	Average, land and buildings, per farm.....dollars..	6,872.43	17,081.15	3,757.50	12,388.06	9,766.19	16,600.36	16,637.02
7	per acre in farms.....dollars..	27.02	23.48	3.12	5.32	2.88	10.11	7.86
8	Buildings, irrigated farms reporting value.....number..	210	844	8	64	61	171	65
9	Total reported.....dollars..	434,700	2,554,182	2,950	115,725	107,210	586,712	212,000
10	Average, per irrigated farm reporting.....dollars..	2,070.00	3,026.28	368.75	1,808.20	1,757.54	3,431.06	3,261.54
11	per acre on all irrigated farms.....dollars..	8.06	4.10	0.31	0.78	0.50	2.07	1.52
12	Buildings, nonirrigated farms reporting value.....number..	1,474	361	518	398	200	30	1,130
13	Total reported.....dollars..	2,486,189	789,540	838,820	581,684	176,065	27,190	1,313,605
14	Average, per nonirrigated farm reporting.....dollars..	1,686.70	2,187.09	618.28	1,486.64	880.42	906.33	1,162.48
15	per acre on all nonirrigated farms.....dollars..	10.95	3.43	0.39	0.88	0.44	2.07	1.03
16	Implements and machinery, irrigated farms reporting value.....number..	188	785	8	60	63	166	62
17	Total reported.....dollars..	149,045	1,202,327	6,300	83,663	74,410	210,836	111,850
18	Average, per irrigated farm reporting.....dollars..	792.79	1,531.50	787.50	1,394.72	1,181.11	1,270.10	1,804.03
19	per acre, on all irrigated farms.....dollars..	2.76	1.93	0.66	0.56	0.35	0.74	0.80
20	Implements and machinery, nonirrigated farms reporting value.....number..	1,228	315	526	404	196	30	1,117
21	Total reported.....dollars..	743,031	458,618	265,775	549,388	147,170	10,450	1,563,739
22	Average, per acre, on all nonirrigated farms.....dollars..	3.27	1.98	0.30	0.82	0.37	0.80	1.22
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
23	Enterprises.....1940.....number.....	135	301	19	5	28	110	48
24	.....1930.....number.....	55	272	9	5	34	148	29
25	.....1920.....number.....	129	463	2	2	.....	170	42
26	Average size of enterprise based on							
27	irrigable area.....1940.....acres.....	68	465	174	10,648	154	233	225
28	.....1930.....acres.....	142	544	87	16,520	177	196	278
29	.....1920.....acres.....	292	621	2,045	59,250	.....	343	353
30	Diversion dams.....1940.....number.....	118	254	8	2	19	230	36
31	Main canals and laterals.....1940.....length, miles.....	127.5	618.1	28.0	209.8	37.0	360.6	48.4
32	.....1930.....length, miles.....	88	978	11	390	61	383	68
33	.....1920.....length, miles.....	422	1,396	15	114	.....	316	166
34	.....1940.....capacity, c.f.s. ²	425	3,790	109	1,201	80	1,290	212
35	.....1930.....capacity, c.f.s. ²	255	3,540	59	1,220	233	745	163
36	.....1920.....capacity, c.f.s. ²	1,292	5,315	3	341	.....	1,622	235
37	Pipe lines.....1940.....length, miles.....	11.2	2.5	1.1	1.1	.....	0.9	0.3
38	Storage dams.....1940.....number.....	14	2	10	2	1	2	24
39	Reservoirs.....1940.....number.....	11	3	11	2	4	2	30
40	.....1930.....number.....	4	1	6	3	.....	2	20
41	.....1920.....number.....	11	4	.....	3	.....	2	31
42	.....1940.....capacity, acre-feet.....	7,622	9,501	1,060	82,000	85	(³)	132,200
43	.....1930.....capacity, acre-feet.....	12,103	3	322	98,000	.....	5	1,355
44	.....1920.....capacity, acre-feet.....	38,101	2,189	.....	95,000	.....	330	7,205
45	Wells, flowing.....1940.....number.....	.....	.....	.....	.....	.....	.....	.....
46	.....1930.....number.....	.....	.....	.....	.....	.....	.....	1
47	.....1920.....number.....	9	.....	.....	.....	.....	.....	1
48	.....1940.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
49	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	8
50	.....1920.....yield, g.p.m.....	1,083	.....	.....	.....	.....	.....	50
51	Wells, pumped.....1940.....number.....	7	1	.....	1	.....	1	2
52	.....1930.....number.....	.....	.....	.....	.....	.....	1	2
53	.....1920.....number.....	.....	.....	.....	.....	.....	.....	1
54	.....1940.....yield, g.p.m.....	1,640	(³)	.....	(³)	.....	(³)	(³)
55	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	.....	500	4,171
56	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	3,000
57	Pumping plants.....1940.....number.....	39	4	5	2	5	3	12
58	.....1930.....number.....	17	1	2	.....	1	1	5
59	.....1920.....number.....	15	6	.....	.....	.....	.....	12
60	Prime movers.....1940.....capacity, hp.....	332	46	125	(³)	87	26	108
61	.....1930.....capacity, hp.....	158	15	7	.....	5	15	127
62	.....1920.....capacity, hp.....	170	115	.....	.....	.....	.....	352
63	Pumps.....1940.....capacity, g.p.m.....	18,427	5,956	8,200	(³)	7,800	3,260	15,516
64	.....1930.....capacity, g.p.m.....	11,080	2,300	1,270	.....	900	500	15,003
65	.....1920.....capacity, g.p.m.....	9,155	6,729	.....	.....	.....	.....	21,335
66	Pumping lift, from all sources.....1940.....average, feet.....	21	18	16	(³)	13	13	11
67	.....1930.....average, feet.....	22	13	12	.....	10	3	17
68	.....1920.....average, feet.....	38	14	.....	.....	.....	.....	16
69	from pumped wells.....1940.....average, feet.....	18	(³)	.....	(³)	.....	(³)	(³)
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁷								
70	Enterprises reporting pay roll.....number.....	1	33	.....	1	1	1	1
71	Irrigated area in these enterprises.....acres.....	(³)	70,209	.....	(³)	(³)	(³)	(³)
72	Wages and salaries paid and payable.....dollars..	(³)	17,444	.....	(³)	(³)	(³)	(³)
73	Persons employed during week ending April 29.....number..	(³)	29	.....	(³)	.....	(³)	(³)

* Census of Agriculture.

¹ Data are included only in State totals because less than 3 farms reported in the 1940 Census.² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.³ Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

CENSUS OF IRRIGATION - MONTANA

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1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939-Continued
Irrigation data omitted from any of the counties listed are included under "All other counties"]

Jefferson	Judith Basin	Lake	Lewis and Clark	Liberty	Lincoln	McCone	Madison	Meagher	Mineral	Missoula	Mussel-shell	Park	Petroleum	
2,274,761	6,265,877	9,031,603	6,023,476	5,419,827	1,645,218	3,550,602	8,033,051	4,862,099	463,800	5,529,990	1,654,156	7,335,009	842,890	1
1,007,926	1,138,104	6,919,710	5,261,603	77,810	819,035	223,375	7,659,124	4,352,924	256,250	4,913,350	399,483	6,518,158	314,540	2
1,324,831	1,015,468	5,694,625	4,747,353	77,810	728,615	160,335	6,489,349	4,103,464	226,450	4,148,990	344,393	4,972,293	243,940	3
283,095	117,636	1,225,085	514,250	.....	90,420	63,040	1,169,775	249,460	29,800	764,460	55,100	1,545,865	70,600	4
8,418.46	22,217.73	5,714.05	14,068.46	19,452.50	4,157.54	7,702.59	13,297.09	34,547.02	5,229.59	7,937.56	7,989.86	13,578.50	12,097.69	5
7.59	6.27	25.40	6.52	3.72	15.55	4.37	10.26	5.34	17.22	23.87	2.71	10.41	4.07	6
187	50	1,192	370	4	192	29	567	124	49	610	50	475	24	7
436,950	151,263	1,823,191	1,108,696	4,300	198,375	38,350	1,635,995	442,920	82,650	1,542,661	72,100	1,276,574	29,300	8
2,336.63	3,025.26	1,529.52	2,996.45	1,075.00	1,033.20	1,322.41	2,895.35	3,571.94	1,686.73	2,528.95	1,442.00	2,687.52	1,220.63	9
2.06	0.84	6.89	1.37	0.21	3.77	0.75	2.19	0.54	5.55	7.50	0.49	2.04	0.38	10
136	524	458	182	375	328	872	77	96	61	152	259	139	151	11
186,625	836,407	556,929	207,402	752,630	282,579	549,159	95,795	85,915	52,690	243,270	304,890	228,300	80,385	12
1,372.24	1,586.20	1,216.00	1,364.49	2,007.07	900.55	817.20	1,244.09	894.95	867.05	1,600.46	791.04	1,042.45	532.35	13
2.21	1.30	2.79	1.68	0.95	4.98	0.57	1.51	1.00	3.98	5.30	0.36	2.60	0.42	14
171	50	1,114	356	4	169	29	554	123	48	588	47	427	26	15
162,971	114,015	821,813	392,624	5,700	92,762	36,155	798,473	233,345	23,345	387,686	42,019	581,066	27,430	16
958.89	2,280.30	737.71	1,102.88	1,425.00	548.89	1,247.07	1,441.29	1,698.05	486.35	659.33	894.02	1,360.81	1,055.00	17
0.77	0.63	3.02	0.49	0.27	1.76	0.71	1.07	0.29	1.57	1.88	0.29	0.93	0.35	18
109	509	395	129	399	374	658	52	90	55	130	247	110	146	19
88,460	765,530	155,866	74,205	1,046,120	101,196	568,179	40,675	50,910	18,625	60,875	187,433	87,051	69,954	20
1.05	1.19	0.78	0.57	1.33	1.92	0.59	0.64	0.60	1.40	1.33	0.32	0.99	0.37	21
123	39	158	304	5	153	38	365	122	46	219	41	251	28	22
124	43	98	180	9	92	2	358	125	31	193	22	282	17	23
175	.....	.....	311	.....	64	.....	517	137	87	253	47	314	.....	24
264	316	795	186	201	60	146	281	367	38	202	145	280	655	25
659	237	1,240	290	126	100	.....	345	400	39	155	261	318	972	26
492	.....	.....	303	.....	215	.....	513	440	117	620	410	401	.....	27
103	44	76	264	3	156	12	299	125	59	240	18	260	37	28
271.5	71.1	965.6	383.6	3.0	132.3	44.0	841.8	344.7	38.7	432.2	57.2	448.4	97.0	29
286	89	896	323	19	96	.....	785	353	11	232	32	788	90	30
492	.....	.....	742	.....	105	.....	1,561	617	43	1,189	204	878	.....	31
1,021	497	996	2,129	32	411	153	3,688	684	116	1,404	201	2,242	1,050	32
753	211	669	880	23	258	.....	3,069	1,087	24	866	185	2,727	1,091	33
9,547	.....	2,956	577	.....	577	.....	6,290	1,546	239	2,404	671	3,180	.....	34
0.5	1.0	15.9	3.4	6.0	8.2	.....	1.2	1.1	3.3	6.9	0.4	1.0	.....	35
11	5	17	6	.....	6	20	13	6	2	13	1	3	7	36
13	6	23	6	1	6	23	13	5	2	15	2	3	7	37
10	.....	11	14	12	1	.....	17	2	2	5	2	1	3	38
11	.....	.....	31	.....	10	.....	37	7	6	8	2	7	.....	39
10,094	6,130	107,596	16,826	(*)	3,096	2,276	57,923	906	(*)	1,114	(*)	375	28,285	40
6,072	.....	60,638	74	669	6,500	.....	3,083	700	81	336	205	800	27,001	41
8,268	.....	651,071	313	.....	313	.....	24,879	181	129	43,297	129	8,029	.....	42
.....	.....	27	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	43
.....	.....	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
.....	.....	7,100	(*)	.....	.....	.....	.....	.....	.....	(*)	.....	.....	.....	45
.....	.....	1,960	.....	.....	.....	.....	.....	.....	.....	125	.....	.....	.....	46
.....	.....	.....	5	.....	30	.....	.....	.....	.....	.....	.....	.....	.....	47
.....	.....	4	29	.....	2	.....	1	.....	1	7	10	1	.....	48
7	.....	.....	8	1	.....	.....	.....	.....	.....	4	4	3	1	49
.....	.....	.....	7	.....	(*)	.....	(*)	.....	(*)	2	.....	(*)	.....	50
.....	.....	285	8,105	.....	(*)	.....	(*)	.....	(*)	1,120	3,725	(*)	.....	51
978	.....	1,896	5	.....	.....	.....	.....	.....	.....	598	2,265	465	500	52
.....	.....	1,445	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	.....	53
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
2	.....	26	51	6	7	8	3	.....	2	20	26	2	7	55
5	.....	1	20	3	4	.....	2	.....	.....	13	12	9	3	56
1	.....	.....	14	.....	1	.....	.....	.....	3	5	5	1	.....	57
(*)	.....	9,195	4,036	235	33	232	29	.....	(*)	235	296	(*)	170	58
24	.....	2	3,882	121	11	.....	40	.....	.....	93	155	311	32	59
10	.....	.....	3,884	.....	.....	.....	.....	.....	48	32	86	15	.....	60
(*)	.....	102,331	105,295	14,500	2,030	17,810	1,840	.....	(*)	13,195	31,475	(*)	13,100	61
280	.....	80	89,365	3,645	4,650	.....	2,250	.....	.....	5,530	13,550	18,715	3,600	62
(*)	.....	.....	77,949	.....	5	.....	.....	.....	361	2,141	11,970	.....	.....	63
44	.....	63	24	22	15	20	19	.....	(*)	37	13	(*)	17	64
33	.....	35	34	35	15	.....	6	.....	.....	36	16	20	13	65
.....	.....	.....	45	.....	10	.....	(*)	.....	(*)	22	20	(*)	.....	66
.....	.....	32	23	.....	(*)	.....	(*)	.....	(*)	53	14	(*)	.....	67
8	1	5	3	.....	2	.....	21	1	.....	11	.....	5	.....	68
5,638	(*)	67,634	10,503	.....	(*)	.....	26,340	.....	.....	14,534	.....	8,297	.....	69
2,561	(*)	227,532	13,247	.....	(*)	.....	7,859	(*)	.....	9,403	.....	1,825	.....	70
1	(*)	291	22	.....	(*)	.....	15	(*)	.....	24	.....	17	.....	71

*Includes siphons and farm pipe lines reported.

†Data for less than 3 enterprises shown with permission of the enterprises involved.

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

§Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION - MONTANA

COUNTY TABLE II--FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940,
[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		Phillips	Pondera	Powder River	Powell	Prairie	Ravalli	Richland
FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	6,581,800	11,306,414	3,462,844	5,761,632	1,787,440	8,773,891	7,211,866
2	Land and buildings, irrigated farms.....dollars..	2,919,098	6,301,741	230,500	5,454,528	100,334	8,582,811	2,989,037
	Operated by—							
3	(a) Owners and managers.....dollars..	2,434,425	4,943,137	(²)	4,901,508	100,334	6,859,238	2,072,327
4	(b) Tenants.....dollars..	484,673	1,358,604	(²)	553,020	.....	1,623,573	916,710
5	Average, land and buildings, per farm.....dollars..	9,602.30	15,184.92	10,021.74	20,898.57	11,148.22	6,014.58	7,605.69
6	per acre in farms.....dollars..	6.64	14.02	2.68	9.04	3.64	28.06	21.64
7	Buildings, irrigated farms reporting value.....number..	298	391	23	258	9	1,388	385
8	Total reported.....dollars..	648,963	840,183	42,050	1,066,381	25,980	2,463,931	746,410
9	Average, per irrigated farm reporting.....dollars..	2,177.73	2,148.81	1,828.26	4,133.26	2,886.67	1,775.17	1,938.73
10	per acre on all irrigated farms.....dollars..	1.20	1.87	0.49	1.77	0.94	8.06	5.40
11	Buildings, nonirrigated farms reporting value.....number..	705	404	653	45	235	67	769
12	Total reported.....dollars..	614,917	749,435	631,310	58,100	313,580	68,930	962,882
13	Average, per nonirrigated farm reporting.....dollars..	872.22	1,855.04	966.78	1,291.11	1,334.38	1,028.81	1,252.12
14	per acre on all nonirrigated farms.....dollars..	0.74	1.99	0.50	1.89	0.87	5.39	1.26
15	Implements and machinery, irrigated farms reporting value.....number..	290	393	21	251	9	1,274	375
16	Total reported.....dollars..	362,197	823,469	24,695	384,889	9,710	886,035	575,870
17	Average, per irrigated farm reporting.....dollars..	1,248.96	2,095.34	1,171.19	1,533.42	1,078.89	695.47	1,535.65
18	per acre on all irrigated farms.....dollars..	0.67	1.83	0.29	0.64	0.35	2.90	4.17
19	Implements and machinery, nonirrigated farms reporting value.....number..	681	416	615	36	240	48	753
20	Total reported.....dollars..	526,617	794,174	377,081	19,760	224,698	16,186	745,800
21	Average, per acre, on all nonirrigated farms.....dollars..	0.63	2.11	0.30	0.47	0.62	1.26	0.98
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
22	Enterprises.....1940.....number.....	39	26	25	229	8	455	29
23	.....1930.....number.....	38	22	5	196	5	295	4
24	.....1920.....number.....	36	30	.....	272	10	449	9
25	Average size of enterprise based on							
26	irrigable area.....1940.....acres.....	2,322	4,844	119	322	244	266	1,331
27	.....1930.....acres.....	2,229	4,555	.....	381	147	373	9,595
28	.....1920.....acres.....	2,365	7,091	.....	495	83	320	4,588
29	Diversion dams.....1940.....number.....	37	28	44	445	4	603	9
30	Main canals and laterals.....1940.....length, miles.....	331.4	639.1	15.1	577.8	14.0	809.2	196.2
31	.....1930.....length, miles.....	367	593	.....	411	2	927	212
32	.....1920.....length, miles.....	244	642	.....	871	9	892	138
33	.....1940.....capacity, c.f.s.*.....	695	1,163	55	2,110	361	3,176	69
34	.....1930.....capacity, c.f.s.*.....	1,172	1,429	.....	1,149	30	2,448	872
35	.....1920.....capacity, c.f.s.*.....	852	3,184	.....	3,233	55	3,430	672
36	Pipe lines.....1940.....length, miles.....	14.2	2.8	.....	0.4	0.3	3.1	.....
37	Storage dams.....1940.....number.....	23	8	6	15	6	19	14
38	Reservoirs.....1940.....number.....	23	8	8	16	6	19	16
39	.....1930.....number.....	19	11	.....	7	3	14	.....
40	.....1920.....number.....	8	6	.....	8	3	10	4
41	.....1940.....capacity, acre-feet.....	81,629	162,707	325	19,015	35	45,916	955
42	.....1930.....capacity, acre-feet.....	84,710	141,760	.....	4,675	43	46,453	.....
43	.....1920.....capacity, acre-feet.....	46,221	62,800	.....	276	8	7,634	395
44	Wells, flowing.....1940.....number.....	.....	.....	.....	.....	.....	.....	.....
45	.....1930.....number.....	.....	.....	.....	.....	.....	.....	.....
46	.....1920.....number.....	.....	3	.....	.....	5	.....	.....
47	.....1940.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
48	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
49	.....1920.....yield, g.p.m.....	.....	1,000	.....	.....	104	.....	.....
50	Wells, pumped.....1940.....number.....	3	.....	.....	2	.....	2	.....
51	.....1930.....number.....	.....	.....	.....	6	.....	.....	.....
52	.....1920.....number.....	.....	.....	.....	.....	.....	.....	.....
53	.....1940.....yield, g.p.m.....	3,350	.....	.....	(²)	.....	(²)	.....
54	.....1930.....yield, g.p.m.....	.....	.....	.....	700	.....	.....	.....
55	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
56	Pumping plants.....1940.....number.....	15	2	4	4	3	4	10
57	.....1930.....number.....	3	.....	.....	1	1	.....	1
58	.....1920.....number.....	6	.....	.....	1	3	.....	3
59	Prime movers.....1940.....capacity, hp.....	206	(²)	70	41	3,015	17	422
60	.....1930.....capacity, hp.....	100	.....	.....	4	15	.....	220
61	.....1920.....capacity, hp.....	154	.....	.....	16	462	.....	125
62	Pumps.....1940.....capacity, g.p.m.....	14,650	(²)	6,900	4,200	99,336	1,245	34,000
63	.....1930.....capacity, g.p.m.....	5,000	.....	.....	700	500	.....	20,000
64	.....1920.....capacity, g.p.m.....	10,420	.....	.....	650	19,015	.....	9,750
65	Pumping lift, from all sources.....1940.....average, feet.....	14	(²)	10	16	68	16	20
66	.....1930.....average, feet.....	14	.....	.....	10	30	.....	31
67	.....1920.....average, feet.....	18	.....	.....	12	24	.....	20
	from pumped wells.....1940.....average, feet.....	20	.....	.....	(²)	.....	(²)	.....
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁷								
68	Enterprises reporting pay roll.....number.....	3	4	.....	4	1	34	(²) 1
69	Irrigated area in these enterprises.....acres.....	24,525	52,784	.....	3,010	.....	57,629	(²)
70	Wages and salaries paid and payable.....dollars..	29,740	63,309	.....	1,570	(²)	43,292	(²)
71	Persons employed during week ending April 29.....number..	23	41	.....	20	(²)	196	(²)

* Census of Agriculture.

¹ Data between census years not comparable (see headnote).² Data are included only in State totals because less than 3 farms reported in the 1940 Census.³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

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irrigation data omitted from any of the counties listed are included under "All other counties".

⁴Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.
⁵Includes siphons and farm pipe lines reported.
⁶Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.
⁷Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION—NEBRASKA

STATE TABLE 1.—IRRIGATION SUMMARY FOR THE STATE: 1890 TO 1940

ITEM (For definitions and explanations, see text)	CENSUS OF—						
	1940	1935	1930	1920	1910	1900	1890
Approximate land area of State.....acres....	* 49,057,820	49,157,120	49,157,120	49,157,120	49,157,120	49,157,120	49,157,120
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number...	121,062	133,616	129,458	124,417	129,678	121,525	113,608
Land in all farms.....acres....	47,343,981	46,615,762	44,708,565	42,225,475	38,622,021	29,911,779	21,593,444
Farms irrigated: ¹							
Farms.....number...	6,913	5,140	4,602	3,021	1,852	1,932	214
Increase or decrease (-) over preceding census.....percent...	² 50.2	.....	52.8	63.1	-4.1	802.8	.....
Proportion of all farms.....percent...	5.7	3.8	3.6	2.4	1.4	1.6	0.2
Land in farms.....acres....	3,577,439	(³)	1,648,339	(³)	(³)	(³)	(³)
Proportion of all farm land.....percent...	7.6	(³)	3.7	(³)	(³)	(³)	(³)
Area irrigated.....acres....	⁴ 473,775	⁵ 345,417	⁶ 404,481	(⁷)	(⁷)	148,538	11,744
Increase or decrease (-) over preceding census.....percent...	² 17.1	.....	.....	.....	.....	(⁸)	.....
Proportion of total land area of State.....percent...	1.0	0.7	0.8	.....	.....	0.3	(⁹)
Proportion of all farm land.....percent...	1.0	0.7	0.9	.....	.....	0.5	0.1
Value of irrigated farms (land and buildings).....dollars..	92,846,541	(³)	85,097,442	(³)	(³)	(³)	(³)
Average per farm.....dollars..	13,430.72	(³)	18,491.40	(³)	(³)	(³)	(³)
Average per acre.....dollars..	25.95	(³)	51.63	(³)	(³)	(³)	(³)
Value of farm implements and machinery ¹⁰.....dollars..	9,398,048	(³)	6,676,291	(³)	(³)	(³)	(³)
Average per farm ¹⁰.....dollars..	1,359.47	(³)	1,450.74	(³)	(³)	(³)	(³)
Average per acre ¹⁰.....dollars..	2.63	(³)	4.05	(³)	(³)	(³)	(³)
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number...	2,717	(³)	721	470	474	(³)	(³)
Farms irrigated.....number...	9,156	(³)	(³)	(³)	(³)	(³)	(³)
Area irrigated.....acres....	610,379	(³)	532,617	442,690	255,950	(³)	(³)
Area existing works were capable of supplying with water.....acres....	982,957	(³)	703,641	562,468	429,225	(³)	(³)
Area irrigable.....acres....	1,065,567	(³)	763,039	¹¹ 766,768	¹¹ 680,133	(³)	(³)
Additional area existing works were capable of supplying with water.....acres....	382,578	(³)	171,024	119,778	173,275	(³)	(³)
Additional irrigable area in enterprises not supplied with water.....acres....	485,188	(³)	230,422	¹¹ 324,078	¹¹ 424,183	(³)	(³)
Investment in irrigation enterprises.....dollars..	39,056,207	(³)	21,386,319	13,909,185	7,798,310	1,310,698	¹² 47,768
Increase or decrease (-) over preceding census.....percent...	² 82.6	(³)	53.8	78.4	495.0	(³)	.....
Average per acre based on area works were capable of supplying with water.....dollars..	39.33	(³)	30.39	24.73	18.17	(³)	(³)
Increase or decrease (-) over preceding census.....percent...	² 29.4	(³)	22.9	36.1	.....	.....	.....
Estimated completed cost of existing enterprises.....dollars..	41,995,361	(³)	21,465,772	18,030,154	9,485,231	(³)	(³)
Average per acre based on irrigable area in enterprises.....dollars..	38.33	(³)	28.13	¹¹ 23.51	¹¹ 13.95	(³)	(³)
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	1.59	(³)	1.54	1.48	1.09	(³)	(³)

¹Relates to farms reporting irrigated cropland harvested and/or irrigated pasture, 1940 Census; farms reporting irrigated cropland harvested, 1935 Census; farms reporting irrigated crops, 1930, 1920, and 1910 Censuses; and farms reporting irrigated land, 1900 and 1890 Censuses. ²Increase or decrease represented by 1940 figures are with reference to 1930 figures, not 1935. ³Not available. ⁴Irrigated land from which crops were harvested plus 10,869 acres of irrigated land used only for pasture. ⁵Irrigated land from which crops were harvested. ⁶Acres of irrigated crops including some duplication where 2 or more crops were harvested from same land. ⁷Data were secured for crops irrigated but the returns were considered relatively incomplete. ⁸Percent not shown when more than 1,000. ⁹Less than one-tenth of 1 percent. ¹⁰Total is for irrigated farms reporting this item. Averages are based on all irrigated farms. ¹¹For 1920 and 1910 relates to total area in enterprises. Irrigable areas for those years were not reported. ¹²Based on average for "subhumid" region. Average for Nebraska not shown separately in 1890. ¹³The land area shown for 1940 represents redeterminations by the Bureau of the Census and, therefore, differs from that shown for earlier years.

STATE TABLE 2.—CENSUS OF AGRICULTURE—NUMBER OF FARMS, FARM ACREAGE ACCORDING TO USE, AND SPECIFIED FARM VALUES FOR IRRIGATED AND NONIRRIGATED FARMS, BY TENURE OF OPERATOR, 1940

ITEM (For definitions and explanations, see text)	Farms	Land in farms	CROPLAND HARVESTED 1939		Irrigated pasture 1939	VALUE OF FARMS (land and buildings)		VALUE OF BUILDINGS		VALUE OF IMPLEMENTS AND MACHINERY	
			Total	Irrigated ¹		Total	Average per acre ²	Total	Average per acre ²	Total	Average per acre ²
All farms.....	Number 121,062	Acres 47,343,981	Acres 17,304,802	Acres 462,906	Acres 10,869	Dollars 1,137,808,019	Dollars 24.03	Dollars 256,753,804	Dollars 5.42	Dollars 97,645,065	Dollars 2.06
Owners and managers.....	57,115	28,964,009	8,919,421	225,958	7,082	616,275,106	21.28	148,403,334	5.12	52,831,318	1.62
Tenants.....	63,947	18,379,972	8,385,381	236,948	3,787	521,532,913	28.38	108,350,470	5.90	44,813,767	2.44
Irrigated farms, total.....	6,913	3,577,439	1,025,290	462,906	10,869	92,846,541	25.95	17,318,057	4.84	9,398,048	2.63
Owners and managers.....	3,342	2,600,098	585,574	225,958	7,082	54,397,486	20.92	10,685,061	4.11	5,101,064	1.96
Tenants.....	3,571	977,341	439,716	236,948	3,787	38,449,055	39.34	6,632,996	6.79	4,296,984	4.40
Wholly irrigated farms.....	2,761	607,112	236,324	236,324	4,826	28,717,583	47.30	6,022,194	9.92	3,730,037	6.14
Owners and managers.....	1,194	355,003	102,051	102,051	2,768	13,656,110	38.47	3,357,432	9.46	1,659,145	4.67
Tenants.....	1,567	252,109	134,273	134,273	2,058	15,061,473	59.74	2,664,762	10.57	2,070,892	8.21
Partly irrigated farms.....	4,152	2,970,327	788,966	226,582	6,043	64,128,958	21.59	11,295,863	3.80	5,668,011	1.91
Owners and managers.....	2,148	2,245,095	483,523	123,907	4,294	40,741,376	18.15	7,327,629	3.26	3,441,919	1.53
Tenants.....	2,004	725,232	305,443	102,675	1,749	23,387,582	32.25	3,968,234	5.47	2,226,092	3.07
Nonirrigated farms, total.....	114,149	43,766,542	16,279,512	.....	.....	1,044,961,478	23.88	239,435,747	5.47	88,247,037	2.02

¹Does not include irrigated fallow land or land in young irrigated crops not harvested or in irrigated crops that failed.

²Based on all land in farms for each tenure group.

CENSUS OF IRRIGATION - NEBRASKA

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STATE TABLE 3.—NUMBER OF ENTERPRISES, IRRIGABLE AREA, AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1940; IRRIGATED AREA, 1939, 1929, AND 1919; WATER DELIVERED TO IRRIGATORS, 1939; BY SOURCE OF WATER SUPPLY

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	1940			IRRIGATED AREA				DELIVERY OF WATER TO IRRIGATORS, 1939					
	Enter- prises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Irrigated area reporting—			Quantity delivered per acre ¹	Cost ¹	
								Quantity	Cost	Quantity and cost		Per acre	Per acre- foot
Number	Acres	Acres	Acres	Acres	Acres	Percent	Acres	Acres	Acres	Acres	Dollars	Dollars	
Total.....	2,717	1,095,567	992,957	810,379	532,617	442,590	14.6	573,110	902,671	567,998	2.1	1.94	0.93
Primary sources:													
Streams, gravity.....	247	883,349	792,703	488,499	501,195	435,567	-2.5	457,848	483,459	454,785	2.0	1.37	0.68
Streams, pumped.....	311	21,053	19,482	10,178	2,458	1,115	314.0	10,055	9,851	9,663	1.3	3.26	2.49
Streams, gravity and pumped.....	7	29,301	26,301	12,514	.....	850	.....	12,694	12,814	12,694	2.3	2.45	1.06
Wells, pumped.....	1,707	132,966	126,423	80,673	23,452	546	244.0	80,155	79,114	79,023	1.5	3.48	2.31
Wells, flowing.....	14	465	465	361	.....	.....	.....	25	66	10	1.0	0.50	0.50
Wells, pumped and flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity.....	.....	.....	.....	.....	81	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, pumped.....	13	596	589	251	255	.....	-1.6	251	251	251	2.2	4.90	2.27
Springs.....	27	4,981	4,957	2,113	414	2,050	410.4	2,022	2,107	2,016	0.7	0.35	0.49
Springs and streams.....	4	260	260	117	.....	.....	.....	92	117	92	2.2	1.68	0.77
Stored storm water.....	59	2,038	1,433	711	1,245	1,200	-42.9	489	448	260	1.1	1.34	1.21
City water.....	2	84	84	74	.....	7	.....	71	71	68	2.0	1.63	0.80
Sewage.....	2	.....	.....	.....	.....	120	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped...	28	5,979	5,866	5,019	70	115	(²)	3,565	5,019	3,565	2.2	1.63	0.74
Streams, gravity; wells, flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped; wells, pumped...	11	1,092	1,038	529	.....	.....	.....	529	449	449	2.3	3.77	1.66
Waste water, seepage or drainage.....	8	6,634	6,500	4,362	.....	.....	.....	4,362	4,285	4,285	1.3	2.55	1.94
Other mixed.....	15	6,769	6,766	4,680	2,259	1,120	107.2	952	4,620	837	4.6	3.12	0.67
Other and not reported.....	.....	.....	.....	.....	1,188	.....	.....	.....	.....	.....	.....	.....	.....
Supplemental sources: ³													
Streams, gravity and/or storage...	4	301,387	289,567	153,377	.....	.....	.....	153,377	153,377	153,377	0.5	0.83	1.29
Streams, pumped.....	47	3,554	3,413	2,708	.....	.....	.....	2,834	2,668	2,594	1.0	2.55	2.54
Wells, pumped.....	211	24,179	23,750	15,548	.....	.....	.....	15,508	15,403	15,363	0.8	1.41	1.82
Wells, flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Based on enterprises reporting both quantity and cost of water, assuming (a) that for enterprises serving 1 to 4 farms the cost of water is cost of maintenance and operation, and for enterprises serving 5 or more farms it is total annual charges, and (b) that enterprises reporting cost and quantity of water had used the same quantity of water per acre as all enterprises which reported water delivered.

²Percent not shown when more than 1,000.

³Areas shown under "Supplemental sources" are parts of areas shown under "Primary sources" and therefore are not again added into the totals (see text).

STATE TABLE 4.—INVESTMENT, 1940 AND 1930; AND COST OF MAINTENANCE AND OPERATION, 1939, 1929, AND 1919; BY SOURCE OF WATER SUPPLY

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	INVESTMENT							COST OF MAINTENANCE AND OPERATION ¹						
	1940			1930			Average per acre increase or decrease (-) 1930-40	1939		1929		Average per acre increase or decrease (-) 1930-40	1919	
	Amount	Pro- portion of total	Aver- age per acre ²	Amount	Pro- portion of total	Aver- age per acre ²		Irrigated area reporting	Aver- age per acre	Irrigated area reporting	Aver- age per acre		Irrigated area reporting	Aver- age per acre
Total.....	Dollars 39,056,207	Percent 100.0	Dollars 39.33	Dollars 21,386,319	Percent 100.0	Dollars 30.39	Dollars 8.94	Acres 602,582	Dollars 1.59	Acres 524,260	Dollars 1.54	Dollars 0.05	Acres 394,392	Dollars 1.48
Primary sources:														
Streams, gravity.....	32,147,527	82.3	40.55	20,561,922	96.2	31.24	9.31	483,370	0.99	495,259	1.41	-0.42	389,699	1.48
Streams, pumped.....	219,587	0.6	11.27	71,933	0.3	13.11	-1.84	9,851	3.33	2,248	3.85	-0.52	572	2.66
Streams, gravity and pumped.....	1,515,810	3.9	57.63					12,814	2.08				850	1.04
Wells, pumped.....	1,989,248	5.1	15.73	616,939	2.9	19.95	-4.22	79,114	3.49	22,432	4.03	-0.54	436	5.16
Wells, flowing.....	2,205	(³)	4.74					66	0.24					
Wells, pumped and flowing.....														
Lakes, gravity.....				17,000	0.1	209.88				81	2.94			
Lakes, pumped.....	4,325	(³)	7.34	5,000	(²)	9.26	-1.92	251	4.90	255	5.88	-0.98		
Springs.....	35,099	0.1	7.08	6,460	(³)	15.60	-8.52	2,107	0.55	413	2.42	-1.87	1,700	1.14
Springs and streams.....	7,360	(³)	28.31					117	1.75					
Stored storm water.....	31,666	0.1	22.10	33,565	0.2	13.06	9.04	448	1.11	1,245	2.87	-1.76	895	0.95
City water.....														
Sewage.....	1,845	(³)	21.96					71	1.63					
Streams, gravity; wells, pumped..	85,477	0.2	14.57	2,330	(³)	33.29	-18.72	5,019	1.38	70	2.86	-1.48	10	3.00
Streams, gravity; wells, flowing.....														
Streams, pumped; wells, pumped..	16,425	(³)	15.82					449	3.77					
Waste water, seepage or drainage.....	77,595	0.2	11.77					4,285	2.71					
Other mixed.....	57,617	0.1	8.52	21,470	0.1	6.12	2.40	4,620	0.94	2,257	1.20	-0.26	230	2.63
Other and not reported.....				29,700	0.1	25.00								
Supplemental sources: ⁴														
Streams, gravity and/or storage..	2,565,407	6.6	8.86					153,377	0.59					
Streams, pumped.....	30,370	0.1	8.90					2,668	2.65					
Wells, pumped.....	268,644	0.7	11.31					15,403	1.44					
Wells, flowing.....														

¹Based on irrigated area in enterprises reporting cost of maintenance and operation.

²Based on area works were capable of supplying with water.

³Less than one-tenth of 1 percent.

⁴Areas shown under "Supplemental sources" are parts of areas shown under "Primary sources" and therefore are not again added into the totals (see text).

CENSUS OF IRRIGATION — NEBRASKA

STATE TABLE 5.—AREAS, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920

ITEM AND TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	CENSUS OF—				Increase or decrease (-) 1930-40 primary enter- prises	ITEM AND TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	CENSUS OF—				Increase or decrease (-) 1930-40 primary enter- prises
	1940		1930	1920			1940		1930	1920	
	Primary enter- prises	Supple- mental enter- prises ¹	Primary enter- prises	Primary enter- prises			Primary enter- prises	Supple- mental enter- prises ¹	Primary enter- prises	Primary enter- prises	
AREA IRRIGATED						AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER—Continued					
Total.....	Acres 610,379	Acres 171,633	Acres 532,617	Acres 442,690	Percent 14.6						
Individual and partnership....	123,079	17,986	57,472	68,140	115.7		Acres	Acres	Acres	Acres	Percent
Cooperative, incorporated....	53,488	365	54,811	55,408	11.8	Irrigation district.....	400,674	175,476	254,033	220,859	57.7
Cooperative, unincorporated....	7,764					Commercial.....	126,673	(⁵)	114,361	27,332	10.8
Irrigation district.....	234,688	56,680	219,590	206,206	6.9	Bureau of Reclamation ²	181,155	105,996	180,458	³ 115,487	0.4
Commercial.....	28,723		53,574	25,335	46.4	State.....	874		149		486.6
Bureau of Reclamation ²	160,799	96,602	147,026	² 87,558	9.4	Other.....	176		20	83	780.0
State.....	762		134		468.7	IRRIGABLE AREA ⁶					
Other.....	176		10	43	(⁴)	Total.....	1,095,567	329,120	763,039	766,768	43.6
AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER						Individual and partnership....	209,914	27,463	82,193	124,098	155.4
Total.....	992,957	316,730	703,641	562,468	41.1	Cooperative, incorporated....	82,329	⁵ 8,365	88,361	145,444	5.5
Individual and partnership....	197,075	26,893	77,296	96,465	155.0	Cooperative, unincorporated....	10,904				
Cooperative, incorporated....	76,599	⁵ 8,365	77,324	102,242	11.6	Irrigation district.....	483,522	187,296	254,327	244,393	90.1
Cooperative, unincorporated....	9,821					Commercial.....	126,673	(⁵)	155,753	76,925	-18.7

¹Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises." See text, p. 4, for explanation. ²U. S. Dept. of the Interior. ³Does not include land supplied with stored water under the Warren Act. ⁴Percent not shown when more than 1,000. ⁵Data for 1 "Commercial" enterprise are included with "Cooperative" enterprises in the 1940 Census. ⁶For 1920 relates to total area. Irrigable area for that year was not reported. ⁷For explanation of areas, see text, p. 358.

STATE TABLE 6.—ENTERPRISES, AREAS, AVERAGE COSTS, 1940; AND AREA IRRIGATED, 1939;
BY TYPE OF ENTERPRISE

TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	ENTERPRISES		AREAS		AVERAGE COST				AREA IRRIGATED, 1939 ¹				
	Total	Serving 5 or more farms	Irrigable	Works were capable of supplying with water	Primary enterprises		Supplemental enterprises		Farms served	Total area	Cropland		Irrigated pasture
					Works and equipment per acre ²	Maintenance and operation per acre ³	Works and equipment per acre ²	Maintenance and operation per acre ³			From which crops were harvested	On which crops failed	
Total.....	Number 2,717	Number 69	Acres 1,095,567	Acres 992,957	Dollars 36.14	Dollars 1.39	Dollars 9.04	Dollars 0.70	Number 9,156	Acres 610,379	Acres 579,535	Acres 10,717	Acres 20,127
Individual and partnership....	2,620	3	209,914	197,075	13.46	2.77	10.99	1.64	2,317	123,970	116,495	3,443	4,041
Cooperative, incorporated....	24	16	82,329	76,599	11.50	0.62			614	53,488	50,850	520	2,118
Cooperative, unincorporated....	15	3	10,904	9,821	10.85	0.45	⁴ 3.33	0.64	47	7,764	6,772	402	590
Irrigation district.....	38	38	483,522	400,674	44.03	1.04	8.49	0.40	3,194	234,688	226,807	3,039	4,842
Commercial.....	5	5	126,673	126,673	7.52	1.49	(⁴)		826	28,723	28,723		
U. S. Bureau of Reclamation...	4	4	181,155	181,155	75.00	1.13	9.91	0.70	2,146	180,799	149,072	3,249	8,478
State.....	7		874	874	42.67	4.55			8	762	640	64	58
Other.....	4		176	176	72.35	4.85			4	176	176		

¹Reported by enterprises in the Census of Irrigation, not by the Census of Agriculture. ²Based on area works were capable of supplying with water and cost of works and equipment exclusive of water right investment. ³Based on irrigated area in enterprises reporting maintenance and operation in 1939. ⁴Data for 1 "Commercial" enterprise are included with "Cooperative" enterprises in the 1940 Census. ⁵For explanation of areas and investment, see text, p. 358.

STATE TABLE 7.—INVESTMENT IN IRRIGATION ENTERPRISES, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920

TYPE OF ENTERPRISE (For definitions and explanations, see text)	TOTAL INVESTMENT, TO JANUARY 1							AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER		Capital expend- itures during 1939 ¹	Estimated invest- ment re- quired to complete works	
	1940					1930	1920	Increase or decrease (-) 1930-40	Primary enter- prises			Supple- mental enter- prises
	Total	Primary enter- prises	Supple- mental enter- prises	Total cost of works and equipment	Invest- ment in water rights							
Total.....	Dollars 39,056,207	Dollars 36,191,786	Dollars 2,864,421	Dollars 38,749,216	Dollars 306,991	Dollars 21,368,319	Dollars 13,909,185	Percent 82.6	Dollars 36.45	Dollars 9.04	Dollars 4,344,324	Dollars 2,939,151
Individual end partnership...	2,967,486	2,671,642	295,844	2,948,350	19,136	1,041,547	1,146,227	184.9	13.56	11.00	384	147,924
Cooperative, incorporated...	1,036,557	2,144,788	28,370	880,642	155,915	761,302	547,104	52.6	13.54	23.39	825	6,000
Cooperative, unincorporated...	109,591			108,900	691				10.81		800	110
Irrigation district.....	19,205,720	17,716,079	1,489,641	19,129,996	75,724	5,082,366	2,811,474	277.9	44.22	8.49	4,327,526	2,764,823
Commercial.....	1,027,010	(2)	(2)	977,010	50,000	899,054	726,560	14.2	7.91	(2)	11,079	
U. S. Bureau of Reclamation...	14,659,810	13,609,244	1,050,566	14,654,235	5,515	13,603,568	8,674,250	7.8	76.12	9.91	3,710	
State.....	37,300	37,300		37,290	10	7,482		398.5	42.68			
Other.....	12,733	12,733		12,733		1,000	3,570	(3)	72.35			297

¹Only for enterprises serving 5 or more farms. ²Data for 1 "Commercial" enterprise are included with "Cooperative" enterprises in the 1940 Census. ³Percent not shown when more than 1,000. ⁴For explanation of investment, see text, p. 358.

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STATE TABLE 8.—INDEBTEDNESS, ARREARAGE, AND CHARGES, BY TYPE OF ENTERPRISE,¹ CENSUS OF 1940

TYPE OF ENTERPRISE (For definitions and explanations, see text)	INDEBTEDNESS OF ENTERPRISES REPORTING						ARREARAGES OF ENTERPRISES REPORTING ²			CHARGES OF ENTERPRISES REPORTING			
	Enter- prises 1940	Area		Total indebt- ness 1940	Average per acre assessed 1939 ³	Average per acre works were capable of supplying with water ⁴	Enter- prises 1940	Total arrearages		Average per acre assessed 1939 ⁵	Area assessed 1939	Charges made 1939	Charges collected 1939
		Irrig- able 1940	Works were capable of supplying with water 1940					Dec. 31 1939	Dec. 31 1938				
Total.....	Number 34	Acres 917,675	Acres 825,817	Dollars 21,727,368	Dollars 52.08	Dollars 31.46	Number 11	Dollars 178,738	Dollars 57,871	Dollars 2.44	Acres 674,574	Dollars 770,745	Dollars 576,412
Individual and partnership.....	3	29,153	25,963	13,968	1.07	0.54	.....	.....	.....	.....	2,149	1,284	764
Cooperative, incorporated.....	56,377	35,952	32,225
Cooperative, unincorporated.....	4,868	1,174	634
Irrigation district.....	27	707,367	618,699	11,967,098	49.25	24.11	9	149,106	25,858	2.61	323,013	432,704	416,815
Commercial.....	1	(6)	(6)	(6)	(6)	(6)	1	(6)	(6)	(6)	28,723	40,423	46,463
Bureau of Reclamation ⁷	3	181,155	181,155	8,786,302	59.91	53.86	1	29,632	32,013	1.83	259,444	259,208	79,471
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Only for enterprises serving 5 or more farms. Enterprises and areas shown are totals for primary and supplemental enterprises reporting. ²In payment of principal, interest, and/or other funded obligations. ³Based on primary enterprises only; State average for supplemental enterprises is \$22.42. ⁴Based on primary enterprises only; State average for supplemental enterprises is \$7.24. ⁵Based on primary enterprises only; no supplemental enterprises reported arrearage. ⁶Data for 1 "Commercial" enterprise are included with "Irrigation district" enterprises in the 1940 Census. ⁷U. S. Dept. of the Interior. ⁸Represents indebtedness and arrearages of irrigation districts to the U. S. Government. ⁹Data for less than 3 enterprises shown with permission of the enterprise involved. ¹⁰For explanation of areas and investment, see text, p. 358.

TABLE 9.—COST OF MAINTENANCE AND OPERATION, AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939;
BY TYPE OF ENTERPRISE

TYPE OF ENTERPRISE (For definitions and explanations, see text)	COST OF MAINTENANCE AND OPERATION						PAY ROLL AND EMPLOYEES, 1939 ¹		
	Primary enterprises		Supplemental enterprises		Average cost per irrigated acre		Enterprises reporting pay roll	Wages and salaries paid and payable	Employees during week ending April 29
	Irrigated area reporting 1939	Reported cost 1939	Irrigated area reporting 1939	Reported cost 1939	Primary enterprises 1939	Supplemental enterprises 1939			
	Acres	Dollars	Acres	Dollars	Dollars	Dollars	Number	Dollars	Number
Total.....	602,582	839,682	171,448	119,770	1.39	0.70	56	308,746	668
Individual and partnership.....	120,069	332,936	17,801	29,186	2.77	1.64	1	(2)	.....
Cooperative, incorporated.....	50,191	30,998	365	235	0.62	0.64	12	20,396	60
Cooperative, unincorporated.....	7,144	3,245	.....	.....	0.45	.....	1	(2)	.....
Irrigation district.....	234,688	244,153	56,680	22,766	1.04	0.40	35	164,034	317
Commercial.....	28,723	42,873	.....	.....	1.49	.....	4	14,352	34
Bureau of Reclamation ²	160,799	181,154	96,602	67,593	1.13	0.70	3	109,749	277
.....	762	3,470	.....	.....	4.55	.....	.....	.....	.....
.....	176	553	.....	.....	4.85	.....	.....	.....	.....

Only for enterprises serving 5 or more farms.
Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.
For explanation of areas and investment, see text, p. 358.

STATE TABLE 10.—IRRIGATION WORKS, BY TYPE OF ENTERPRISE, 1940

TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	DAMS		CANALS			RESERVOIRS		PIPE LINES	FLOWING WELLS		PUMPED WELLS		PUMPING PLANTS			
	Diver- sion	Stor- age	Capac- ity at main head- ing	Length ¹		Num- ber	Capacity	Length	Num- ber	Yield	Number	Yield	Prime movers		Pumps	
				Earth	Lined ²								Number	Rated capac- ity	Number	Rated capacity
Number	Number	Sec.-ft.	Miles	Miles		Ac.-ft.	Miles		G.p.m.		G.p.m.	Rp.		G.p.m.		
Total.....	351	156	14,256	3,287	44.3	164	2,306,159	126.1	19	370	2,412	2,053,184	2,664	53,572	2,848	2,528,669
Individual and partnership...	278	146	2,054	395	4.0	153	8,225	68.3	19	370	2,388	2,036,874	2,626	52,811	2,810	2,498,246
Cooperative, incorporated...	21		1,960	236							8	5,950	6	140	6	6,350
Cooperative, unincorporated...	7		208	47		1	1,700	0.6			5	3,200	7	120	7	4,000
Irrigation district.....	40	5	8,923	1,275	12.0	5	2,213,448	37.2					2	75	2	5,000
Commercial.....	4	2	1,098	215		2	7,625	1.0								
Bureau of Reclamation ³		3		1,117	28.3	3	75,160	14.3								
State.....	1		11	2				1.7			13	6,060	14	331	14	11,490
Other.....			2					3.0			3	1,100	9	95	9	3,583

¹Includes main and lateral canals but not farm ditches.²Includes flumes.³U. S. Dept. of the Interior.

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STATE TABLE 11.—DAMS, BY MATERIAL: 1940 AND 1930

MATERIAL	1940		1930		MATERIAL	1940		1930	
	Diversion	Storage	Diversion	Storage		Diversion	Storage	Diversion	Storage
	Number	Number	Number	Number		Number	Number	Number	Number
Total.....	351	156	185	28	Earth and rock.....	165	146	.....	20
Concrete or masonry.....	76	4	61	3	Other and mixed.....	180	2	102	3
Timber.....	24	.....	18	.....	Not reported.....	6	4	4	2

¹ Principally temporary dams, replaced annually.

STATE TABLE 12.—PUMPING PLANTS, BY KIND OF MOTIVE POWER AND TYPE OF PUMP, 1940; AND TOTAL NUMBER AND CAPACITY, 1930

PUMPS BY KIND OF POWER EMPLOYED	Pumps	Proportion of total number	Rated capacity of pumps	Proportion of total capacity	Average lift of pumps	MOTIVE POWER BY TYPE OF PUMP EMPLOYED	Prime movers	Proportion of total number	Rated capacity of movers	Proportion of total capacity
Total, 1940.....	Number 2,848	Percent 100.0	G.p.m. 2,528,669	Percent 100.0	Feet 32	Total, 1940.....	Number 2,684	Percent 100.0	Hp. 53,572	Percent 100.0
Electric motor.....	180	6.3	160,030	6.3	36	Centrifugal pump.....	1,409	52.9	25,448	47.5
Centrifugal.....	93	3.3	81,085	3.2	31	Electric.....	106	4.0	1,407	2.6
Turbine.....	78	2.7	75,020	3.0	42	Internal-combustion.....	1,288	48.3	23,732	44.3
Plunger.....	4	0.1	1,125	(¹)	42	Other.....	15	0.6	309	0.6
Other.....	5	0.2	2,800	0.1	23	Turbine pump.....	979	36.7	23,367	43.6
Internal-combustion engine.....	2,486	87.3	2,228,395	88.1	32	Electric.....	91	3.4	1,661	3.1
Centrifugal.....	1,456	51.1	1,272,366	50.3	25	Internal-combustion.....	882	33.1	21,624	40.4
Turbine.....	966	33.9	913,045	36.1	42	Other.....	6	0.2	82	0.1
Plunger.....	16	0.6	2,794	0.1	32	Plunger pump.....	46	1.8	214	0.4
Other.....	47	1.7	40,190	1.6	29	Electric.....	5	0.2	50	0.1
Other kinds of motive power.....	37	1.3	17,457	0.7	37	Internal-combustion.....	21	0.8	143	0.3
Centrifugal.....	16	0.6	13,160	0.5	21	Other.....	20	0.8	21	(¹)
Turbine.....	6	0.2	4,000	0.2	26	Other and mixed types of pumps.....	230	8.6	4,543	8.5
Plunger.....	14	0.5	282	(¹)	58	Electric.....	44	1.6	1,082	2.0
Other.....	1	(¹)	15	(¹)	25	Internal-combustion.....	184	6.9	3,415	6.1
Mixed kinds of motive power.....	146	5.1	122,787	4.9	33	Other.....	2	0.1	36	0.1
Centrifugal.....	57	2.0	49,450	2.0	28	Total, 1930.....	² 610	.....	10,991	.....
Turbine.....	78	2.7	70,670	2.8	33	Increase or decrease (-) 1930-1940.....	2,054	.....	42,581	.....
Plunger.....	8	0.3	217	(¹)	66					
Other.....	3	0.1	2,450	0.1	30					
Total, 1930.....	636	.....	530,752	.....	29					
Increase or decrease (-) 1930-1940..	2,212	.....	1,991,917	.....	3					

¹ Less than one-tenth of 1 percent.² Number of pumping plants.

STATE TABLE 13.—PIPE LINES, BY MATERIAL, SIZE, AND LENGTH: 1940 AND 1930

MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940	MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940
	1940 ¹	1930 ²			1940 ¹	1930 ²	
Total.....	Miles 126.1	Miles 27.5	Percent 358.5	Wood-stave:	Miles	Miles	Percent
Concrete:				1 to 12 inches.....	5.1	1.2	325.0
1 to 12 inches.....	3.1	} 6.6	174.2	13 to 24 inches.....	1.3	} 6.3	17.5
13 to 24 inches.....	2.8			Over 24 inches.....	6.1		
Over 24 inches.....	15.3						
Metal:				Clay and other:			
1 to 12 inches.....	65.8	2.3	(²)	1 to 12 inches.....	2.7	.....	.....
13 to 24 inches.....	4.2	} 1.6	987.5	13 to 24 inches.....	1.5	} 9.5	-31.6
Over 24 inches.....	13.2			Over 24 inches.....	5.0		

¹ Includes siphons and farm pipe lines reported.² Pipe sizes were separated at 30 inches in diameter (instead of 24 inches) in the 1930 Census.³ Percent not shown when more than 1,000.

BUREAU OF RECLAMATION AREAS AND INVESTMENT

The areas credited to the United States Bureau of Reclamation in State tables 5, 6, 8, and 9 include 160,799 acres irrigated in 1939 and related areas within the Pathfinder, Gering-Fort Laramie, and Northport Irrigation Districts of the North Platte Project, which are tabulated as separate enterprises of the Bureau of Reclamation. This acreage is not duplicated under any other classification. The 96,602 acres shown as having received supplemental service from the Bureau of Reclamation are included in the primary enterprise listings in the irrigation district classification.

The investment attributed to the Bureau of Reclamation in State tables 7 and 17 includes the cost of the irrigation and power facilities of the North Platte Project

located in Wyoming which are charged to Nebraska lands in the primary classification. Under existing contracts, net power revenues will pay a substantial part of the irrigation costs of the North Platte Project. The irrigation investment reported for the North Platte Project does not include costs for drainage. Indebtedness and arrearages shown under Bureau of Reclamation in State table 8 represent obligations of three irrigation districts to the United States Government.

Data relating to the Mirage Flats Project being constructed on the Niobrara River under the Water Conservation and Utilization Program are not included in the 1940 Census of Irrigation.

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TABLE 14.—AREA WITHIN IRRIGATION ENTERPRISES FOR WHICH DRAINS HAVE BEEN INSTALLED, AND ADDITIONAL AREA IN NEED OF DRAINAGE: 1940, 1930, AND 1920

ITEM	1940	1930	1920	ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number..	65	40	24	Ratio of area drained to area irrigated in—			
Irrigable in these enterprises.....acres...	338,481	434,939	1,376,518	(a) Enterprises reporting lands drained and/or needing drainage...percent..	16.8	538.1	12.9
Irrigated in these enterprises.....acres...	284,658	(²)	(²)	(b) All irrigation enterprises.....percent..	7.9	22.9	2.4
Area in which drains have been installed...acres...	47,960	122,101	10,793	Ratio of area drained plus area needing drainage to—			
Additional area needing drainage.....acres...	10,305	51,505	26,606	(a) Irrigable area reporting.....percent..	17.2	39.9	19.9
				(b) Irrigated area reporting.....percent..	20.5	(²)	(²)

1920 relates to total area in enterprises. Irrigable area was not reported and irrigated area in enterprises reporting drainage was not reported separately for the census.

2. Available.

2. Based on irrigable area for 1930, area irrigated in enterprises reporting land drained or needing drainage not available.

STATE TABLE 15.—WATER USED, BY SOURCE OF SUPPLY: 1939, 1929, AND 1919

ITEM (For definitions and explanations, see text)	TOTAL			MEASURED ¹			NOT MEASURED		
	1939	1929 ¹	1919 ¹	1939	1929	1919	1939	1929 ¹	1919 ¹
PRIMARY ENTERPRISES									
Surface sources reported:									
Water entering canals.....acre-feet..	1,122,742	1,583,615	975,071	915,024	1,559,187	894,316	207,718	24,428	80,755
Area irrigated by these enterprises.....acres...	298,979	384,900	232,680	273,139	371,623	199,650	25,834	13,277	32,970
Average water per acre irrigated.....acre-feet..	3.8	4.1	4.2	3.4	4.2	4.5	8.0	1.8	2.4
Water delivered to irrigators.....acre-feet..	971,826	704,085	445,585	511,857	668,636	188,089	459,689	35,449	257,496
Area irrigated by these enterprises.....acres...	499,085	233,244	185,795	265,655	213,512	76,987	220,430	19,732	108,808
Average water per acre irrigated.....acre-feet..	2.0	3.0	2.4	1.9	3.1	2.4	2.1	1.8	2.4
Underground sources reported:									
Water delivered to irrigators.....acre-feet..	134,170	.....	.....	.....	.....	.....	134,170	.....	.....
Area irrigated by these enterprises.....acres...	87,025	.....	.....	.....	.....	.....	87,025	.....	.....
Average water per acre irrigated.....acre-feet..	1.5	.....	.....	.....	.....	.....	1.5	.....	.....
SUPPLEMENTAL ENTERPRISES									
Surface sources reported:									
Water entering canals.....acre-feet..	275,945	.....	.....	275,945	.....	.....	.....	.....	.....
Area irrigated by these enterprises.....acres...	56,680	.....	.....	56,680	.....	.....	.....	.....	.....
Average water per acre irrigated.....acre-feet..	4.9	.....	.....	4.9	.....	.....	.....	.....	.....
Water delivered to irrigators.....acre-feet..	77,812	.....	.....	26,721	.....	.....	51,091	.....	.....
Area irrigated by these enterprises.....acres...	158,011	.....	.....	56,680	.....	.....	98,331	.....	.....
Average water per acre irrigated.....acre-feet..	0.5	.....	.....	0.5	.....	.....	0.5	.....	.....
Underground sources reported:									
Water delivered to irrigators.....acre-feet..	12,033	.....	.....	.....	.....	.....	12,033	.....	.....
Area irrigated by these enterprises.....acres...	15,508	.....	.....	.....	.....	.....	15,508	.....	.....
Average water per acre irrigated.....acre-feet..	0.8	.....	.....	.....	.....	.....	0.8	.....	.....

¹ Data only for enterprises serving 5 or more farms. Water and area for surface and underground sources and water and area for primary and supplemental enterprises were segregated for 1929 and 1919.

STATE TABLE 16.—AREA IRRIGATED, BY TYPE OF RIGHTS UNDER WHICH WATER WAS DELIVERED: 1939, 1929, AND 1919

TYPE OF WATER RIGHTS (For definitions and explanations, see text)	1939			1929		1919	
	Area irrigated			Area irrigated	Proportion of total	Area irrigated	Proportion of total
	Primary enterprises	Proportion of total	Supplemental enterprises ¹				
	Acres	Percent	Acres	Acres	Percent	Acres	Percent
Total.....	610,378	100.0	171,633	532,617	100.0	442,690	100.0
Irrigation ²	507,786	83.3	154,395	385,601	72.4	411,424	93.0
Canal.....	4,426	0.7	787	.....	.....	618	0.1
Irrigation and riparian.....	696	0.1	.....	.....	.....	.....	.....
Ground.....	81,339	13.3	15,485	23,452	4.4	546	0.1
Irrigation and underground.....	1,825	0.3	.....	.....	.....	.....	.....
Canal and underground.....	1,830	0.3	.....	.....	.....	.....	.....
Allocated by court.....	9,370	1.5	63	118,916	22.3	9,280	2.1
Mixed and not reported.....	3,107	0.5	903	4,648	0.9	20,822	4.7

Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text).
¹ "Appropriation" includes water rights published in the 1930 and 1920 Census reports as "Appropriation and use," "Notice filed and posted," "Permit from State," and "Certificate or license from State."

CENSUS OF IRRIGATION - NEBRASKA

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

	PRIMARY ENTERPRISES (For definitions and explanations, see text)	TOTAL	IRRIGATED FARMS						
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms	1,000 farms and more
1	Enterprises, 1940.....number...	2,455	165	2,136	89	28	20	16	² 1
2	Irrigated farms, 1939.....number...	9,156	.....	2,136	211	330	1,086	4,102	1,281
3	Area irrigated, 1939.....acres....	610,379	.....	112,059	15,566	33,542	100,221	256,916	92,075
4	(a) From which crops were harvested.....acres....	579,535	.....	105,197	14,707	30,905	93,872	247,236	87,618
5	(b) On which crops failed.....acres....	10,717	.....	3,187	272	720	3,289	3,249	.....
6	(c) Irrigated pasture.....acres....	20,127	.....	3,675	587	1,917	3,060	6,431	4,457
CAPITAL INVESTMENT, 1940									
7	Total capital investment in all enterprises.....dollars..	35,191,788	146,335	2,308,414	320,722	514,740	1,919,783	22,865,382	8,116,891
8	(a) Cost of irrigation works and equipment.....dollars..	35,885,745	148,133	2,294,056	318,670	492,993	1,859,870	22,661,573	8,112,451
9	(b) Investment in water rights.....dollars..	306,040	202	14,358	2,052	21,756	59,923	203,809	3,940
10	Area works were capable of supplying with water.....acres....	992,957	12,898	164,573	22,766	49,828	120,480	506,281	110,140
11	Average investment per acre irrigated.....dollars..	59.29	.....	20.60	20.60	15.35	19.16	89.00	88.15
12	Average investment per acre which the works could supply with water.....dollars..	36.45	11.35	14.03	14.09	10.33	15.18	45.16	73.69
MAINTENANCE AND OPERATION, AND CHARGES, 1939									
13	Enterprises reporting maintenance and operation.....number...	2,345	164	2,033	84	28	19	16	² 1
14	(a) Area irrigated in these enterprises.....acres....	602,582	.....	107,879	13,433	33,542	98,737	256,916	92,075
15	(b) Cost of maintenance and operation.....dollars..	839,582	753	311,255	27,689	15,729	73,396	238,200	117,660
16	(c) Average cost per irrigated acre reporting.....dollars..	1.39	.....	2.89	2.06	0.47	0.74	1.14	1.28
17	Total annual charges.....dollars..	674,403	.....	.....	.....	25,607	102,787	425,771	120,238
18	Average charge per irrigated acre reporting.....dollars..	1.40	.....	.....	.....	0.76	1.03	1.66	1.31
19	Area against which charges were assessed.....acres....	521,292	.....	.....	.....	40,528	116,906	271,783	92,075
20	Average annual charge per acre assessed.....dollars..	1.28	.....	.....	.....	0.63	0.88	1.57	1.31
21	Total charges collected.....dollars..	575,579	.....	.....	.....	19,502	98,537	425,614	31,928
INDEBTEDNESS AND ARREARAGE, 1939									
22	Enterprises reporting indebtedness.....number...	33	.....	.....	.....	11	10	11	² 1
23	(a) Area irrigated in these enterprises.....acres....	359,702	.....	.....	.....	14,346	58,394	193,897	92,075
24	(b) Indebtedness.....dollars..	20,456,809	.....	.....	.....	135,710	476,612	14,369,187	5,475,390
25	(c) Average indebtedness per acre irrigated.....dollars..	57.08	.....	.....	.....	9.46	8.15	74.11	59.47
26	(d) Cost of irrigation works and equipment.....dollars..	31,652,544	.....	.....	.....	268,320	1,266,410	22,005,393	8,112,451
27	(e) Investment in water rights.....dollars..	262,751	.....	.....	.....	16,340	40,171	202,300	3,940
28	(f) Total investment.....dollars..	31,915,295	.....	.....	.....	284,660	1,306,581	22,207,693	8,116,391
29	(g) Maintenance and operation.....dollars..	309,040	.....	.....	.....	8,135	47,187	228,068	117,660
30	(h) Total annual charges.....dollars..	590,615	.....	.....	.....	15,831	73,867	370,679	120,238
31	(i) Total charges collected.....dollars..	466,358	.....	.....	.....	12,531	61,739	360,182	31,926
32	(j) Area against which annual charges were assessed.....acres....	392,831	.....	.....	.....	21,255	70,737	208,784	92,075
33	(k) Average indebtedness per acre assessed.....dollars..	52.08	.....	.....	.....	6.38	6.74	68.83	59.47
34	(l) Average charges per acre assessed.....dollars..	1.48	.....	.....	.....	0.74	1.04	1.71	1.31
35	(m) Average charges per acre irrigated.....dollars..	1.62	.....	.....	.....	1.10	1.27	1.88	1.31
36	Enterprises reporting arrearage.....number...	11	.....	.....	.....	5	2	4	.....
37	(a) Area assessed in these enterprises.....acres....	73,378	.....	.....	.....	9,091	(8)	48,569	.....
38	(b) Total arrearage.....dollars..	178,738	.....	.....	.....	16,879	(8)	150,290	.....
39	(c) Average arrearage per acre assessed.....dollars..	2.44	.....	.....	.....	1.88	(6)	3.08	.....
40	(d) Indebtedness.....dollars..	3,031,921	.....	.....	.....	102,374	(8)	2,774,347	.....
TYPE, 1940									
41	Individual and partnership.....number...	2,963	164	2,118	76	3	.....	.....	.....
42	Cooperative (incorporated and unincorporated).....number...	37	1	8	10	12	4	2	.....
43	Irrigation district.....number...	37	.....	.....	.....	12	16	10	.....
44	Commercial.....number...	4	.....	.....	.....	1	1	2	.....
45	U. S. Bureau of Reclamation.....number...	3	.....	.....	.....	.....	.....	2	.....
46	All other.....number...	11	.....	10	1	.....	.....	.....	1
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939									
47	Enterprises reporting pay roll.....number...	⁶ 58	.....	.....	.....	19	19	16	² 1
48	Wages and salaries paid and payable for 1939.....dollars..	308,746	.....	.....	.....	8,634	45,759	184,433	68,870
49	Persons employed during week ending April 29, 1939.....numbers...	688	.....	.....	.....	54	131	317	185
SOURCE OF WATER SUPPLY, 1939									
50	Streams, gravity.....number...	247	12	155	22	24	19	14	1
51	Streams, pumped.....number...	311	13	287	11	.....	.....	.....	.....
52	Wells, pumped.....number...	1,707	130	1,530	47	.....	.....	.....	.....
53	Wells, pumped and flowing; or wells flowing.....number...	14	.....	13	1	.....	.....	.....	.....
54	Lakes, gravity or pumped.....number...	13	.....	13	.....	.....	.....	.....	.....
55	Streams and springs; or springs.....number...	31	1	27	2	1	.....	.....	.....
56	Mixed, streams and wells.....number...	46	1	39	4	1	.....	1	.....
57	Other mixed or stored storm water.....number...	86	8	72	2	2	1	1	.....
	SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)	TOTAL	IRRIGATED FARMS						
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms	1,000 farms and more
1	Enterprise, 1940.....number...	282	29	221	10	.....	.....	.....	² 2
2	Irrigated farms, 1939.....number...	2,787	.....	221	22	.....	.....	.....	2,544
3	Area irrigated, 1939.....acres....	171,693	.....	16,666	1,686	.....	.....	.....	153,282
CAPITAL INVESTMENT, 1940									
4	Total capital investment in all enterprises.....dollars..	2,864,421	56,843	249,971	17,400	.....	.....	.....	2,540,207
5	(a) Cost of irrigation works and equipment.....dollars..	2,863,470	56,838	249,131	17,400	.....	.....	.....	2,540,101
6	(b) Investment in water rights.....dollars..	951	5	840	.....	.....	.....	.....	106
7	Area works were capable of supplying with water.....acres....	316,730	11,224	21,895	2,139	.....	.....	.....	281,472
8	Average investment per acre irrigated.....dollars..	16.69	.....	15.00	10.32	.....	.....	.....	16.57
9	Average investment per acre which the works could supply with water.....dollars..	9.04	5.06	11.42	8.13	.....	.....	.....	9.02

¹Relates to enterprises reporting no irrigation in 1939 but having works capable of supplying water in 1940.²Data for less than 3 enterprises shown with permission of the enterprises involved.³Annual charges, reported only by enterprises serving 5 or more farms, 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.

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CHARGES, INDEBTEDNESS AND ARREARAGE, TYPE OF ENTERPRISE, PAY ROLL, NUMBER OF EMPLOYEES, FARMS, AREAS IRRIGATED, AND COST OF WORKS: CENSUS OF 1940

ACRES IRRIGATED							COST OF IRRIGATION WORKS AND EQUIPMENT					
No acres ¹	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	
165	1,946	240	63	25	15	² 1	2,326	70	37	18	4	1
.....	1,999	319	321	1,415	3,811	1,291	2,289	206	1,300	2,595	2,766	2
.....	66,457	36,174	45,075	103,811	264,787	92,075	112,862	26,346	109,478	153,713	207,960	3
.....	65,301	33,534	42,655	94,055	256,372	87,618	106,639	23,314	103,561	144,649	201,072	4
.....	2,022	1,045	462	3,550	3,638	.....	2,854	509	2,518	4,538	200	5
.....	1,134	1,595	1,958	6,206	4,777	4,457	2,969	2,523	3,401	4,526	6,708	6
146,335	1,744,885	679,780	629,504	2,876,956	21,695,835	8,116,391	2,189,652	502,826	1,421,778	6,802,650	25,274,860	7
146,133	1,732,666	677,404	613,239	2,815,622	21,788,231	8,112,451	2,174,242	500,999	1,213,481	6,739,625	25,257,399	8
202	12,219	2,376	16,265	63,334	207,704	9,940	15,410	1,827	208,297	63,025	17,481	9
12,888	112,922	51,716	61,862	153,494	489,935	110,140	180,925	33,093	151,992	301,818	325,129	10
.....	25.49	18.79	13.97	27.73	83.07	89.15	19.40	19.09	12.99	44.26	121.53	11
11.35	15.45	13.14	10.18	18.76	44.90	73.69	12.10	15.19	9.35	22.54	77.74	12
164	1,851	231	58	25	15	² 1	2,222	65	36	18	4	13
.....	66,308	34,599	41,002	103,811	264,787	92,075	108,355	24,540	107,994	153,713	207,960	14
753	239,565	75,551	35,830	90,598	279,725	117,660	309,451	23,403	90,487	184,229	232,112	15
.....	3.61	2.18	0.87	0.87	1.08	1.28	2.86	0.85	0.84	1.20	1.12	16
.....	.....	2,923	18,920	113,615	418,707	120,238	1,597	5,578	95,177	207,686	364,365	17
.....	.....	5.85	0.88	1.09	1.58	1.31	0.43	0.57	0.89	1.35	1.75	18
.....	.....	3,159	25,428	123,176	277,454	92,075	3,832	11,342	120,237	169,779	217,102	19
.....	.....	0.93	0.74	0.92	1.51	1.31	0.42	0.49	0.79	1.23	1.68	20
.....	.....	600	12,651	115,057	415,345	31,926	1,033	12,428	81,026	196,777	282,315	21
.....	.....	1	6	16	9	² 1	.....	2	17	10	4	22
.....	(⁵)	4,601	79,058	189,768	92,075	.....	(⁵)	58,768	89,474	207,960	207	23
.....	(⁵)	54,853	1,650,031	13,258,625	5,475,900	.....	(⁵)	253,522	3,225,224	16,974,714	24	24
.....	(⁵)	11.92	22.59	70.24	59.47	.....	(⁵)	4.31	36.05	81.62	25	25
.....	(⁵)	161,450	2,243,622	21,112,021	8,112,451	.....	(⁵)	671,330	5,169,615	25,796,199	26	26
.....	(⁵)	8,940	43,776	205,995	3,940	.....	(⁵)	189,281	56,964	17,481	27	27
.....	(⁵)	170,390	2,287,398	21,318,016	8,116,391	.....	(⁵)	859,611	5,226,579	25,813,680	28	28
.....	(⁵)	3,788	69,089	207,583	117,660	.....	(⁵)	49,744	116,341	232,112	29	29
.....	(⁵)	7,608	91,781	358,415	120,238	.....	(⁵)	62,806	151,738	364,365	30	30
.....	(⁵)	5,680	83,459	344,693	31,926	.....	(⁵)	53,556	128,945	282,315	31	31
.....	(⁵)	8,371	88,091	201,435	92,075	.....	(⁵)	70,485	102,082	217,102	32	32
.....	(⁵)	8.55	18.73	65.82	59.47	.....	(⁵)	3.60	31.59	78.19	33	33
.....	(⁵)	0.91	1.04	1.78	1.31	.....	(⁵)	0.89	1.49	1.68	34	34
.....	(⁵)	1.65	1.26	1.90	1.31	.....	(⁵)	1.07	1.70	1.75	35	35
.....	.....	3	4	.....	.....	.....	.....	1	6	5	.....	36
.....	.....	4,082	16,275	53,019	.....	.....	(⁵)	14,150	58,144	.....	.....	37
.....	.....	15,000	38,546	128,192	.....	.....	(⁵)	17,979	158,359	.....	.....	38
.....	.....	3.97	2.37	2.36	.....	.....	(⁵)	1.23	2.72	.....	.....	39
.....	.....	41,354	1,246,907	1,743,680	.....	.....	(⁵)	103,574	2,825,947	.....	.....	40
164	1,927	232	40	.....	.....	.....	2,302	55	6	.....	.....	41
1	11	4	14	5	2	.....	15	9	10	3	.....	42
.....	.....	1	8	19	9	.....	2	2	20	11	2	43
.....	.....	1	.....	1	2	.....	.....	.....	1	3	.....	44
.....	.....	.....	.....	.....	2	.....	1	.....	.....	1	2	45
.....	8	2	1	.....	.....	.....	7	4	.....	.....	.....	46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
.....	.....	(⁵)	14	24	15	² 1	3	6	24	18	4	48
.....	.....	.....	5,492	74,079	158,635	69,870	579	2,876	42,337	116,985	146,519	49
.....	.....	.....	41	187	274	185	9	31	119	247	281	.....
12	103	49	45	23	14	1	186	30	30	17	4	50
13	281	17	.....	.....	.....	.....	304	7	.....	.....	.....	51
130	1,409	161	7	.....	.....	.....	1,683	21	3	.....	.....	52
.....	13	1	.....	.....	.....	.....	14	.....	.....	.....	.....	53
.....	13	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	54
1	28	.....	2	.....	.....	.....	30	.....	1	.....	.....	55
1	32	6	6	.....	1	.....	36	6	1	1	.....	56
8	67	6	3	2	.....	.....	78	6	2	.....	.....	57
ACRES IRRIGATED							COST OF IRRIGATION WORKS AND EQUIPMENT					
No acres ¹	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		
29	176	49	6	.....	² 1	² 1	259	.....	1	2 2	1	
.....	181	53	9	.....	1,222	1,322	243	.....	.....	2,544	2	
.....	8,842	7,437	2,072	.....	58,680	96,602	18,351	.....	.....	153,282	3	
56,843	169,704	84,802	12,865	.....	1,489,641	1,050,596	299,214	.....	(⁵)	2,540,207	4	
56,838	168,864	84,802	12,865	.....	1,489,535	1,050,596	298,369	.....	(⁵)	2,540,101	5	
5	840	.....	.....	.....	106	.....	845	.....	.....	106	6	
11,224	13,235	8,540	2,259	.....	175,476	105,996	27,258	.....	(⁵)	281,472	7	
.....	19.19	11.40	6.21	.....	23.23	10.88	16.31	.....	.....	16.57	8	
5.06	12.82	9.93	5.69	.....	8.49	9.91	10.98	.....	(⁵)	9.02	9	

¹Indebtedness and arrearage were reported only by enterprises serving 5 or more farms.

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

³Data for 1 supplemental enterprise included in State totals but not shown in detail.

CENSUS OF IRRIGATION - NEBRASKA

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

SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)		TOTAL	IRRIGATED FARMS						
			No farms ¹	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms	1,000 farms and more
MAINTENANCE AND OPERATION, AND CHARGES, 1939									
10	Enterprises reporting maintenance and operation.....number...	256	28	218	10				² 2
11	(a) Area irrigated in these enterprises.....acres...	171,448		16,480	1,666				153,282
12	(b) Cost of maintenance and operation.....dollars...	119,770	324	27,737	1,360				90,340
13	(c) Average cost per irrigated acre reporting.....dollars...	0.70		1.68	0.81				0.59
14	Total annual charges ³.....dollars...	96,342							96,342
15	Average charge per irrigated acre reporting.....dollars...	0.63							0.63
16	Area against which charges were assessed.....acres...	153,282							153,282
17	Average annual charge per acre assessed.....dollars...	0.63							0.63
18	Total charges collected ⁴.....dollars...	833							833
INDEBTEDNESS AND ARREARAGE, 1939									
19	Enterprises reporting indebtedness ⁵.....number...	² 1							² 1
20	(a) Area irrigated in these enterprises.....acres...	56,680							56,680
21	(b) Indebtedness.....dollars...	1,270,559							1,270,551
22	(c) Average indebtedness per acre irrigated.....dollars...	22.42							22.42
23	(d) Cost of irrigation works and equipment.....dollars...	1,489,535							1,489,535
24	(e) Investment in water rights.....dollars...	106							106
25	(f) Total investment.....dollars...	1,489,641							1,489,641
26	(g) Maintenance and operation.....dollars...	22,756							22,756
27	(h) Total annual charges ⁴.....dollars...	26,721							26,721
28	(i) Total charges collected ⁴.....dollars...	833							833
29	(j) Area against which annual charges were assessed.....acres...	56,680							56,680
30	(k) Average indebtedness per acre assessed.....dollars...	22.42							22.42
31	(l) Average charges per acre assessed.....dollars...	0.47							0.47
32	(m) Average charges per acre irrigated.....dollars...	0.47							0.47
TYPE, 1940									
33	Individual and partnership.....number...	257	28	220	9				
34	Cooperative (incorporated and unincorporated).....number...	2		1	1				
35	Irrigation district.....number...	1							1
36	Commercial.....number...	1	1						
37	U. S. Bureau of Reclamation.....number...	1							1
SOURCE OF SUPPLEMENTAL WATER SUPPLY 1939									
38	Streams, pumped.....number...	47	2	45					
39	Wells, pumped or flowing.....number...	211	26	175	10				
40	Streams, gravity or storage.....number...	4	1	1					2

¹ Relates to enterprises reporting no irrigation in 1939 but having works capable of supplying water in 1940.² Data for less than 3 enterprises shown with permission of the enterprises involved.³ Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.

STATE TABLE 18.—CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES, 1939

DRAINAGE BASIN AND WEATHER STATION	County	Elevation of station	PRECIPITATION, OCTOBER 1938—SEPTEMBER 1939										TEMPERATURES, 1939		
			Water year		Oct.-Dec.		Jan.-Mar.		Apr.-June		July-Sept.		Annual mean	Departure ¹	
			Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹			
White River			Feet	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Degrees F.	Degrees F.
Harrison.....	Sioux.....	4,849	11.51	-8.36	1.12	-1.67	2.35	-0.18	4.67	-4.62	3.37	-1.89	46.8	+2.5	
Chadron.....	Dawes.....	3,371	14.39	-3.88	1.01	-1.69	1.75	-0.56	6.01	-1.73	5.62	+0.10	52.6	+4.0	
Average.....			12.95	-6.12	1.06	-1.68	2.05	-0.37	5.34	-3.18	4.50	-0.90	49.7	+3.2	
Niobrara River															
Kirtley, Wyo. (near).....	Niobrara.....	5,200	18.43	+2.48	3.97	+1.66	2.45	+0.95	6.38	-0.87	5.63	+0.74	46.8	+3.4	
Gordon.....	Sheridan.....	3,550	14.81	-2.85	1.40	-1.04	2.37	+0.48	5.77	-1.84	5.07	-0.45	(²)	(²)	
Valentine.....	Cherry.....	2,581	16.22	-2.12	0.29	-1.98	2.49	+0.44	8.36	+0.82	5.06	-1.40	49.9	+3.4	
Ainsworth.....	Brown.....	2,521	16.73	-6.91	0.22	-2.88	1.86	-0.88	7.43	-2.20	7.22	-0.95	51.2	+3.1	
Average.....			16.50	-2.35	1.47	-1.06	2.29	+0.25	6.98	-1.02	5.75	-0.52	49.3	+3.3	
Platte River															
Scotts Bluff.....	Scotts Bluff..	3,888	10.19	-6.23	1.38	-0.84	2.39	+0.61	4.56	-2.80	1.86	-3.20	51.8	+3.4	
Alliance.....	Box Butte.....	3,971	12.23	-4.50	1.77	-0.20	2.68	+1.27	4.52	-2.80	3.06	-2.77	50.3	+3.5	
Sidney.....	Cheyenne.....	4,085	9.74	-6.40	1.19	-0.59	3.08	+1.54	4.09	-3.46	1.38	-3.89	49.9	+0.7	
Ogallala.....	Keith.....	3,216	13.96	-5.83	0.71	-1.23	3.58	+1.87	6.77	-1.97	2.90	-4.50	52.0	+2.3	
North Platte.....	Lincoln.....	2,805	11.15	-7.24	0.42	-1.65	1.73	-0.05	7.28	-0.78	1.72	-4.76	52.6	+4.3	
Lexington.....	Dawson.....	2,385	19.41	-3.50	0.53	-2.68	2.51	+0.30	13.73	14.45	2.64	-5.57	53.9	+3.7	
Kearney.....	Buffalo.....	2,146	17.02	-8.93	0.52	-2.68	2.75	+0.74	10.54	+0.61	3.21	-5.60	53.2	+2.6	
Columbus.....	Platte.....	1,442	18.62	-8.97	0.64	-3.06	2.43	-0.20	7.27	-3.57	8.28	-2.12	53.8	+3.8	
Lincoln (University Campus).....	Lancaster.....	1,180	19.98	-7.96	2.64	-1.11	4.23	+1.37	7.43	-3.50	5.68	-4.72	54.9	+4.1	
Average.....			14.70	-6.40	1.09	-1.56	2.84	+0.83	7.35	-1.54	3.41	-4.13	52.5	+3.1	
Loup River															
Hyannis.....	Grant.....	3,735	13.81	-2.38	0.42	-1.07	2.64	+0.56	6.60	-0.59	4.15	-1.28	(²)	(²)	
Halsey.....	Thomas.....	2,695	17.38	-3.84	0.51	-2.12	2.33	+0.47	10.44	+1.63	4.10	-3.82	49.3	+1.1	
North Loup.....	Valley.....	1,961	15.04	-10.46	2.63	-0.48	1.67	-0.59	7.84	-3.23	2.90	-6.16	51.8	+2.6	
Average.....			15.41	-5.56	1.19	-1.22	2.21	+0.15	8.29	-0.73	3.72	-3.75	50.6	+2.0	
Elkhorn River															
Newport.....	Rock.....	2,234	18.61	-5.03	0.58	-2.29	2.86	+0.65	8.14	-1.74	7.03	-1.65	51.0	+3.7	
Oakdale.....	Antelope.....	1,722	18.82	-6.71	1.81	-1.42	3.51	+1.16	8.27	-2.20	5.23	-4.25	50.3	+3.1	
Stanton.....	Stanton.....	1,472	18.67	-10.40	0.86	-2.83	3.99	+1.30	5.16	-5.50	6.66	-3.37	53.0	+4.4	
Fremont.....	Dodge.....	1,203	18.54	-11.25	1.85	-2.49	3.27	+0.33	6.06	-5.49	7.36	-3.60	53.9	+4.1	
Average.....			18.16	-8.35	1.28	-2.26	3.41	+0.86	6.31	-3.73	6.57	-3.22	52.0	+3.8	
Republican River															
Benkelman.....	Dundy.....	2,968	15.15	-4.24	0.18	-2.34	2.14	+0.33	8.19	+0.33	4.64	-2.56	54.3	+2.6	
McCook.....	Red Willow.....	2,506	13.90	-5.74	0.17	-2.32	2.65	+0.77	7.78	-0.12	3.30	-4.07	55.5	+3.4	
Franklin.....	Franklin.....	1,820	14.64	-6.85	0.36	-2.83	2.50	+0.35	7.63	-1.91	4.15	-4.46	55.7	+3.9	
Average.....			14.56	-6.23	0.24	-2.50	2.43	+0.48	7.87	-0.57	4.03	-3.70	55.2	+3.3	

¹ Departure from normal.² Data not available.³ Average for drainage basin.

CENSUS OF IRRIGATION - NEBRASKA

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

ACRES IRRIGATED							COST OF IRRIGATION WORKS AND EQUIPMENT				
No acres ¹	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	
28	174	48	6	.....	² 1	² 1	255	.....	1	² 2	10
.....	8,802	7,292	2,072	.....	56,680	96,602	18,166	.....	.....	153,282	11
324	20,767	6,850	1,480	.....	22,756	57,593	29,371	.....	(3)	90,349	12
.....	2.36	0.94	0.71	.....	0.40	0.70	1.62	.....	.....	0.59	13
.....	.....	.....	.....	.....	26,721	69,621	.....	.....	.....	96,342	14
.....	.....	.....	.....	.....	0.47	0.72	.....	.....	.....	0.63	15
.....	.....	.....	.....	.....	56,680	96,602	.....	.....	.....	153,282	16
.....	.....	.....	.....	.....	0.47	0.72	.....	.....	.....	0.63	17
.....	.....	.....	.....	.....	.....	833	.....	.....	.....	833	18
.....	.....	.....	.....	.....	² 1	.....	.....	.....	.....	² 1	19
.....	.....	.....	.....	.....	56,680	.....	.....	.....	.....	56,680	20
.....	.....	.....	.....	.....	1,270,559	.....	.....	.....	.....	1,270,559	21
.....	.....	.....	.....	.....	22,42	.....	.....	.....	.....	22,42	22
.....	.....	.....	.....	.....	1,489,535	.....	.....	.....	.....	1,489,535	23
.....	.....	.....	.....	.....	106	.....	.....	.....	.....	106	24
.....	.....	.....	.....	.....	1,489,641	.....	.....	.....	.....	1,489,641	25
.....	.....	.....	.....	.....	22,756	.....	.....	.....	.....	22,756	26
.....	.....	.....	.....	.....	26,721	.....	.....	.....	.....	26,721	27
.....	.....	.....	.....	.....	833	.....	.....	.....	.....	833	28
.....	.....	.....	.....	.....	56,680	.....	.....	.....	.....	56,680	29
.....	.....	.....	.....	.....	22,42	.....	.....	.....	.....	22,42	30
.....	.....	.....	.....	.....	0.47	.....	.....	.....	.....	0.47	31
.....	.....	.....	.....	.....	0.47	.....	.....	.....	.....	0.47	32
28	175	48	6	.....	.....	.....	257	.....	.....	.....	33
.....	1	1	.....	.....	.....	.....	2	.....	.....	.....	34
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	35
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	36
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	37
2	40	4	1	.....	.....	.....	47	.....	.....	.....	38
26	135	45	5	.....	.....	.....	211	.....	.....	.....	39
1	1	.....	.....	.....	1	1	1	.....	1	2	40

¹Annual charges, reported only by enterprises serving 5 or more farms, 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.
²Indebtedness and arrearage were reported only by enterprises serving 5 or more farms.

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

According to the U. S. Weather Bureau, the calendar year 1939 for Nebraska was warm and dry, only two years in the State-wide period of record having been warmer, while only three had been drier. Much of the extreme western portion of the State received only about half the normal rainfall. Exceptional dryness also characterized November and December of the preceding year. Weather conditions were similar in mountainous sections of southern Wyoming and northern Colorado which are contributors of run-off to the Platte River Drainage Basin in Nebraska. Owing to high temperatures and low humidity during the spring months of 1939, snow in the higher mountains melted and the moisture evaporated instead of finding its way into the streams. As a result, the usual run-off did not occur and it was only on account of the large carry-over in the reservoirs from the 1938 season that there was sufficient water for irrigation in the North Platte Valley. In fact, water supplies ran low before the end of the 1939 season, resulting in some reduction of the harvested acreage of certain irrigated crops.

In comparison the year 1929, when the last previous irrigation census was taken, averaged slightly colder and drier than normal in Nebraska, mean annual temperature being 0.8° below normal and precipitation 0.45 inch below normal. In the western and northwestern counties, however, precipitation was above normal, although of the growing months, May and August were marked by fairly general deficiencies.

Precipitation.—The average annual precipitation in Nebraska for the calendar year 1939 was—eastern division 18.88 inches, central division 16.67 inches, western division 13.31 inches, and for the State 16.28 inches, a departure from a State normal, based on records since 1876, of -6.28 inches.

The average precipitation for the water year (October 1938 through September 1939) at 25 Weather Bureau stations, representative of the major drainage basins in the State (listed in State table 18) was 15.47 inches, a departure of -5.92 inches from the normal precipitation at these stations.

CENSUS OF IRRIGATION - NEBRASKA

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		MISSOURI RIVER (Missouri River drains entire State; therefore, Missouri River total for Nebraska is identical with State total)					
		STATE TOTAL ¹	Direct	South Fork Cheyenne River (Hat Creek)	White River	Niobrara River ²	Platte River
							Total
		(1)	(12)	(3)	(2)		
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number.....	9,156	13	19	85	88	8,442
2	Area irrigated.....1939..acres.....	810,379	385	1,933	12,083	10,259	654,445
3	(a) Cropland harvested.....1939..acres.....	579,535	377	1,557	11,074	9,318	527,200
4	(b) Crop failure.....1939..acres.....	10,717	8	92	791	310	9,099
5	(c) Pasture.....1939..acres.....	20,127	.....	284	218	631	18,146
6	Area irrigated.....1929..acres.....	532,617	.....	.....	8,678	3,498	496,867
7	.....1919..acres.....	442,680	.....	2,938	8,008	5,693	400,023
8	Increase or decrease (-), 1929-1939.....percent.....	14.6	.....	.....	99.2	193.3	11.6
9	Irrigable area in enterprises.....1940..acres.....	1,095,567	633	3,895	18,258	14,371	1,017,261
10	.....1930..acres.....	763,039	.....	.....	13,791	4,198	713,490
11	.....1920 ³ ..acres.....	766,768	.....	3,755	21,922	28,511	678,053
12	Excess of irrigable area over the area irrigated.....1940..acres.....	485,188	248	1,962	6,175	4,112	462,819
13	.....1930..acres.....	230,422	.....	.....	5,113	700	216,623
14	.....1920 ³ ..acres.....	324,078	.....	817	13,914	22,818	277,430
15	Area works were capable of supplying with water.....1940..acres.....	992,957	544	3,469	14,028	13,042	922,215
16	.....1930..acres.....	703,641	.....	.....	13,106	4,195	650,936
17	.....1920..acres.....	532,468	.....	3,705	16,839	9,820	501,435
18	Increase or decrease (-), 1930-1940.....percent.....	41.1	.....	.....	7.0	210.9	40.4
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	382,578	159	1,536	1,945	2,783	367,770
20	.....1930..acres.....	171,024	.....	.....	4,428	697	160,099
21	.....1920..acres.....	119,778	.....	767	8,931	4,127	100,812
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	61.5	70.8	55.7	88.1	78.7	60.1
23	.....1929..percent.....	75.7	.....	.....	66.2	83.4	75.6
24	.....1919..percent.....	78.7	.....	79.3	47.3	58.0	79.9
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars.....	39,056,207	19,558	79,278	498,915	136,355	37,537,335
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	38,749,216	19,508	78,250	489,745	135,235	37,256,761
27	(b) Investment in water rights (reported).....1940..dollars.....	306,991	50	1,028	9,170	1,120	280,574
28	Total investment in irrigation enterprises.....1930..dollars.....	21,386,319	.....	.....	478,185	23,776	20,372,920
29	.....1920..dollars.....	13,909,185	.....	85,243	183,349	349,874	12,894,088
30	Increase or decrease (-), 1930-1940.....percent.....	82.6	.....	.....	4.3	473.5	84.3
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	39.33	35.95	22.85	35.57	10.46	40.70
32	.....1930..dollars.....	30.39	.....	.....	36.49	5.67	31.01
33	.....1920..dollars.....	24.73	.....	23.01	10.82	35.63	25.71
34	Average investment per acre irrigated.....1939..dollars.....	63.99	50.80	41.01	41.29	13.29	67.70
35	Estimated final investment in existing enterprises.....1940..dollars.....	41,995,361	20,705	88,778	604,065	141,630	40,340,488
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	38.33	32.71	22.79	33.08	9.86	39.66
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Sup.				Primary
		Enterprises					Enterprises
37	Enterprises reporting maintenance and operation.....1939..number.....	2,346	258	11	22	31	76
38	Area irrigated in these enterprises.....1939..acres.....	602,582	171,448	394	1,888	12,003	10,118
39	Cost of maintenance and operation.....1939..dollars.....	839,682	119,770	2,054	2,176	18,411	8,390
40	Average cost, per acre irrigated.....1939..dollars.....	1.39	0.70	5.35	1.15	1.53	0.83
41	Total annual charges (reported) ⁴.....1939..dollars.....	674,403	96,342	.....	.....	16,784	.....
42	Average annual charge per acre irrigated.....1939..dollars.....	1.40	0.63	.....	.....	1.59	.....
43	Area against which charges were assessed.....1939..acres.....	521,292	153,282	.....	.....	10,575	.....
44	Average annual charge per acre assessed.....1939..dollars.....	1.29	0.63	.....	.....	1.59	.....
45	Total charges collected ⁴.....1939..dollars.....	575,579	833	.....	.....	15,613	.....
46	Indebtedness to December 31 (reported) ⁵.....1939..dollars.....	20,456,809	1,270,559	.....	.....	151,000	.....
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number.....	2,182	231	11	15	30	78
48	Area irrigated by these enterprises.....1939..acres.....	573,110	171,519	360	1,213	12,057	8,699
49	Water delivered.....1939..acre-feet.....	1,105,696	89,845	246	1,303	7,455	16,517
50	Average water delivered per acre irrigated.....1939..acre-feet.....	1.9	0.5	0.7	1.1	0.6	1.9
51	Average cost of water per acre irrigated.....1939..dollars.....	1.73	0.73	5.58	1.13	1.58	0.91
52	Average cost of water per acre-foot delivered.....1939..dollars.....	0.90	1.39	8.18	1.05	2.55	0.48
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number.....	65	.....	(⁶) 1	(⁶) 1	(⁶) 1	3
54	Irrigable area in these enterprises.....1939..acres.....	338,461	.....	(⁶)	(⁶)	(⁶)	625
55	Irrigated area in these enterprises.....1939..acres.....	284,658	.....	(⁶)	(⁶)	(⁶)	604
56	Area for which drains have been installed.....1939..acres.....	47,960	.....	(⁶)	(⁶)	(⁶)	1
57	Additional area needing drainage.....1939..acres.....	10,305	.....	(⁶)	(⁶)	.....	83

¹ Data for unidentified tributaries of the Missouri River for the 1930 Census are included only in State totals. ² Data for 1 enterprise in Keya Paha River Drainage Basin (13) (number refers to separate map) are included with Niobrara River Drainage Basin (2). ³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ⁴ Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, warrants, and for special reasons. ⁵ Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only. ⁶ Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — NEBRASKA

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DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		MISSOURI RIVER—Continued					
		PLATTE RIVER—Continued					
		Direct	Total	North Platte River		South Platte River	
				Direct	Blue Creek	Total	
		(8)		(4)	(5)		
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number....	2,784	4,505	4,394	111	360	
2	Area irrigated.....1939..acres.....	128,586	363,084	354,844	8,240	34,577	
3	(a) Cropland harvested.....1939..acres.....	125,403	341,857	334,047	7,810	32,412	
4	(b) Crop failure.....1939..acres.....	2,217	5,327	5,147	180	1,295	
5	(c) Pasture.....1939..acres.....	966	15,900	15,650	250	870	
6	Area irrigated.....1929..acres.....	71,290	373,692	352,480	.....	26,841
7	.....1919..acres.....	37,532	326,045	291,736	7,376	35,280
8	.. Increase or decrease (-), 1929-1939.....percent....	80.4	-2.8	0.7	.....	28.8
9	Irrigable area in enterprises.....1940..acres.....	458,091	437,407	424,286	13,121	42,225	
10	.....1930..acres.....	179,011	465,531	435,442	.....	34,240
11	.....1920 ¹ ..acres.....	151,377	479,258	438,013	7,391	42,262
12	Excess of irrigable area over the area irrigated.....1940..acres.....	329,505	74,323	69,442	4,881	7,649	
13	.....1930..acres.....	107,721	91,639	82,962	.....	7,399
14	.....1920 ¹ ..acres.....	113,845	153,213	144,277	15	6,972
15	Area works were capable of supplying with water.....1940..acres.....	376,465	434,465	422,718	11,747	41,169	
16	.....1930..acres.....	140,456	450,970	421,121	.....	32,813
17	.....1920..acres.....	68,732	389,140	349,766	7,391	40,542
18	.. Increase or decrease (-), 1930-1940.....percent....	188.0	-3.7	0.4	.....	25.5
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	247,879	71,381	67,874	3,507	6,592	
20	.....1930..acres.....	69,186	77,278	68,641	.....	5,972
21	.....1920..acres.....	31,200	63,095	58,030	15	5,232
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	34.2	83.6	83.9	70.1	84.0	
23	.....1929..percent....	50.8	82.9	83.7	.....	81.8
24	.....1919..percent....	54.6	83.8	83.4	99.8	87.0
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars....	14,001,510	20,032,273	19,926,141	106,132	602,546	
26	(a) Cost of irrigation works and equipment.....1940..dollars....	13,795,794	19,961,893	19,856,311	105,582	600,025	
27	(b) Investment in water rights (reported).....1940..dollars....	205,716	70,380	69,830	550	2,521	
28	Total investment in irrigation enterprises.....1930..dollars....	989,656	18,288,605	18,037,289	.....	501,300
29	.....1920..dollars....	488,642	11,934,733	11,661,937	31,050	444,413
30	.. Increase or decrease (-), 1930-1940.....percent....	(E)	9.5	10.5	.....	20.2
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	37.19	46.11	47.14	9.03	14.64	
32	.....1930..dollars....	7.05	40.55	42.83	.....	15.28
33	.....1920..dollars....	7.11	30.87	33.34	.....	10.96
34	Average investment per acre irrigated.....1939..dollars....	108.89	55.17	56.15	12.88	17.43	
35	Estimated final investment in existing enterprises.....1940..dollars....	16,662,253	20,076,339	19,962,071	114,267	637,221	
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars....	36.37	45.90	47.05	8.71	15.09	
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Sup.	Primary	Sup.	Primary	
		Enterprises		Enterprises		Enterprises	
37	Enterprises reporting maintenance and operation.....1939..number....	1,328	52	177	170	151	170
38	Area irrigated in these enterprises.....1939..acres.....	125,598	57,938	360,178	110,168	352,508	110,168
39	Cost of maintenance and operation.....1939..dollars....	270,102	27,094	360,837	87,930	354,879	87,930
40	Average cost, per acre irrigated.....1939..dollars....	2.15	0.47	1.00	0.80	1.01	0.80
41	Total annual charges (reported) ⁵ 4.....1939..dollars....	70,536	26,335	506,233	70,007	503,852	70,007
42	Average annual charge per acre irrigated.....1939..dollars....	1.04	0.48	1.46	0.72	1.47	0.72
43	Area against which charges were assessed.....1939..acres.....	69,452	55,434	385,229	97,848	377,374	97,848
44	Average annual charge per acre assessed.....1939..dollars....	1.02	0.48	1.32	0.72	1.34	0.72
45	Total charges collected ⁵.....1939..dollars....	74,153	404,872	833	393,613	833
46	Indebtedness to December 31 (reported) ⁴.....1939..dollars....	7,771,892	10,315,456	1,270,559	10,312,456	1,270,559
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number....	1,252	41	150	157	134	157
48	Area irrigated by these enterprises.....1939..acres.....	125,528	58,083	333,689	110,094	329,301	110,094
49	Water delivered.....1939..acre-feet....	231,637	28,415	688,222	58,807	678,464	58,807
50	Average water delivered per acre irrigated.....1939..acre-feet....	1.8	0.5	2.1	0.5	2.1	0.5
51	Average cost of water per acre irrigated.....1939..dollars....	2.18	0.53	1.51	0.81	1.51	0.81
52	Average cost of water per acre-foot delivered.....1939..dollars....	1.19	1.09	0.73	1.52	0.73	1.52
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number....	19	15	14
54	Irrigable area in these enterprises.....1939..acres.....	7,742	288,570	286,484
55	Irrigated area in these enterprises.....1939..acres.....	3,043	258,173	256,419
56	Area for which drains have been installed.....1939..acres.....	3,192	42,991	42,991
57	Additional area needing drainage.....1939..acres.....	49	9,441	9,429

¹ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ² Percent not shown when more than 1,000. ³ Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons. ⁴ Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only. ⁵ Data are included only in totals because less than 5 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION - NEBRASKA

DRAINAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		MISSOURI RIVER—Continued				
		Platte River—Continued				Kansas River
		South Platte River—Continued		Loup River	Elkhorn River	Total
		Direct	Lodgepole Creek			
		(9)	(10)	(6)	(7)	
IRRIGATED FARMS AND AREAS						
1	Irrigated farms.....1939..number....	183	177	719	74	509
2	Area irrigated.....1939..acres.....	21,454	13,123	25,130	3,068	31,274
3	(a) Cropland harvested.....1939..acres.....	21,180	11,232	24,583	2,945	30,009
4	(b) Crop failure.....1939..acres.....	53	1,242	236	24	417
5	(c) Pasture.....1939..acres.....	221	649	311	99	848
6	Area irrigated.....1929..acres.....	13,975	11,830	281	.....	21,340
7	.....1919..acres.....	17,061	18,229	1,177	.....	25,428
8	Increase or decrease (-), 1929-1939.....percent.....	53.5	10.9	(¹)	.....	46.6
9	Irrigable area in enterprises.....1940..acres.....	25,181	17,045	74,379	5,161	41,146
10	.....1930..acres.....	16,590	15,978	732	.....	27,903
11	.....1920 ² ..acres.....	18,623	23,639	4,512	.....	34,527
12	Excess of irrigable area over the area irrigated.....1940..acres.....	3,727	3,922	49,249	2,093	8,872
13	.....1930..acres.....	2,615	4,148	441	.....	6,563
14	.....1920 ² ..acres.....	1,562	5,410	3,335	.....	9,099
15	Area works were capable of supplying with water.....1940..acres.....	24,691	16,478	65,442	4,674	39,659
16	.....1930..acres.....	15,745	15,486	672	.....	25,932
17	.....1920..acres.....	18,590	21,952	2,377	.....	30,569
18	Increase or decrease (-), 1930-1940.....percent.....	56.8	6.4	(¹)	.....	52.8
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	3,237	3,355	40,312	1,606	8,385
20	.....1930..acres.....	1,770	3,656	381	.....	4,612
21	.....1920..acres.....	1,529	3,723	1,200	.....	5,141
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	86.9	79.6	38.4	65.6	78.9
23	.....1929..percent.....	89.8	76.4	43.3	.....	82.2
24	.....1919..percent.....	91.8	83.0	49.5	.....	83.2
CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises.....1940..dollars....	231,179	371,367	2,842,945	58,061	784,786
26	(a) Cost of irrigation works and equipment.....1940..dollars....	230,818	369,207	2,841,285	57,764	789,717
27	(b) Investment in water rights (reported).....1940..dollars....	361	2,160	1,660	297	15,049
28	Total investment in irrigation enterprises.....1930..dollars....	147,400	322,405	10,000	.....	479,214
29	.....1920..dollars....	87,712	356,701	21,300	.....	396,631
30	Increase or decrease (-), 1930-1940.....percent.....	56.8	15.2	(¹)	.....	63.8
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	9.36	22.54	43.44	12.42	19.79
32	.....1930..dollars....	9.36	20.82	14.88	.....	18.47
33	.....1920..dollars....	4.73	16.25	8.96	.....	12.97
34	Average investment per acre irrigated.....1939..dollars....	10.78	28.30	113.13	18.62	25.09
35	Estimated final investment in existing enterprises.....1940..dollars....	249,934	393,287	2,900,280	64,396	799,655
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars....	9.69	23.07	38.99	12.48	19.44
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
		Primary	Sup.	Primary	Sup.	Primary
	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises
37	Enterprises reporting maintenance and operation.....1939..number....	85	28	115	3	158
38	Area irrigated in these enterprises.....1939..acres.....	21,086	2,988	12,734	258	25,127
39	Cost of maintenance and operation.....1939..dollars....	23,659	4,140	20,121	250	62,457
40	Average cost, per acre irrigated.....1939..dollars....	1.12	1.39	1.58	0.97	2.49
41	Total annual charges (reported) ⁴.....1939..dollars....	5,708	.....	8,998	.....	46,773
42	Average annual charge per acre irrigated.....1939..dollars....	0.39	.....	2.00	.....	2.33
43	Area against which charges were assessed.....1939..acres.....	14,640	.....	4,499	.....	20,099
44	Average annual charge per acre assessed.....1939..dollars....	0.39	.....	2.00	.....	2.03
45	Total charges collected ⁴.....1939..dollars....	5,690	.....	9,000	.....	47,091
46	Indebtedness to December 31 (reported) ⁵.....1939..dollars....	.....	.....	82,000	.....	2,128,041
WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered.....1939..number....	83	27	105	3	130
48	Area irrigated by these enterprises.....1939..acres.....	21,454	2,988	12,548	258	24,398
49	Water delivered.....1939..acre-feet....	28,141	2,322	12,846	241	50,647
50	Average water delivered per acre irrigated.....1939..acre-feet....	1.3	0.6	1.0	0.9	2.1
51	Average cost of water per acre irrigated.....1939..dollars....	1.13	1.39	2.01	0.97	2.56
52	Average cost of water per acre-foot delivered.....1939..dollars....	0.86	1.78	1.87	1.04	1.23
DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage.....1939..number....	4	.....	.....	2	.....
54	Irrigable area in these enterprises.....1939..acres.....	1,099	.....	.....	(³)	4
55	Irrigated area in these enterprises.....1939..acres.....	509	.....	.....	(³)	395
56	Area for which drains have been installed.....1939..acres.....	950	.....	.....	(³)	194
57	Additional area needing drainage.....1939..acres.....	41	.....	.....	(³)	375

¹ Percent not shown when more than 1,000.

² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

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

⁴ Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

⁵ Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

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PAGE BASIN TABLE I.—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED FARMS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

ITEM (For definitions and explanations, see text. Major basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	MISSOURI RIVER—Continued				
	Kansas River—Continued				
	Republican River				Big Blue River
	Total	Direct (11)	Arikaree River (17)	Frenchman Creek (16)		(15)
IRRIGATED FARMS AND AREAS					
Irrigated farms.....1939...number.....	397	167	40	190	112
Area irrigated.....1939...acres.....	27,202	8,200	4,457	14,545	4,072
(a) Cropland harvested.....1939...acres.....	26,028	7,938	3,637	14,453	3,981
(b) Crop failure.....1939...acres.....	409	163	204	42	8
(c) Pasture.....1939...acres.....	765	99	616	50	83
Area irrigated.....1929...acres.....	19,523	.....	.....	.....	.....
.....1919...acres.....	25,409	.....	.....	.....	19
Increase or decrease (-), 1929-1939.....percent.....	39.3	.....	.....	.....	.....
Irrigable area in enterprises.....1940...acres.....	34,597	12,264	6,527	15,806	6,549
.....1930...acres.....	25,441	.....	.....	.....	.....
.....1920 ¹ ...acres.....	34,483	.....	.....	.....	44
Excess of irrigable area over the area irrigated.....1940...acres.....	7,395	4,064	2,070	1,261	2,477
.....1930...acres.....	5,918	.....	.....	.....	.....
.....1920 ¹ ...acres.....	9,074	.....	.....	.....	25
Area works were capable of supplying with water.....1940...acres.....	33,632	11,641	6,393	15,598	6,027
.....1930...acres.....	23,541	.....	.....	.....	.....
.....1920...acres.....	30,525	.....	.....	.....	44
Increase or decrease (-), 1930-1940.....percent.....	42.9	.....	.....	.....	.....
Excess of area works were capable of supplying with water over area irrigated.....1940...acres.....	6,430	3,441	1,936	1,053	1,955
.....1930...acres.....	4,018	.....	.....	.....	.....
.....1920...acres.....	5,116	.....	.....	.....	25
Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.....	80.9	70.4	69.7	93.2	67.6
.....1929...percent.....	82.9	.....	.....	.....	.....
.....1919...percent.....	83.2	.....	.....	.....	43.2
CAPITAL INVESTED TO JANUARY 1					
Total investment in irrigation enterprises.....1940...dollars.....	618,456	247,641	77,775	293,040	166,310
(a) Cost of irrigation works and equipment.....1940...dollars.....	604,327	245,087	67,520	291,720	165,990
(b) Investment in water rights (reported).....1940...dollars.....	14,129	2,554	10,255	1,320	920
Total investment in irrigation enterprises.....1930...dollars.....	421,664	.....	.....	.....	.....
.....1920...dollars.....	395,006	.....	.....	.....	1,625
Increase or decrease (-), 1930-1940.....percent.....	46.7	.....	.....	.....	.....
Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.....	18.39	21.27	12.17	18.79	27.59
.....1930...dollars.....	17.91	.....	.....	.....	.....
.....1920...dollars.....	12.94	.....	.....	.....	36.93
Average investment per acre irrigated.....1939...dollars.....	22.74	30.20	17.45	20.15	40.84
Estimated final investment in existing enterprises.....1940...dollars.....	630,426	257,631	79,255	293,540	169,269
Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.....	18.22	21.01	12.14	18.57	25.85
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
Enterprises reporting maintenance and operation.....1939...number.....	Primary		Supplemental		9
	Enterprises		Enterprises		
Area irrigated in these enterprises.....1939...acres.....	179	3	140	3	30
Cost of maintenance and operation.....1939...dollars.....	25,621	12	7,833	12	4,247
Average cost, per acre irrigated.....1939...dollars.....	39,993	71	19,507	71	18,348
.....1939...dollars.....	1.50	5.92	2.49	5.92	0.50
Total annual charges (reported) ².....1939...dollars.....	17,369	.....	4,500	.....	1,283
Average annual charge per acre irrigated.....1939...dollars.....	1.03	.....	1.58	.....	0.44
Area against which charges were assessed.....1939...acres.....	16,798	.....	2,850	.....	2,924
Average annual charge per acre assessed.....1939...dollars.....	1.03	.....	1.58	.....	0.44
Total charges collected ².....1939...dollars.....	18,160	.....	5,100	.....	2,707
Indebtedness to December 31 (reported) ³.....1939...dollars.....	10,420	.....	.....	10,420	.....
WATER DELIVERED TO IRRIGATORS, 1939					
Enterprises reporting water delivered.....1939...number.....	168	1	130	10	28
Area irrigated by these enterprises.....1939...acres.....	25,184	(4)	8,195	(4)	3,491
Water delivered.....1939...acre-feet.....	58,911	(4)	10,793	(4)	6,521
Average water delivered per acre irrigated.....1939...acre-feet.....	2.3	(4)	2.0	(4)	1.9
Average cost of water per acre irrigated.....1939...dollars.....	1.55	(4)	2.45	(4)	0.56
Average cost of water per acre-foot delivered.....1939...dollars.....	0.66	(4)	1.20	(4)	0.30
DRAINAGE OF IRRIGATED LAND					
Enterprises reporting land drained or needing drainage.....1939...number.....	6	.....	5	1	9
Irrigable area in these enterprises.....1939...acres.....	212	.....	92	(4)	214
Irrigated area in these enterprises.....1939...acres.....	93	.....	53	(4)	178
Area for which drains have been installed.....1939...acres.....	76	.....	36	(4)	206
Additional area needing drainage.....1939...acres.....	102	.....	22	(4)	.....

For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.
 Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
 Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.
 Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — NEBRASKA

DRAINAGE BASIN TABLE II—ENTERPRISES AND IRRIGATION

ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1930 censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		MISSOURI RIVER (Missouri River drains entire State; therefore, Missouri River total for Nebraska is identical with State total)						
		STATE TOTAL ¹	Direct	South Fork Cheyenne River (Hat Creek)	White River	Niobrara River ²	Platte River	
							Total	Direct
		(1)	(12)	(3)	(2)		(8)	
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
1	Enterprises.....1940..number.....	2,718	12	23	33	88	2,262	1,434
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	365	45	151	425	148	408	263
3	Diversion dams.....1940..total number.....	351	1	29	32	77	174	13
4	.....1930..total number.....	185			21	15	119	3
5	.....1920..total number.....	260		11	63	27	131	4
6	(a) Concrete and masonry.....1940..number.....	76			2	14	54	4
7	(b) Timber.....1940..number.....	24			3	3	14	2
8	(c) Earth and rock.....1940..number.....	165		22	23	36	62	5
9	(d) Other, mixed, and not reported.....1940..number.....	86	1	7	4	24	44	2
10	Main canals and laterals.....1940..total length, miles.....	3,331.3		23.1	54.0	97.2	3,005.7	682.7
11	.....1930..total length, miles.....	3,465			76	42	3,202	483
12	.....1920..total length, miles.....	3,325		45	197	124	2,781	344
13	(a) Earth.....1940..length, miles.....	3,287		23	54	97	2,962	681
14	(b) Lined.....1940..length, miles.....	44.3		0.1		0.2	43.7	1.7
15	.....1940..capacity, c.f.s. ⁴	14,255	10	53	187	243	13,085	4,347
16	.....1930..capacity, c.f.s. ⁴	13,108			98	37	12,540	3,375
17	.....1920..capacity, c.f.s. ⁴	11,665		25	237	204	10,593	1,776
18	Pipe lines ⁵.....1940..total length, miles.....	126.1	2.7		18.5	3.0	89.6	39.6
19	.....1930..total length, miles.....	27.5			5.5		20.7	1.0
20	.....1920..total length, miles.....	3.8			0.4	0.1	0.9	
21	(a) Concrete.....1940..length, miles.....	21.2				1.1	19.8	1.2
22	(b) Metal.....1940..length, miles.....	83.2	2.5		11.0	0.2	59.9	37.8
23	(c) Wood-stave.....1940..length, miles.....	12.5	0.2		7.0	1.2	3.3	0.6
24	(d) Other.....1940..length, miles.....	9.2			0.5	0.5	6.6	
25	Storage dams.....1940..total number.....	156	1	23	8	4	104	48
26	.....1930..total number.....	28			3		17	2
27	.....1920..total number.....	73		2	23	10	29	1
28	(a) Concrete and masonry.....1940..number.....	4	1				2	
29	(b) Earth and rock.....1940..number.....	146		23	6	4	99	48
30	(c) Other, mixed, and not reported.....1940..number.....	6			2		3	
31	Reservoirs.....1940..total number.....	164	1	24	9	4	110	47
32	(a) 1-99 acre-feet capacity.....1940..number.....	137	1	20	3	4	96	45
33	(b) 100-999 acre-feet capacity.....1940..number.....	16		4	3		5	2
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	12			3		9	
35	.....1940..total capacity, ac.-ft. ⁶	2,306,159	(7)	1,172	14,570	42	2,289,015	526
36	.....1930..total number.....	40			1		29	4
37	.....1930..total capacity, ac.-ft. ⁶	199,185			12,000		186,803	189
38	Wells, flowing.....1940..number.....	19						
39	.....1930..number.....							
40	.....1920..number.....							
41	.....1940..yield, g.p.m.....	370						
42	.....1930..yield, g.p.m.....							
43	.....1920..yield, g.p.m.....							
44	Wells, pumped.....1940..number.....	2,412	7		4	13	2,228	1,655
45	.....1930..number.....	537					491	4
46	.....1920..number.....	34			2		19	14
47	.....1940..yield, g.p.m.....	2,053,184	2,010		1,235	13,840	1,915,664	1,411,279
48	.....1930..yield, g.p.m.....	428,058					396,688	930
49	.....1920..yield, g.p.m.....	24,701			2,200		14,501	10,551
50	Pumping plants.....1940..total number.....	2,664	12	1	6	28	2,334	1,591
51	.....1930..total number.....	610					528	6
52	Prime movers.....1940..capacity, hp.....	53,572	142	(7)	78	616	46,016	30,598
53	.....1930..capacity, hp.....	10,991					9,632	37
54	.....1920..capacity, hp.....	959			53	8	437	180
55	(a) Electric.....1940..number.....	246	3				211	113
56	.....1940..capacity, hp.....	4,210	16				3,065	1,425
57	(b) Internal-combustion.....1940..number.....	2,375	7	1	5	28	2,090	1,463
58	.....1940..capacity, hp.....	48,914	124	(7)	46	616	42,585	29,002
59	(c) Other.....1940..number.....	43	2		1		33	15
60	.....1940..capacity, hp.....	448	(7)		(7)		366	169
61	Pumps.....1940..total number.....	2,848	12	1	6	29	2,508	1,734
62	.....1930..number.....	836					551	6
63	.....1920..number.....	54			3	1	36	14
64	.....1940..capacity, g.p.m.....	2,528,869	3,779	(7)	3,385	24,655	2,229,055	1,506,089
65	.....1930..capacity, g.p.m.....	536,752					459,623	3,290
66	.....1920..capacity, g.p.m.....	73,886			4,000	480	36,003	14,680
67	(a) Centrifugal.....1940..number.....	1,622	5	1	6	24	1,389	935
68	.....1940..capacity, g.p.m.....	1,410,061	2,670	(7)	3,385	19,025	1,211,166	780,430
69	.....1940..average capacity, g.p.m.....	873		(7)	564	793	872	835
70	(b) Turbine.....1940..number.....	1,128	3			4	1,039	759
71	.....1940..capacity, g.p.m.....	1,062,735	890			4,630	973,980	703,025
72	.....1940..average capacity, g.p.m.....	942	297			1,158	837	926
73	(c) Plunger.....1940..number.....	42	4				29	14
74	.....1940..capacity, g.p.m.....	4,418	219				2,744	934
75	.....1940..average capacity, g.p.m.....	105	55				95	67
76	(d) Other.....1940..number.....	56				1	51	26
77	.....1940..capacity, g.p.m.....	45,455				(7)	41,165	21,700
78	Pumping lift, from all sources.....1940..average, feet.....	32	55	(7)	34	31	31	31
79	.....1930..average, feet.....	29					29	9
80	.....1920..average, feet.....	24			35	8	27	31
81	from pumped wells.....1940..average, feet.....	34	44		36	50	33	31
82	from surface sources.....1940..average, feet.....	22	65	(7)	32	18	19	19

¹Data for unidentified tributaries of the Missouri River for the 1930 Census are included only in State totals.²Data for 1 enterprise in Keya-Paha River Drainage Basin (13) (number refers to separate map) are included with Niobrara River Drainage Basin (2).³Includes interdrainage basin projects counted as independent enterprises in each basin into which they extend. For actual number of enterprises see State table 1.⁴Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

CENSUS OF IRRIGATION — NEBRASKA

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WORKS, 1940, 1930, AND 1920

MISSOURI RIVER—Continued														
Platte River—Continued								Kansas River						
North Platte River			South Platte River			Loop River	Elkhorn River	Total	Republican River				Big Blue River	
Total	Direct	Blue Creek	Total	Direct	Lodgepole Creek				Total	Direct	Arikaree River	Frenchman Creek		
(4)	(5)		(9)	(10)	(6)	(7)		(11)	(17)	(13)	(15)			
359	331	28	237	117	120	161	71	300	191	118	12	31	109	
1,210	1,277	120	174	211	137	108	66	132	176	79	533	503	53	
79	73	6	65	4	61	17		39	30	10	5	15	8	
63	25		49	4	45			21	16					
66	25	3	57	3	54	3		28	28					
40	36	4	7	2	5	3		6	3		1	2	3	
12	12							4	3		2	1	1	
14	12	2	38	2	36	5		22	20	8	1	11	2	
13	13		20		20	9		6	4	2	1	1	2	
1,928.1	1,886.0	42.1	104.5	10.0	64.5	286.1	4.3	151.3	144.2	26.2	26.0	92.0	7.1	
2,554	2,407		152	36	113			108	96					
2,147	1,869	27	275	57	218	23		168	167				1	
1,891	1,849	42	103	39	54	283	4	151	144	26	26	92	7	
37.1	37.0	0.1	1.5	1.0	0.5	3.1	0.3	0.3	0.2	0.2			0.1	
6,758	6,609	149	631	417	214	1,215	114	698	545	228	67	250	153	
8,641	8,056		516	306	210			380	351					
7,769	7,082	139	949	598	351	91		606	601				5	
30.2	20.1	0.1	3.8	0.5	3.3	24.3	1.7	12.3	5.7	3.1	0.3	2.3	6.6	
18.0	18.0		0.5					1.1	0.6					
0.5	0.5		0.1	0.1				2.4	2.0				0.4	
10.5	10.5		0.3	0.1	0.2	7.8		0.3	0.3	0.3				
2.5	2.4	0.1	2.6	0.3	2.3	16.3	0.7	9.6	3.7	2.1	0.3	1.3	5.9	
2.2	2.2		0.3		0.3	0.2		0.8	0.1	0.1			0.7	
5.0	5.0		0.6	0.1	0.5		1.0	1.6	1.6	0.6		1.0		
18	16	2	6	1	5	32		16	10	6	3	1	6	
6	4		5		5	1		2	1					
17	5		5		5	5		9	9					
1	1	1	1		1			1					1	
15	14	1	4	1	3	32		14	10	6	3	1	4	
2	2		1		1			1					1	
22	19	3	9	3	6	32		16	8	6	1	1	8	
13	12	1	7	3	4	31		13	5	5			8	
1	1		1		1	1		3	3	1	1	1		
8	6	2	1		1									
2,281,733	2,272,513	9,220	6,382	7	6,275	474		1,359	1,154	351	(?)	(?)	205	
8	5		8		6	1		4	3					
179,655	77,950		6,710		6,707	28		46	45					
								19					19	
								370					370	
240	218	22	247	159	88	46	40	160	123	106	4	13	37	
9			40	3	4			42	38					
225,461	207,138	18,323	217,114	145,540	71,574	31,285	30,525	120,435	96,470	76,420	4,550	15,500	23,935	
950			32,650	2,750	5,300			27,990	23,485					
			3,950	1,650	2,100			8,000	8,000					
280	258	22	242	148	94	141	80	283	176	149	5	22	107	
5			42	3	9	6		76	60					
5,982	5,012	970	5,174	2,946	2,228	2,600	1,664	6,695	4,082	3,157	140	785	2,613	
21			674	50	139	155		1,237	1,018					
81	71		106	38	70	49		461	431					
26	25	1	62	5	32	12	2	32	12	8				
480	450	(?)	993	915	68	137	(?)	1,123	277	127		150	852	
250	230	20	174	91	82	125	78	244	160	138	5	17	84	
5,429	4,490	939	4,185	2,031	2,154	2,345	1,624	5,518	3,770	3,010	140	620	1,748	
1	3		6		6	8		7	4	3		1		
73	72	(?)	6		6	118		48	35	20		(?)	13	
295	273	22	242	151	91	147	90	292	182	154	5	23	110	
5			44	3	9	6		78	61					
6	5		5	2	3	7		14	12					
282,811	261,391	18,423	226,204	148,480	77,721	131,798	82,150	266,395	175,855	139,385	5,370	31,100	90,840	
1,000			42,850	2,750	14,300	7,725		73,859	55,550					
7,000	6,400		9,682	1,850	7,832	4,280		33,203	32,203				1,000	
190	190		73	58	15	107	84	197	113	100	2	11	84	
181,716	181,716		71,307	58,750	12,557	100,813	78,900	178,715	107,475	90,905	(?)	15,450	71,240	
956	956		977	1,013	837	942	915	907	931	909	(?)	1,405	818	
87	68	19	187	88	69	30	6	82	62	47	3	12	20	
90,725	72,325	18,400	148,830	84,480	61,350	26,150	5,250	83,235	67,010	47,110	4,250	15,650	16,225	
1,043	1,064	968	948	960	933	872	875	1,015	1,081	1,002	1,417	1,304	811	
5	2	3	6		6	4		9	6				3	
1,523	(?)	23	17		17	270		1,455	370	370			1,085	
305	(?)	8	3		3	68		162	62	62			362	
13	13		6	5	1	6		4	1	1			3	
8,850	8,850		6,050	5,250	(?)	4,565		3,290	(?)	(?)			2,290	
30	26	74	42	33	55	31	24	36	35	31	55	53	39	
21			27	23	33	23		27	28					
15	8		17	25	11	17		26	27				18	
33	28	74	42	33	55	47	31	49	42	37	65	73	75	
17	17					21	19	24	23	21	14	35	25	

*Includes siphons and farm pipe lines reported.

*Total capacity of all reservoirs regardless of size.

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

CENSUS OF IRRIGATION — NEBRASKA

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, [Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		STATE TOTAL	Adams	Antelope	Barner	Boone	Box Butte
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS¹							
1 All farms.....	1940...number....	121,062	1,456	1,940	323	1,672	854
2	1930...number....	129,458	1,715	2,154	342	1,985	924
3 Irrigated farms.....	1940...number....	6,913	10	14	4	22	27
4	1930...number....	4,602	5	1	1	2	6
5 Increase or decrease (-), 1930-1940.....	percent....	50.2	100.0	(1)	300.0	1,000.0	350.0
6 Operated by—							
7 (a) Owners and managers.....	1940...number....	3,342	5	10	4	12	20
8	1930...number....	2,276	.....	.....	.....	.....	6
9 (b) Tenants.....	1940...number....	3,571	5	4	.....	10	7
10	1930...number....	2,326	.....	.....	.....	.....	.....
11 Land in all farms.....	1940...acres....	47,343,881	338,644	533,405	483,119	427,341	899,008
12 Land in irrigated farms.....	1940...acres....	3,577,439	2,897	3,037	20,080	7,157	66,289
13	1930...acres....	517	294	217	5,015	325	2,455
14 (a) Operated by owners and managers.....	1940...acres....	2,600,068	2,310	2,202	20,080	4,750	61,679
15	1930...acres....	463	220	220	5,015	396	3,084
16 (b) Operated by tenants.....	1940...acres....	977,341	627	835	.....	2,407	4,810
17	1930...acres....	274	125	209	.....	241	659
18	1940...acres....	49,057,920	359,680	545,920	472,320	437,120	682,240
IRRIGATED AND IRRIGABLE AREAS							
19 Area irrigated.....	1939...acres....	610,379	513	238	645	1,100	3,435
20 (a) Cropland harvested.....	1939...acres....	579,535	485	238	340	1,100	3,255
21 (b) Crop failure.....	1939...acres....	10,717	8	.....	305	.....	180
22 (c) Pasture.....	1939...acres....	20,127	20	.....	.....	.....	.....
23 Area irrigated.....	1929...acres....	532,617	.....	.....	.....	.....	2,400
24	1919...acres....	442,690	.....	.....	.....	.....	2,162
25 Increase or decrease (-), 1929-1939.....	percent....	14.6	.....	.....	.....	.....	43.1
26 Irrigable area in enterprises.....	1940...acres....	1,095,567	774	430	1,271	2,185	6,348
27	1930...acres....	783,039	.....	.....	.....	.....	3,740
28	1920 ⁴ ...acres....	766,768	.....	.....	.....	.....	3,802
29 Excess of irrigable area over the area irrigated.....	1940...acres....	485,188	261	192	626	1,085	2,913
30	1930...acres....	230,422	.....	.....	.....	.....	1,340
31 Area works were capable of supplying with water.....	1940...acres....	992,957	655	398	1,271	2,055	4,874
32	1930...acres....	703,641	.....	.....	.....	.....	3,740
33	1920...acres....	562,468	.....	.....	.....	.....	3,062
34 Increase or decrease (-), 1930-1940.....	percent....	41.1	.....	.....	.....	.....	33.0
35 Excess, capability of works over area irrigated.....	1940...acres....	392,578	142	160	626	955	1,539
36	1930...acres....	171,024	.....	.....	.....	.....	1,340
37 Proportion which area irrigated is of all lands in irrigated farms.....	1939...percent....	17.1	17.5	7.8	3.2	15.4	5.2
38	1929...percent....	32.3	.....	.....	.....	.....	4.3
39 Proportion which area irrigated is of area works were capable of supplying with water.....	1939...percent....	61.5	78.3	59.8	50.7	53.5	69.1
40	1929...percent....	75.7	.....	.....	.....	.....	64.2
CAPITAL INVESTED TO JANUARY 1							
41 Total investment in all enterprises.....	1940...dollars....	39,056,207	24,475	3,185	10,700	17,427	51,250
42 (a) Cost of irrigation works and equipment.....	1940...dollars....	38,749,216	24,420	3,128	10,700	17,302	50,850
43 (b) Investment in water rights (reported).....	1940...dollars....	306,991	55	57	.....	125	400
44 Total investment in all enterprises.....	1930...dollars....	21,386,919	.....	.....	.....	.....	36,675
45	1920...dollars....	13,908,165	.....	.....	.....	.....	32,410
46 Increase or decrease (-), 1930-1940.....	percent....	82.6	.....	.....	.....	.....	39.7
47 Average investment, based on area works were capable of supplying with water, per acre.....	1940...dollars....	39.33	37.37	8.00	8.42	8.48	10.30
48	1930...dollars....	30.39	.....	.....	.....	.....	9.51
49	1920...dollars....	24.73	.....	.....	.....	.....	10.59
50 Average investment per acre irrigated.....	1939...dollars....	63.99	47.71	13.38	16.59	15.84	14.92
51 Estimated final investment in existing enterprises.....	1940...dollars....	41,995,361	24,975	4,685	10,700	21,927	59,425
52	1930...dollars....	21,465,772	.....	.....	.....	.....	36,675
53	1920...dollars....	18,030,154	.....	.....	.....	.....	32,410
54 Increase or decrease (-), 1930-1940.....	percent....	95.6	.....	.....	.....	.....	32.0
55 Average investment, based on estimated final investment and irrigable area, per acre.....	1940...dollars....	38.33	32.27	10.90	8.42	10.04	9.36
56	1930...dollars....	28.13	.....	.....	.....	.....	9.81
57	1920 ⁴ ...dollars....	23.51	.....	.....	.....	.....	8.52
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Supplemental				
		Enterprises					
58 Enterprises reporting maintenance and operation.....	1939...number....	2,367	282	12	7	5	21
59 Area irrigated in these enterprises.....	1939...acres....	602,682	171,448	511	166	645	2,865
60 Cost of maintenance and operation.....	1939...dollars....	839,682	119,770	3,512	445	420	3,779
61	1939...dollars....	1.39	0.70	6.87	2.68	0.65	3.41
62	1929...dollars....	1.54	.....	.....	.....	.....	2.32
63 Total annual charges (reported) ⁶	1939...dollars....	674,403	96,342	.....	.....	.....	.....
64	1939...dollars....	1.40	0.63	.....	.....	.....	.....
65 Area against which charges were assessed.....	1939...acres....	521,292	153,282	.....	.....	.....	.....
66	1939...dollars....	1.29	0.63	.....	.....	.....	.....
67 Total charges collected ⁶	1939...dollars....	575,579	833	.....	.....	.....	.....
Indebtedness to December 31 (reported) ⁶	1939...dollars....	20,456,809	1,270,559	.....	.....	.....	.....
WATER DELIVERED TO IRRIGATORS							
68 Enterprises reporting water delivered.....	1939...number....	2,222	208	11	9	2	19
69 Area irrigated in these enterprises.....	1939...acres....	573,110	171,519	513	238	(8)	1,100
70 Water delivered in these enterprises.....	1939...acre-feet..	1,105,696	89,845	1,076	568	(8)	1,196
71	1939...acre-feet..	1.9	0.5	2.1	2.4	(8)	1.1
72	1939...dollars....	1.73	0.73	6.87	2.68	(8)	3.41
DRAINAGE OF IRRIGATED LAND							
73 Enterprises reporting land drained or needing drainage.....	1939...number....	69	.....	.....	.....	.....	.....
74	1939...acres....	338,461	.....	.....	.....	.....	.....
75	1939...acres....	284,658	.....	.....	.....	.....	.....
76	1939...acres....	47,960	.....	.....	.....	.....	.....
77	1939...acres....	10,305	.....	.....	.....	.....	.....

¹Census of Agriculture.²Percent not shown when more than 1,000.³The excess of farm acreage over approximate land area is due to the fact that the entire acreage of a farm is tabulated as in the county in which the headquarters are located, even though a part of the farm may be situated in an adjoining county.

CENSUS OF IRRIGATION - NEBRASKA

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1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE
WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939
Data omitted from any of the counties listed are included under "All other counties"

town	Buffalo	Butler	Chase	Cherry	Cheyenne	Clay	Colfax	Cuming	Custer	Dawes	Dawson			
733	2,276	1,896	768	1,217	1,167	1,551	1,416	1,925	3,413	844	1,919	1		
706	2,429	1,883	766	1,480	1,116	1,782	1,393	1,943	3,735	870	2,086	2		
40	460	12	21	31	215	5	33	16	88	78	870	3		
(1)	250	.....	19	4	17	4	1	.....	6	80	781	4
	84.0	.....	10.5	675.0	(1)	25.0	(1)	.....	(1)	30.0	11.4	5
19	215	8	13	25	111	4	20	7	51	46	420	6		
.....	149	.....	11	.....	13	.....	.....	.....	.....	35	363	7
21	245	4	8	6	104	1	13	9	37	32	450	8		
.....	101	.....	8	.....	4	.....	.....	.....	.....	25	418	9
58,793	592,714	365,312	545,773	3,572,549	753,062	357,918	253,620	360,421	1,676,166	853,756	601,343	10		
63,333	94,318	2,744	56,898	237,019	179,485	2,207	8,961	3,244	48,201	120,761	274,175	11		
1,583	205	229	2,709	7,646	835	441	272	203	548	1,548	315	12		
34,133	48,757	2,024	52,508	216,484	111,877	(3)	6,464	1,589	36,084	95,801	171,068	13		
1,796	227	253	4,039	8,659	1,006	(3)	323	227	708	2,076	407	14		
29,200	45,561	720	4,390	20,535	67,608	(3)	2,497	1,655	12,117	25,260	103,107	15		
1,390	186	180	549	3,422	650	(3)	192	184	327	789	229	16		
79,520	609,280	372,480	572,160	3,828,480	759,040	364,800	259,200	365,440	1,639,680	888,960	629,120	17		
635	24,076	399	2,520	1,837	4,178	251	1,169	421	3,797	14,301	70,308	18		
630	23,362	389	2,500	1,524	3,662	243	1,145	421	3,553	12,834	69,012	19		
5	454	.....	20	.....	320	.....	24	.....	209	629	1,108	20
.....	260	10	.....	313	196	8	.....	.....	35	638	190	21
.....	12,236	.....	2,000	.....	1,901	.....	.....	.....	.....	9,911	69,702	22
.....	3,019	.....	2,292	.....	5,247	.....	.....	.....	.....	9,005	33,700	23
.....	96.8	.....	22.3	.....	119.8	.....	.....	.....	.....	44.3	0.9	24
860	45,917	1,101	3,227	2,442	5,998	350	2,640	623	11,400	21,253	206,444	25		
.....	33,227	.....	2,135	.....	2,694	.....	.....	.....	.....	15,379	173,775	26
.....	6,419	.....	4,491	.....	5,958	.....	.....	.....	.....	24,326	141,610	27
225	21,841	702	707	605	1,820	99	1,471	202	7,603	6,952	138,136	28		
.....	20,991	.....	75	.....	793	.....	.....	.....	.....	5,468	104,079	29
809	37,856	976	3,104	2,369	5,694	283	2,570	568	9,507	16,685	200,544	30		
.....	24,019	.....	2,135	.....	2,684	.....	.....	.....	.....	14,694	134,986	31
.....	3,059	.....	4,311	.....	5,778	.....	.....	.....	.....	19,052	64,725	32
.....	58.0	.....	45.4	.....	113.7	.....	.....	.....	.....	13.5	46.6	33
174	13,860	577	584	532	1,515	32	1,401	147	5,710	2,384	130,236	34		
.....	11,783	.....	75	.....	793	.....	.....	.....	.....	4,783	65,294	35
1.0	25.5	14.5	4.4	0.8	2.3	11.4	13.0	13.0	7.9	11.8	25.6	36		
.....	25.6	.....	10.3	.....	10.1	.....	.....	.....	.....	14.8	32.4	37
78.5	63.4	40.9	81.2	77.5	73.4	88.7	45.5	74.1	39.9	85.7	35.1	38		
.....	50.9	.....	96.5	.....	.....	.....	.....	.....	.....	67.4	51.6	39
13,331	644,778	12,946	97,350	12,400	72,217	6,430	18,963	3,957	376,042	553,140	3,392,313	40		
13,206	643,695	12,901	96,150	12,115	70,167	6,310	18,608	3,902	375,463	543,975	3,200,717	41		
125	1,083	45	1,200	285	2,050	120	355	55	579	9,165	191,596	42		
.....	315,314	.....	62,550	.....	24,600	.....	.....	.....	.....	484,760	866,645	43
.....	301,750	.....	39,005	.....	49,137	.....	.....	.....	.....	211,145	170,435	44
.....	104.5	.....	55.6	.....	193.6	.....	.....	.....	.....	14.1	291.4	45
16.48	16.99	13.26	31.36	5.23	12.68	22.72	7.38	6.97	39.55	33.15	16.92	46		
.....	13.13	.....	29.30	.....	9.23	.....	.....	.....	.....	32.99	6.42	47
.....	98.64	.....	9.07	.....	8.50	.....	.....	.....	.....	11.06	2.63	48
20.99	26.78	32.45	36.63	6.75	17.29	25.62	16.22	9.40	99.04	38.68	48.25	49		
14,806	661,212	12,996	97,350	13,250	86,117	6,430	21,758	4,057	388,032	659,790	3,413,474	50		
.....	366,317	.....	62,550	.....	24,600	.....	.....	.....	.....	484,760	866,895	51
.....	301,750	.....	41,095	.....	49,437	.....	.....	.....	.....	243,245	270,435	52
.....	80.5	.....	55.6	.....	250.1	.....	.....	.....	.....	36.1	293.8	53
17.22	14.40	11.80	30.17	5.43	14.36	18.37	8.24	6.51	34.04	31.04	16.53	54		
.....	11.02	.....	29.30	.....	9.13	.....	.....	.....	.....	31.52	4.99	55
.....	47.01	.....	9.15	.....	8.30	.....	.....	.....	.....	10.00	1.91	56
	Primary	Sup.								Primary	Sup.			
	Enterprises									Enterprises				
23	450	4	16	11	58	4	30	11	37	36	411	48	57	
618	22,337	4,030	399	2,520	1,777	3,789	245	1,169	399	3,794	14,181	69,561	58	
1,306	76,740	1,161	1,146	4,261	801	7,196	581	2,758	705	10,444	20,056	114,744	59	
2.11	3.44	0.29	2.87	1.89	0.45	1.90	3.39	2.36	1.77	2.75	1.41	1.65	60	
.....	3.92	0.63	3.24	1.08	1.51	61	
.....	4,738	1,059	695	6,250	16,784	57,199	62	
.....	1.19	0.27	0.65	2.50	1.59	1.11	63	
.....	3,994	3,994	1,070	2,500	10,675	52,832	64	
.....	1.19	0.27	0.65	2.50	1.59	1.08	65	
.....	2,476	35	3,939	15,613	62,588	66	
.....	53,661	354,506	151,000	66,120	67	
25	416	3	9	9	18	55	4	30	11	32	387	39	68	
635	22,497	4,030	356	2,057	1,647	3,826	245	1,169	399	3,777	14,275	70,029	54,013	69
1,149	39,065	1,111	795	3,658	2,513	4,128	399	1,061	471	5,406	11,060	140,727	27,275	70
1.8	1.7	0.3	2.2	1.8	1.5	1.1	1.6	0.9	1.2	1.6	0.8	2.0	0.5	71
2.11	3.47	0.31	3.09	1.90	0.44	1.94	3.39	2.36	1.77	3.15	1.45	1.67	0.55	72
.....	3	7	1	10	73
.....	626	744	(3)	6,858	74
.....	604	282	(3)	2,707	75
.....	1	704	(3)	2,353	76
.....	83	40	4	77

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

⁴For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

⁵Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

⁶Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - NEBRASKA

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929, LAND IN IRRIGATED FARMS, [Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1929]

ITEM (For definitions and explanations, see text)		Deuel	Dodge	Douglas	Dundy	Fillmore	Franklin	Frontier
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS²								
1	All farms.....1940...number.....	515	1,793	1,761	652	1,768	1,201	1,169
2	.....1930...number.....	500	1,878	1,883	709	1,872	1,398	1,367
3	Irrigated farms.....1940...number.....	72	20	24	43	4	22	10
4	.....1930...number.....	40	.....	.....	22	1	10	.....
5	Increase or decrease (-), 1930-1940.....percent.....	80.0	.....	.....	95.5	300.0	120.0	.....
6	Operated by—							
7	(a) Owners and managers.....1940...number.....	33	20	7	22	3	14	10
8	.....1930...number.....	21	.....	.....	14	.....	.....	.....
9	(b) Tenants.....1940...number.....	39	9	17	21	1	8	.....
10	.....1930...number.....	19	.....	.....	8	.....	.....	.....
11	Land in all farms.....1940...acres.....	277,685	327,031	170,927	567,413	358,740	349,668	618,775
12	Land in irrigated farms.....1940...acres.....	31,840	7,287	2,597	42,812	758	8,141	10,836
13	Average per farm.....1940...acres.....	442	251	108	998	190	370	1,084
14	(a) Operated by owners and managers.....1940...acres.....	20,098	4,791	972	33,324	(3)	5,068	10,836
15	Average per farm.....1940...acres.....	609	240	139	1,515	(3)	364	1,084
16	(b) Operated by tenants.....1940...acres.....	11,742	2,496	1,625	9,588	(3)	3,043	.....
17	Average per farm.....1940...acres.....	301	277	96	457	(3)	380	.....
18	Approximate land area.....1940...acres.....	278,400	338,560	214,400	569,440	369,280	369,820	618,240
IRRIGATED AND IRRIGABLE AREAS								
19	Area irrigated.....1939...acres.....	8,585	1,289	410	4,487	122	1,088	72
20	(a) Cropland harvested.....1939...acres.....	8,423	1,289	410	3,647	122	1,042	72
21	(b) Crop failure.....1939...acres.....	67	.....	.....	204	.....	.....	.....
22	(c) Pasture.....1939...acres.....	95	.....	.....	636	.....	46	.....
23	Area irrigated.....1929...acres.....	6,857	.....	.....	3,470	.....	.....	.....
24	.....1919...acres.....	10,317	.....	.....	9,045	.....	.....	.....
25	Increase or decrease (-), 1929-1939.....percent.....	25.2	.....	.....	29.3	.....	.....	.....
26	Irrigable area in enterprises.....1940...acres.....	10,629	1,515	510	6,627	210	1,516	259
27	.....1930...acres.....	8,240	.....	.....	5,470	.....	.....	.....
28	.....1920...acres.....	13,155	.....	.....	14,118	.....	.....	.....
29	Excess of irrigable area over the area irrigated.....1940...acres.....	2,044	226	100	2,140	88	428	187
30	.....1930...acres.....	1,383	.....	.....	2,000	.....	.....	.....
31	Area works were capable of supplying with water.....1940...acres.....	10,393	1,308	410	6,463	190	1,478	259
32	.....1930...acres.....	8,150	.....	.....	4,770	.....	.....	.....
33	.....1920...acres.....	11,755	.....	.....	10,018	.....	.....	.....
34	Increase or decrease (-), 1930-1940.....percent.....	27.5	.....	.....	35.3	.....	.....	.....
35	Excess, capability of works over area irrigated.....1940...acres.....	1,808	19	.....	1,966	68	390	187
36	.....1930...acres.....	1,293	.....	.....	1,300	.....	.....	.....
37	Proportion which area irrigated is of all lands in irrigated farms.....1939...percent.....	27.0	17.7	15.8	10.5	16.1	13.4	0.7
38	.....1929...percent.....	32.9	.....	.....	15.4	.....	.....	.....
39	Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.....	82.6	98.5	100.0	69.5	64.2	73.6	27.8
40	.....1920...percent.....	84.1	.....	.....	72.7	.....	.....	.....
CAPITAL INVESTED TO JANUARY 1								
41	Total investment in all enterprises.....1940...dollars.....	76,174	8,194	5,600	79,775	5,000	22,313	1,167
42	(a) Cost of irrigation works and equipment.....1940...dollars.....	75,994	8,194	5,600	69,520	5,000	22,100	1,160
43	(b) Investment in water rights (reported).....1940...dollars.....	180	.....	.....	10,255	.....	213	7
44	Total investment in all enterprises.....1930...dollars.....	111,715	.....	.....	69,010	.....	.....	.....
45	.....1920...dollars.....	59,613	.....	.....	111,800	.....	.....	.....
46	Increase or decrease (-), 1930-1940.....percent.....	-31.8	.....	.....	15.6	.....	.....	.....
47	Average investment, based on area works were capable of supplying with water, per acre.....1940...dollars.....	7.33	6.26	13.66	12.36	26.32	15.10	4.51
48	.....1930...dollars.....	13.71	.....	.....	14.47	.....	.....	.....
49	.....1920...dollars.....	5.07	.....	.....	10.24	.....	.....	.....
50	Average investment per acre irrigated.....1939...dollars.....	8.87	6.36	13.66	17.78	40.98	20.51	16.21
51	Estimated final investment in existing enterprises.....1940...dollars.....	77,484	8,934	6,600	81,755	5,000	23,468	2,367
52	.....1930...dollars.....	111,715	.....	.....	69,010	.....	.....	.....
53	.....1920...dollars.....	59,613	.....	.....	112,300	.....	.....	.....
54	Increase or decrease (-), 1930-1940.....percent.....	-30.6	.....	.....	18.5	.....	.....	.....
55	Average investment, based on estimated final investment and irrigable area, per acre.....1940...dollars.....	7.29	5.90	12.94	12.34	23.81	15.48	9.14
56	.....1930...dollars.....	13.56	.....	.....	12.62	.....	.....	.....
57	.....1920...dollars.....	4.53	.....	.....	7.95	.....	.....	.....
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS								
		Primary	Sup.					
		Enterprises						
58	Enterprises reporting maintenance and operation.....1939...number.....	52	6	30	3	10	3	15
59	Area irrigated in these enterprises.....1939...acres.....	8,585	717	1,289	410	4,277	122	907
60	Cost of maintenance and operation.....1939...dollars.....	8,285	772	1,797	1,170	2,338	469	1,745
61	Average cost, per acre irrigated.....1939...dollars.....	0.96	1.08	1.39	2.85	0.55	3.84	1.92
62	.....1929...dollars.....	1.24	.....	.....	.....	0.74	.....	.....
63	Total annual charges (reported) ⁵.....1939...dollars.....	2,308	.....	.....	.....	1,283	.....	.....
64	Average annual charge per acre irrigated.....1939...dollars.....	0.38	.....	.....	.....	0.44	.....	.....
65	Area against which charges were assessed.....1939...acres.....	6,140	.....	.....	.....	2,924	.....	.....
66	Average annual charge per acre assessed.....1939...dollars.....	0.38	.....	.....	.....	0.44	.....	.....
67	Total charges collected.....1939...dollars.....	2,310	.....	.....	.....	2,707	.....	.....
68	Indebtedness to December 31 (reported) ⁶.....1939...dollars.....	.....	.....	.....	.....	10,420	.....	.....
WATER DELIVERED TO IRRIGATORS								
69	Enterprises reporting water delivered.....1939...number.....	50	1	30	3	11	3	17
70	Area irrigated in these enterprises.....1939...acres.....	8,585	(3)	1,289	410	3,521	122	1,068
71	Water delivered in these enterprises.....1939...acre-feet.....	8,974	(3)	1,978	453	6,379	235	1,402
72	Average water delivered per acre irrigated.....1939...acre-feet.....	1.0	(3)	1.5	1.1	1.8	1.9	1.3
73	Average cost of water per acre irrigated.....1939...dollars.....	0.93	(3)	1.39	2.85	0.61	3.84	1.92
DRAINAGE OF IRRIGATED LAND								
74	Enterprises reporting land drained or needing drainage.....1939...number.....	(3)	1	.....	.....	(3)	1	(3)
75	Irrigable area in these enterprises.....1939...acres.....	(3)	.....	.....	.....	(3)	(3)	(3)
76	Irrigated area in these enterprises.....1939...acres.....	(3)	.....	.....	.....	(3)	(3)	(3)
77	Area for which drains have been installed.....1939...acres.....	(3)	.....	.....	.....	(3)	(3)	(3)
78	Additional area needing drainage.....1939...acres.....	(3)	.....	.....	.....	.....	.....	.....

¹Census of Agriculture.

²Percent not shown when more than 1,000.

³The excess of farm acreage over approximate land area is due to the fact that the entire acreage of a farm is tabulated as in the county in which the headquarters are located, even though a part of the farm may be situated in an adjoining county.

CENSUS OF IRRIGATION — NEBRASKA

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1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE 1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939—Continued
 Irrigation data omitted from any of the counties listed are included under "All other counties"]

Furnas	Gage	Garden	Garfield	Gosper	Greeley	Hall	Hamilton	Harlan	Hayes	Hitchcock	Holt	Howard	Jefferson	
1,384	2,870	653	490	767	955	1,567	1,623	1,121	561	802	2,305	1,402	1,611	1
1,549	2,898	710	445	846	1,173	1,628	1,766	1,257	646	942	2,410	1,553	1,716	2
17	11	117	57	13	20	233	9	21	14	114	6	23	4	3
4	.....	146	1	1	1	91	5	13	3	118	3	1	2	4
325.0	.....	-10.9	(¹)	(¹)	(¹)	156.0	80.0	61.5	366.7	-3.4	100.0	(¹)	100.0	5
10	9	58	25	8	9	110	8	13	9	69	5	10	1	6
.....	.....	73	.....	.....	.....	51	.....	.....	.....	68	.....	.....	.....	7
7	2	59	31	5	11	123	1	8	5	45	1	13	3	8
.....	.....	73	.....	.....	.....	40	.....	.....	.....	50	.....	.....	.....	9
451,156	532,014	2,108,381	363,308	276,712	345,569	323,831	337,120	348,768	436,177	451,727	1,427,290	337,725	349,211	10
8,314	1,906	195,629	18,534	8,543	8,116	61,387	3,564	10,623	10,231	54,662	5,518	7,537	1,340	11
489	173	1,672	325	657	306	263	396	506	731	479	920	328	335	12
6,432	(³)	177,170	9,036	7,178	2,412	33,933	(³)	6,008	6,877	40,373	(³)	4,339	(³)	13
643	(³)	3,055	348	687	268	308	(³)	462	784	585	(³)	434	(³)	14
1,852	(³)	18,459	9,488	1,365	3,704	27,454	(³)	4,615	3,354	14,289	(³)	3,198	(³)	15
269	(³)	313	306	273	337	223	(³)	577	671	318	(³)	246	(³)	16
462,080	549,120	1,078,400	364,800	298,240	364,800	345,600	346,240	388,000	455,040	462,080	1,541,120	362,240	369,280	17
699	306	11,804	2,187	937	601	10,875	1,341	624	644	11,366	49	511	87	18
615	306	11,168	2,187	914	597	10,530	1,316	616	722	11,321	37	501	87	19
81	.....	150	.....	15	.....	214	.....	5	22	22	12	.....	.....	20
3	.....	486	.....	8	4	131	25	3	.....	23	.....	10	.....	21
.....	.....	24,077	.....	.....	.....	6,425	.....	.....	.....	10,974	.....	.....	.....	22
.....	.....	20,488	.....	.....	.....	69.3	.....	.....	.....	9,766	.....	.....	.....	23
.....	.....	-51.0	.....	.....	.....	.....	.....	.....	.....	3.6	.....	.....	.....	24
1,364	478	19,843	4,923	9,243	1,405	17,833	1,557	1,463	1,018	11,628	49	825	167	25
.....	.....	28,112	.....	.....	.....	10,012	.....	.....	.....	12,507	.....	.....	.....	26
.....	.....	26,714	.....	.....	.....	.....	.....	.....	.....	10,576	.....	.....	.....	27
665	172	8,039	2,736	8,306	804	6,958	216	839	274	262	.....	314	80	28
.....	.....	4,035	.....	.....	.....	3,587	.....	.....	.....	1,533	.....	.....	.....	29
1,309	458	19,843	4,389	1,436	1,291	17,128	1,557	1,314	968	11,548	49	676	167	30
.....	.....	28,111	.....	.....	.....	9,114	.....	.....	.....	11,794	.....	.....	.....	31
.....	.....	25,554	.....	.....	.....	.....	.....	.....	.....	10,226	.....	.....	.....	32
.....	.....	-28.4	.....	.....	.....	87.0	.....	.....	.....	-2.1	.....	.....	.....	33
610	152	5,039	2,202	499	690	6,253	216	690	224	182	.....	165	80	34
.....	.....	4,034	.....	.....	.....	2,698	.....	.....	.....	820	.....	.....	.....	35
8.4	16.0	6.0	11.8	11.0	9.8	17.7	37.6	5.9	7.3	20.8	0.9	6.8	6.5	36
.....	.....	19.2	.....	.....	.....	39.7	.....	.....	.....	33.5	.....	.....	.....	37
53.4	66.8	59.5	49.8	65.3	46.6	63.5	86.1	47.5	76.9	98.4	100.0	75.6	52.1	38
.....	.....	58.6	.....	.....	.....	70.5	.....	.....	.....	93.0	.....	.....	.....	39
20,123	21,170	135,159	263,388	19,077	60,558	273,884	59,550	23,295	12,443	191,615	1,310	12,745	5,250	40
20,047	21,150	132,422	263,383	19,032	60,456	273,884	59,550	23,250	12,408	191,477	1,300	12,365	5,250	41
76	20	2,737	5	45	102	.....	.....	45	35	138	10	390	.....	42
.....	.....	252,706	.....	.....	.....	218,000	.....	.....	.....	185,905	.....	.....	.....	43
.....	.....	229,001	.....	.....	.....	25,500	.....	.....	.....	162,500	.....	.....	.....	44
.....	.....	-46.5	.....	.....	.....	25.6	.....	.....	.....	3.1	.....	.....	.....	45
15.37	46.22	6.81	60.01	13.28	46.91	15.99	38.25	17.73	12.85	16.59	26.73	18.85	31.44	46
.....	.....	8.99	.....	.....	.....	23.92	.....	.....	.....	15.76	.....	.....	.....	47
.....	.....	8.96	.....	.....	.....	.....	.....	.....	.....	15.89	.....	.....	.....	48
28.79	69.18	11.45	120.43	20.36	100.76	25.18	44.41	37.33	16.72	10.86	26.73	24.94	60.34	49
20,348	21,424	135,359	265,927	19,077	61,135	276,601	59,550	26,705	12,523	192,115	1,310	12,945	5,950	50
.....	.....	252,706	.....	.....	.....	218,350	.....	.....	.....	189,905	.....	.....	.....	51
.....	.....	270,201	.....	.....	.....	.....	.....	.....	.....	162,500	.....	.....	.....	52
.....	.....	-46.4	.....	.....	.....	26.7	.....	.....	.....	1.2	.....	.....	.....	53
14.92	44.82	6.82	54.02	2.06	49.51	15.51	38.25	18.25	12.30	16.52	26.73	15.57	35.63	54
.....	.....	8.99	.....	.....	.....	21.81	.....	.....	.....	15.18	.....	.....	.....	55
.....	.....	10.11	.....	.....	.....	.....	.....	.....	.....	15.36	.....	.....	.....	56
25	7	Primary	Sup.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
699	247	Enterprises	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
2,726	1,185	17	5	4	15	5	251	6	18	10	15	3	16	4
3.90	4.72	11,804	354	2,187	937	601	10,710	1,341	604	718	11,366	49	511	77
.....	.....	5,704	870	4,732	2,477	1,557	42,061	7,760	2,120	1,157	13,538	122	1,535	239
.....	.....	0.48	2.46	2.16	2.64	2.59	3.93	5.79	3.51	1.61	1.19	2.49	2.98	3.10
.....	.....	0.49	.....	.....	.....	.....	3.35	.....	.....	.....	1.44	.....	.....	60
.....	.....	9,434	.....	5,202	.....	1,178	.....	.....	.....	.....	10,891	.....	.....	61
.....	.....	0.97	.....	2.50	.....	2.50	.....	.....	.....	.....	1.09	.....	.....	62
.....	.....	15,807	.....	2,081	.....	471	.....	.....	.....	.....	9,954	.....	.....	63
.....	.....	0.60	.....	2.50	.....	2.50	.....	.....	.....	.....	1.09	.....	.....	64
.....	.....	14,622	.....	5,202	.....	1,178	.....	.....	.....	.....	11,353	.....	.....	65
.....	.....	25,101	.....	155,300	.....	35,150	.....	.....	.....	.....	.....	.....	.....	66
22	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
699	246	10	4	13	3	222	6	18	11	14	(³)	2	15	68
1,027	169	6,227	354	2,187	937	536	10,875	1,341	624	744	10,782	(³)	509	77
1.5	0.7	11,140	319	5,025	1,118	1,166	15,177	1,539	1,438	1,448	30,858	(³)	1,204	78
3.58	3.29	1.8	0.9	2.3	1.2	1.4	2.2	1.1	2.3	1.9	2.9	(³)	2.4	1.0
.....	.....	0.82	2.32	2.53	2.64	2.76	3.92	5.79	3.51	1.61	1.18	(³)	2.97	3.10
.....	.....	(³)	.....	(³)	.....	(³)	.....	(³)	.....	.....	.....	.....	.....	73
.....	.....	(³)	.....	(³)	.....	(³)	.....	(³)	.....	.....	.....	.....	.....	74
.....	.....	(³)	.....	(³)	.....	(³)	.....	(³)	.....	.....	.....	.....	.....	75
.....	.....	(³)	.....	(³)	.....	(³)	.....	(³)	.....	.....	.....	.....	.....	76
.....	.....	(³)	.....	(³)	.....	(³)	.....	(³)	.....	.....	.....	.....	.....	77

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

⁴For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

⁵Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

⁶Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 63 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - NEBRASKA

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, [Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1939]

ITEM (For definitions and explanations, see text)		Kearney	Keith	Kimball	Lincoln	Loup
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS¹						
1 All farms.....	1940..number.....	1,155	708	515	1,862	314
2	1930..number.....	1,249	779	600	2,189	317
3 Irrigated farms.....	1940..number.....	95	142	73	320	50
4	1930..number.....	19	119	63	282	2
5 Increase or decrease (-), 1930-1940.....	percent.....	400.0	19.3	15.9	13.5	(¹)
6 Operated by—						
7 (a) Owners and managers.....	1940..number.....	46	81	42	157	27
8	1930..number.....	11	65	34	164	.....
9 (b) Tenants.....	1940..number.....	49	61	31	163	23
10	1930..number.....	8	54	29	118	.....
11 Land in all farms.....	1940..acres.....	319,332	2,689,074	565,754	1,447,091	317,551
12 Land in irrigated farms.....	1940..acres.....	36,389	242,448	90,987	135,591	33,961
13 Average per farm.....	1940..acres.....	383	1,707	1,246	424	679
14 (a) Operated by owners and managers.....	1940..acres.....	19,613	208,061	65,992	95,748	26,688
15 Average per farm.....	1940..acres.....	426	2,569	1,571	510	989
16 (b) Operated by tenants.....	1940..acres.....	16,776	34,367	24,995	39,843	7,253
17 Average per farm.....	1940..acres.....	342	563	806	244	316
17 Approximate land area.....	1940..acres.....	327,680	686,080	609,920	1,616,000	387,360
IRRIGATED AND IRRIGABLE AREAS						
18 Area irrigated.....	1939..acres.....	6,730	16,690	8,192	44,022	4,221
19 (a) Cropland harvested.....	1939..acres.....	6,726	16,541	6,913	42,152	4,221
20 (b) Crop failure.....	1939..acres.....	4	.....	906	502	.....
21 (c) Pasture.....	1939..acres.....	.....	149	373	1,368	.....
22 Area irrigated.....	1929..acres.....	600	23,141	7,422	35,708	.....
23	1919..acres.....	.....	25,832	9,101	35,246	.....
24 Increase or decrease (-), 1929-1939.....	percent.....	682.6	-27.9	10.4	23.3	.....
25 Irrigable area in enterprises.....	1940..acres.....	40,220	22,538	9,213	51,577	8,133
26	1930..acres.....	1,445	27,597	9,807	42,509	.....
27	1920 ⁴ ..acres.....	.....	33,974	11,224	45,421	.....
28 Excess of irrigable area over the area irrigated.....	1940..acres.....	33,490	5,848	1,021	7,555	3,909
29	1930..acres.....	585	4,456	2,385	6,801	.....
30 Area works were capable of supplying with water.....	1940..acres.....	40,168	22,238	9,031	51,336	7,766
31	1930..acres.....	1,445	26,812	9,345	42,288	.....
32	1920 ⁴ ..acres.....	.....	31,466	11,117	41,811	.....
33 Increase or decrease (-), 1930-1940.....	percent.....	(¹)	-17.1	-3.4	21.4	.....
34 Excess, capability of works over area irrigated.....	1940..acres.....	33,438	5,648	839	7,314	3,512
35	1930..acres.....	585	3,671	1,923	6,560	.....
36 Proportion which area irrigated is of all lands in						
37 irrigated farms.....	1939..percent.....	18.5	6.9	9.0	32.5	12.4
38	1929..percent.....	13.1	15.5	18.8	36.3	.....
39 Proportion which area irrigated is of area works						
40 were capable of supplying with water.....	1939..percent.....	16.8	75.1	90.7	85.8	54.4
41	1929..percent.....	59.5	86.3	78.4	84.4	.....
CAPITAL INVESTED TO JANUARY 1						
42 Total investment in all enterprises.....	1940..dollars.....	3,713,510	191,655	281,973	580,027	248,285
43 (a) Cost of irrigation works and equipment.....	1940..dollars.....	3,708,590	190,875	281,863	579,175	246,240
44 (b) Investment in water rights (reported).....	1940..dollars.....	4,920	780	110	852	45
45 Total investment in all enterprises.....	1930..dollars.....	33,050	326,040	279,790	489,895	.....
46	1920 ⁴ ..dollars.....	.....	205,734	270,500	330,481	.....
47 Increase or decrease (-), 1930-1940.....	percent.....	(¹)	-41.2	0.8	18.4	.....
48 Average investment, based on area works were						
49 capable of supplying with water, per acre.....	1940..dollars.....	92.45	8.62	31.22	11.30	31.97
50	1930..dollars.....	22.87	12.16	29.94	11.58	.....
51	1920 ⁴ ..dollars.....	.....	6.54	24.33	7.90	.....
52 Average investment per acre irrigated.....	1939..dollars.....	551.78	11.48	34.42	13.18	58.78
53 Estimated final investment in existing enterprises.....	1940..dollars.....	4,733,471	194,820	289,993	592,062	252,061
54	1930..dollars.....	33,200	329,040	279,790	489,895	.....
55	1920 ⁴ ..dollars.....	.....	221,334	270,500	330,481	.....
56 Increase or decrease (-), 1930-1940.....	percent.....	(¹)	-40.8	3.8	20.9	.....
57 Average investment, based on estimated final						
58 investment and irrigable area, per acre.....	1940..dollars.....	117.69	8.64	31.48	11.48	30.99
59	1930..dollars.....	22.98	11.92	28.53	11.52	.....
60	1920 ⁴ ..dollars.....	.....	6.51	24.10	7.28	.....
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
61 Enterprises reporting maintenance and operation.....	1939..number.....	41	53	34	74	5
62 Area irrigated in these enterprises.....	1939..acres.....	6,677	15,692	2,631	43,951	4,221
63 Cost of maintenance and operation.....	1939..dollars.....	6,435	15,668	3,583	33,944	5,355
64 Average cost, per acre irrigated.....	1939..dollars.....	0.96	0.99	1.42	0.77	1.27
65	1929..dollars.....	0.92	0.80	1.82	1.25	.....
66 Total annual charges (reported) ⁵	1939..dollars.....	5,570	5,485	8,998	25,620	6,910
67 Average annual charge per acre irrigated.....	1939..dollars.....	1.06	0.48	2.00	0.66	1.68
68 Area against which charges were assessed.....	1939..acres.....	5,255	11,374	4,489	42,712	4,154
69 Average annual charge per acre assessed.....	1939..dollars.....	1.06	0.48	2.00	0.66	1.65
70 Total charges collected ⁶	1939..dollars.....	2,982	3,380	9,000	24,993	6,910
71 Indebtedness to December 31 (reported) ⁶	1939..dollars.....	2,513,251	1,620	82,000	20,077	136,861
WATER DELIVERED TO IRRIGATORS						
72 Enterprises reporting water delivered.....	1939..number.....	41	74	34	68	5
73 Area irrigated in these enterprises.....	1939..acres.....	6,730	14,417	(³)	34,255	4,221
74 Water delivered in these enterprises.....	1939..acre-feet.....	9,953	17,704	(³)	58,028	8,621
75 Average water delivered per acre irrigated.....	1939..acre-feet.....	1.5	1.2	(³)	1.7	2.0
76 Average cost of water per acre irrigated.....	1939..dollars.....	1.45	1.05	(³)	0.91	1.73
DRAINAGE OF IRRIGATED LAND						
77 Enterprises reporting land drained or needing						
78 drainage.....	1939..number.....	.....	2	.....	5	1
79 Irrigable area in these enterprises.....	1939..acres.....	.....	(³)	.....	30,049	(³)
80 Irrigated area in these enterprises.....	1939..acres.....	.....	(³)	.....	25,908	(³)
81 Area for which drains have been installed.....	1939..acres.....	.....	(³)	.....	14,820	(³)
82 Additional area needing drainage.....	1939..acres.....	.....	(³)	.....	2,458	(³)

¹ Census of Agriculture.² Percent not shown when more than 1,000.³ The excess of farm acreage over approximate land area is due to the fact that the entire acreage of a farm is tabulated as in the county in which the headquarters are located, even though a part of the farm may be situated in an adjoining county.

CENSUS OF IRRIGATION - NEBRASKA

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1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE
1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939-Continued
Irrigation data omitted from any of the counties listed are included under "All other counties"]

Madison	Merrick	Morrill	Nance	Nuckolls	Perkins	Phelps	Platte	Polk	Red Willow	Rock	Saline	Sanders	
1,874	1,238	1,007	961	1,373	897	1,161	2,094	1,388	1,047	583	2,057	2,668	1
1,986	1,390	1,081	1,197	1,587	1,034	1,195	2,174	1,507	1,189	531	2,087	2,699	2
24	83	590	14	6	3	100	46	5	83	30	14	12	3
(1)	16	515	.....	5	.....	(1)	(1)	400.0	80.4	568.7	(1)	.....	4
.....	418.8	14.6	.....	20.0	.....	.....	.....	.....	.....	.....	.....	.....	5
14	40	236	5	5	2	50	23	4	49	15	10	6	6
.....	12	206	.....	.....	.....	.....	.....	.....	26	.....	.....	.....	7
10	43	354	9	1	1	50	23	1	34	5	4	6	8
.....	4	309	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	9
357,133	282,711	781,893	272,391	347,278	529,903	327,152	421,736	270,213	434,125	2,685,541	356,892	463,111	10
6,634	19,769	243,254	10,141	1,232	3,400	32,277	10,084	1,445	30,081	44,154	3,180	2,376	11
279	238	412	724	205	1,133	323	219	299	362	2,208	227	198	12
4,395	10,097	153,210	7,564	(2)	(2)	18,091	4,424	(2)	21,881	42,280	2,580	1,355	13
314	252	648	1,513	(2)	(2)	381	192	(2)	447	2,819	258	226	14
2,299	9,672	90,044	2,577	(2)	(2)	14,216	5,860	(2)	8,200	1,874	600	1,021	15
230	225	254	286	(2)	(2)	284	246	(2)	241	375	150	170	16
386,080	298,880	897,920	280,320	370,530	568,400	348,800	430,080	277,120	458,240	647,680	368,000	483,840	17
584	2,878	79,982	225	323	353	4,502	535	308	4,542	203	249	195	18
584	2,782	70,275	301	307	313	4,493	532	308	4,537	203	249	195	19
.....	96	9,674	24	.....	.....	.....	.....	.....	5	.....	.....	.....	20
.....	835	97,306	.....	16	40	9	3	.....	.....	.....	.....	.....	21
.....	.....	55,216	.....	.....	.....	.....	.....	.....	3,256	.....	.....	.....	22
.....	244.7	.....	.....	.....	.....	.....	.....	.....	4,013	.....	.....	.....	23
785	4,231	105,903	258	509	500	121,508	910	362	5,994	332	521	344	24
.....	1,292	112,458	.....	.....	.....	.....	.....	.....	4,267	.....	.....	.....	25
.....	.....	100,588	.....	.....	.....	.....	.....	.....	4,928	.....	.....	.....	26
201	1,353	26,941	31	186	147	117,004	375	54	1,452	129	272	149	27
.....	457	26,152	.....	.....	.....	.....	.....	.....	1,011	.....	.....	.....	28
778	4,083	105,122	230	508	465	82,855	787	362	5,737	332	473	314	29
.....	1,285	111,077	.....	.....	.....	.....	.....	.....	4,267	.....	.....	.....	30
.....	217.7	70,646	.....	.....	.....	.....	.....	.....	4,700	.....	.....	.....	31
194	1,205	26,160	5	185	112	58,953	252	54	34.4	.....	.....	.....	32
.....	450	23,771	.....	.....	.....	.....	.....	.....	1,195	129	224	119	33
.....	.....	.....	.....	.....	.....	.....	.....	.....	1,011	.....	.....	.....	34
8.7	14.6	32.9	2.2	26.2	10.4	13.9	5.3	21.3	15.1	0.5	7.8	8.2	35
.....	14.5	47.2	.....	.....	.....	.....	.....	.....	32.0	.....	.....	.....	36
75.1	70.5	76.1	97.8	83.5	75.9	7.2	68.0	85.1	79.2	61.1	52.6	62.1	37
.....	65.0	78.6	.....	.....	.....	.....	.....	.....	76.3	.....	.....	.....	38
25,242	56,298	4,096,708	5,290	4,130	10,200	5,776,493	11,560	8,313	149,373	2,764	4,033	4,010	39
25,132	59,292	4,088,280	6,240	4,080	10,200	5,768,798	11,560	8,235	147,290	2,744	3,981	4,565	40
110	6	8,428	50	50	.....	7,695	10	78	2,083	20	52	46	41
.....	18,080	3,804,028	.....	.....	.....	.....	.....	.....	107,550	.....	.....	.....	42
.....	211.4	2,502,018	.....	.....	.....	.....	.....	.....	74,450	.....	.....	.....	43
.....	.....	7.7	.....	.....	.....	.....	.....	.....	38.9	.....	.....	.....	44
32.44	13.79	38.97	27.35	8.11	21.94	91.90	14.89	22.96	25.04	8.33	8.53	14.68	45
.....	14.07	34.25	.....	.....	.....	.....	.....	.....	25.21	.....	.....	.....	46
.....	.....	35.42	.....	.....	.....	.....	.....	.....	15.84	.....	.....	.....	47
43.22	19.56	51.23	27.96	12.79	28.90	1,283.09	21.61	23.99	32.89	13.62	16.20	23.64	48
28,312	56,648	4,113,768	6,290	4,180	10,700	7,371,430	11,828	8,313	151,643	2,764	4,073	4,650	49
.....	18,080	3,804,528	.....	.....	.....	.....	.....	.....	109,850	.....	.....	.....	50
.....	213.3	3,029,213	.....	.....	.....	.....	.....	.....	75,450	.....	.....	.....	51
.....	.....	8.1	.....	.....	.....	.....	.....	.....	38.0	.....	.....	.....	52
36.07	13.39	38.84	24.57	8.21	21.40	60.57	13.00	22.96	25.30	8.33	7.82	13.52	53
.....	13.99	33.83	.....	.....	.....	.....	.....	.....	25.74	.....	.....	.....	54
.....	.....	30.12	.....	.....	.....	.....	.....	.....	15.31	.....	.....	.....	55
16	55	42	4	3	8	3	51	17	60	3	7	13	56
584	2,826	78,412	41,734	225	318	353	4,502	505	4,542	12	179	249	57
3,025	7,413	77,019	31,609	670	718	760	9,307	2,225	9,630	71	507	838	58
5.18	2.82	0.98	0.76	2.08	2.25	2.15	2.07	4.41	2.12	5.92	2.83	3.37	59
.....	4.34	1.47	.....	.....	.....	.....	.....	.....	2.21	.....	.....	.....	60
.....	.....	153,738	31,077	.....	.....	.....	2,070	.....	4,500	.....	.....	.....	61
.....	.....	2.03	0.75	.....	.....	.....	0.76	.....	1.58	.....	.....	.....	62
.....	.....	94,888	41,539	.....	.....	.....	2,724	.....	2,850	.....	.....	.....	63
.....	.....	1.62	0.75	.....	.....	.....	0.76	.....	.....	.....	.....	.....	64
.....	.....	124,543	.....	.....	.....	.....	4,865	.....	5,100	.....	.....	.....	65
.....	.....	2,144,855	.....	.....	.....	.....	3,930,983	.....	.....	.....	.....	.....	66
14	56	35	4	3	7	3	48	18	41	1	11	13	67
578	2,683	76,021	41,734	225	323	353	4,492	535	4,542	(2)	103	249	68
1,254	3,552	149,989	22,424	244	266	241	6,567	590	11,279	(2)	133	185	69
2.2	1.3	2.0	0.5	1.1	0.8	0.7	1.5	1.1	2.5	(2)	1.3	0.7	70
4.92	2.83	2.08	0.76	2.98	2.25	2.15	1.72	4.41	2.05	(2)	5.53	3.37	71
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72
.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73
.....	.....	34,947	.....	.....	.....	.....	.....	.....	(2)	.....	.....	.....	74
.....	.....	28,616	.....	.....	.....	.....	.....	.....	(2)	.....	.....	.....	75
.....	.....	4,164	.....	.....	.....	.....	.....	.....	(2)	.....	.....	.....	76
.....	.....	400	.....	.....	.....	.....	.....	.....	(2)	.....	.....	.....	77

¹Data are included only in State totals because less than 3 farms or less than 3 enterprises reported in the 1940 Census.

²For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

³Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

⁴Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - NEBRASKA

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, 1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, 1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920 irrigation data omitted from any of the counties listed are included under "All other counties"]

ITEM (For definitions and explanations, see text)		Scotts Bluff	Seward	Sheridan	Sherman	Sioux	
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS *							
1	All farms.....1940..number....	1,900	2,076	1,236	1,167	699	
2	.....1930..number....	1,793	2,132	1,303	1,466	785
3	Irrigated farms.....1940..number....	1,719	26	40	70	261	
4	.....1930..number....	1,609			2	275
5	Increase or decrease (-), 1930-1940.....percent.....	6.8			(1)	-5.1	
6	Operated by—(a) Owners and managers.....1940..number....	721	14	38	31	133	
7	.....1930..number....	719				153
8	(b) Tenants.....1940..number....	998	12	2	39	128	
9	.....1930..number....	890				122
10	Land in all farms.....1940..acres....	2 468,032	359,551	2 1,646,802	341,042	1,143,861	
11	Land in irrigated farms.....1940..acres....	343,029	3,774	210,939	19,875	280,480	
12	Average per farm.....1940..acres....	200	145	5,273	284	998	
13	(a) Operated by owners and managers.....1940..acres....	185,642	2,488	(3)	9,436	187,819	
14	Average per farm.....1940..acres....	258	178	(3)	304	1,467	
15	(b) Operated by tenants.....1940..acres....	157,187	1,286	(3)	10,439	62,641	
16	Average per farm.....1940..acres....	158	107	(3)	288	489	
17	Approximate land area.....1940..acres....	464,640	366,080	1,578,240	364,800	1,320,320	
IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated.....1939..acres....	200,468	499	429	2,034	32,824	
19	(a) Cropland harvested.....1939..acres....	192,432	477	279	2,010	30,964	
20	(b) Crop failure.....1939..acres....	918		150		209	
21	(c) Pasture.....1939..acres....	7,118	22		24	1,651	
22	Area irrigated.....1929..acres....	193,816				25,578	
23	.....1919..acres....	173,245				29,796
24	Increase or decrease (-), 1929-1939.....percent.....	3.4				28.3	
25	Irrigable area in enterprises.....1940..acres....	222,185	1,115	1,179	15,047	43,375	
26	.....1930..acres....	223,162				36,676
27	.....1920 ⁴ ..acres....	251,647				47,307
28	Excess of irrigable area over the area irrigated.....1940..acres....	21,727	616	750	13,013	10,551	
29	.....1930..acres....	29,366				11,398
30	Area works were capable of supplying with water.....1940..acres....	222,184	947	974	12,536	41,622	
31	.....1930..acres....	219,252				36,676
32	.....1920..acres....	196,229				39,793
33	Increase or decrease (-), 1930-1940.....percent.....	1.3				13.8	
34	Excess, capability of works over area irrigated.....1940..acres....	21,716	448	545	10,502	8,798	
35	.....1930..acres....	25,436				10,897
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent....	58.4	13.2	0.2	10.2	12.6	
37	.....1929..percent....	58.5				13.6
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	90.2	52.7	44.0	16.2	78.9	
39	.....1929..percent....	88.4				69.9
CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises.....1940..dollars....	12,660,249	6,275	10,180	577,218	2,692,600	
41	(a) Cost of irrigation works and equipment.....1940..dollars....	12,603,898	6,165	10,170	577,061	2,689,857	
42	(b) Investment in water rights (reported).....1940..dollars....	56,351	110	10	157	2,743	
43	Total investment in all enterprises.....1930..dollars....	11,960,785				1,585,659	
44	.....1920..dollars....	7,037,085				1,978,842
45	Increase or decrease (-), 1930-1940.....percent.....	5.8				68.7	
46	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars....	56.98	6.63	10.45	46.04	61.69	
47	.....1930..dollars....	54.55				43.63
48	.....1920..dollars....	35.86				49.73
49	Average investment per acre irrigated.....1939..dollars....	63.15	12.58	23.73	283.78	82.03	
50	Estimated final investment in existing enterprises.....1940..dollars....	12,676,939	6,350	10,680	592,468	2,704,035	
51	.....1930..dollars....	11,967,485				1,585,659
52	.....1920..dollars....	9,585,822				2,727,029
53	Increase or decrease (-), 1930-1940.....percent.....	5.9				69.5	
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars....	57.05	5.70	9.06	39.37	62.34	
55	.....1930..dollars....	53.62				43.15
56	.....1920 ⁴ ..dollars....	38.09				57.64
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Supplemental			Primary	
		Enterprises				Enterprises	
57	Enterprises reporting maintenance and operation.....1939..number....	40	81	21	10	5	46
58	Area irrigated in these enterprises.....1939..acres....	200,179	59,963	404	429	2,034	32,779
59	Cost of maintenance and operation.....1939..dollars....	211,528	49,392	850	1,453	9,017	39,723
60	Average cost, per acre irrigated.....1939..dollars....	1.06	0.82	2.35	3.39	4.43	1.21
611929..dollars....	1.60					1.66
62	Total annual charges (reported) ⁵.....1939..dollars....	283,885	38,544			5,000	34,434
63	Average annual charge per acre irrigated.....1939..dollars....	1.43	0.70			2.50	1.30
64	Area against which charges were assessed.....1939..acres....	207,107	55,063			2,000	26,488
65	Average annual charge per acre assessed.....1939..dollars....	1.37	0.70			2.50	1.30
66	Total charges collected ⁵.....1939..dollars....	232,329				6,566	9,828
67	Indebtedness to December 31 (reported) ⁶.....1939..dollars....	7,699,900				590,844	1,685,541
WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered.....1939..number....	39	74	15	10	5	35
69	Area irrigated in these enterprises.....1939..acres....	193,673	59,684	443	429	2,034	32,104
70	Water delivered in these enterprises.....1939..acre-feet....	441,850	31,288	550	619	4,510	48,794
71	Average water delivered per acre irrigated.....1939..acre-feet....	2.3	0.5	1.2	1.4	2.2	1.5
72	Average cost of water per acre irrigated.....1939..dollars....	1.44	0.85	2.70	3.39	2.53	1.23
DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage.....1939..number....	7		4		1	3
74	Irrigable area in these enterprises.....1939..acres....	189,937		85		(3)	32,908
75	Irrigated area in these enterprises.....1939..acres....	176,555		72		(2)	27,038
76	Area for which drains have been installed.....1939..acres....	21,281		78		(3)	3,656
77	Additional area needing drainage.....1939..acres....	5,792					1,279

*Census of Agriculture. ¹Percent not shown when more than 1,000. ²The excess of farm acreage over approximate land area is due to the fact that the entire acreage of a farm is tabulated as in the county in which the headquarters are located, even though a part of the farm may be situated in an adjoining county. ³Data are included only in State totals because less than 3 farms or less than 3 enterprises reported in the 1940 Census. ⁴For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ⁵Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons. ⁶Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive.

CENSUS OF IRRIGATION — NEBRASKA

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COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, 1939, 1929, AND 1919; IRRIGABLE AREA AND CAPITAL INVESTED, 1940, 1930, AND 1920; MAINTENANCE AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, 1940; WATER DELIVERED TO IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920 irrigation data omitted from any of the counties listed are included under "All other counties"]

ITEM (For definitions and explanations, see text)			Stanton	Thayer	Valley	Webster	York	All other counties ¹
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS²								
1	All farms.....	1940..number.....	1,218	1,641	1,173	1,283	1,829	31,541
2		1930..number.....	1,225	1,713	1,300	1,505	1,909	32,670
3	Irrigated farms.....	1940..number.....	14	7	198	14	14	61
4		1930..number.....			2		3	4
5	Increase or decrease (-), 1930-1940.....	percent.....			(²)		366.7	(²)
6	Operated by—(a) Owners and managers.....	1940..number.....	8	3	78	10	10	40
7		1930..number.....						82
8	(b) Tenants.....	1940..number.....	6	4	120	4	4	21
9		1930..number.....						26
10	Land in all farms.....	1940..acres.....	265,141	355,007	349,986	350,624	360,014	9,965,819
11	Land in irrigated farms.....	1940..acres.....	3,788	1,293	53,281	4,103	4,372	35,659
12	Average per farm.....	1940..acres.....	271	185	269	293	312	589
13	(a) Operated by owners and managers.....	1940..acres.....	2,648	737	22,853	3,130	3,546	27,216
14	Average per farm.....	1940..acres.....	331	246	293	313	353	680
15	(b) Operated by tenants.....	1940..acres.....	1,140	556	30,428	973	826	8,743
16	Average per farm.....	1940..acres.....	190	139	254	243	206	416
17	Approximate land area.....	1940..acres.....	275,840	369,280	364,800	368,000	369,280	10,104,960
IRRIGATED AND IRRIGABLE AREAS								
18	Area irrigated.....	1939..acres.....	453	118	9,288	384	456	702
19	(a) Cropland harvested.....	1939..acres.....	339	118	9,288	331	450	694
20	(b) Crop failure.....	1939..acres.....	15			50		8
21	(c) Pasture.....	1939..acres.....	99				6	
22	Area irrigated.....	1929..acres.....						1,682
23		1919..acres.....						5,180
24	Increase or decrease (-), 1929-1939.....	percent.....						-55.0
25	Irrigable area in enterprises.....	1940..acres.....	760	219	25,617	456	917	4,478
26		1930..acres.....						8,215
27		1920 ³ ..acres.....						20,510
28	Excess of irrigable area over the area irrigated.....	1940..acres.....	327	101	16,329	102	461	3,776
29		1930..acres.....						3,593
30	Area works were capable of supplying with water.....	1940..acres.....	705	199	22,595	482	857	4,228
31		1930..acres.....						7,118
32		1920..acres.....						8,267
33	Increase or decrease (-), 1930-1940.....	percent.....						40.6
34	Excess, capability of works over area irrigated.....	1940..acres.....	252	81	13,307	98	401	3,528
35		1930..acres.....						2,436
36	Proportion which area irrigated is of all lands in irrigated farms.....	1939..percent.....	12.0	9.1	17.4	9.4	10.4	2.0
37		1929..percent.....						12.6
38	Proportion which area irrigated is of area works were capable of supplying with water.....	1939..percent.....	64.3	59.3	41.1	79.7	53.2	16.6
39		1929 ³ ..percent.....						65.8
CAPITAL INVESTED TO JANUARY 1								
40	Total investment in all enterprises.....	1940..dollars.....	9,295	4,690	1,254,254	8,772	16,484	36,092
41	(a) Cost of irrigation works and equipment.....	1940..dollars.....	9,280	4,290	1,254,168	8,745	16,444	35,867
42	(b) Investment in water rights (reported).....	1940..dollars.....	15	400	86	27	40	165
43	Total investment in all enterprises.....	1930..dollars.....						143,562
44		1920..dollars.....						193,189
45	Increase or decrease (-), 1930-1940.....	percent.....						-74.9
46	Average investment, based on area works were capable of supplying with water, per acre.....	1940..dollars.....	13.18	23.57	55.51	18.20	19.23	8.52
47		1930..dollars.....						20.17
48		1920..dollars.....						17.32
49	Average investment per acre irrigated.....	1939..dollars.....	20.52	39.75	135.04	22.84	36.15	51.33
50	Estimated final investment in existing enterprises.....	1940..dollars.....	9,295	4,690	1,271,062	9,072	16,081	37,729
51		1930..dollars.....						154,782
52		1920..dollars.....						247,639
53	Increase or decrease (-), 1930-1940.....	percent.....						-75.6
54	Average investment, based on estimated final investment and irrigable area, per acre.....	1940..dollars.....	11.62	22.28	49.62	19.28	19.72	8.43
55		1930..dollars.....						18.84
56		1920 ³ ..dollars.....						12.07
MAINTENANCE AND OPERATION. CHARGES AND INDEBTEDNESS								
57	Enterprises reporting maintenance and operation.....	1939..number.....	6	5	12	12	15	20
58	Area irrigated in these enterprises.....	1939..acres.....	429	118	9,288	244	456	701
59	Cost of maintenance and operation.....	1939..dollars.....	2,465	656	23,201	1,079	4,065	3,990
60	Average cost, per acre irrigated.....	1939..dollars.....	5.75	5.56	2.50	4.42	8.91	5.70
61		1929..dollars.....						3.69
62	Total annual charges (reported) ⁵	1939..dollars.....			22,233			
63	Average annual charge per acre irrigated.....	1939..dollars.....			2.50			
64	Area against which charges were assessed.....	1939..acres.....			8,893			
65	Average annual charge per acre assessed.....	1939..dollars.....			2.50			
66	Total charges collected ⁶	1939..dollars.....			23,296			
67	Indebtedness to December 31 (reported) ⁶	1939..dollars.....			853,377			
WATER DELIVERED TO IRRIGATORS								
68	Enterprises reporting water delivered.....	1939..number.....	7	5	12	12	14	19
69	Area irrigated in these enterprises.....	1939..acres.....	453	118	9,288	379	456	702
70	Water delivered in these enterprises.....	1939..acre-feet.....	1,159	143	22,289	894	476	932
71	Average water delivered per acre irrigated.....	1939..acre-feet.....	2.6	1.2	2.4	2.4	1.0	1.3
72	Average cost of water per acre irrigated.....	1939..dollars.....	5.75	5.56	2.64	4.51	8.91	5.70
DRAINAGE OF IRRIGATED LAND								
73	Enterprises reporting land drained or needing drainage.....	1939..number.....	2		1	1	1	2
74	Irrigable area in these enterprises.....	1939..acres.....	(⁴)		(⁴)	(⁴)	(⁴)	(⁴)
75	Irrigated area in these enterprises.....	1939..acres.....	(⁴)		(⁴)	(⁴)	(⁴)	(⁴)
76	Area for which drains have been installed.....	1939..acres.....	(⁴)		(⁴)	(⁴)	(⁴)	(⁴)
77	Additional area needing drainage.....	1939..acres.....	(⁴)		(⁴)			(⁴)

¹Census of Agriculture. ²Data between census years not comparable (see headnote). ³Percent not shown when more than 1,000. ⁴For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ⁵Data are included only in State totals because less than 3 enterprises reported in the 1940 Census. ⁶Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons. ⁷Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to these enterprises only.

CENSUS OF IRRIGATION—NEBRASKA

COUNTY TABLE II—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS,
[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		STATE TOTAL	Adams	Antelope	Barner	Boone	Box Butte	Brown
FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	1,137,808,019	10,381,266	12,978,548	3,222,304	13,068,919	8,372,874	4,738,955
2	Land and buildings, irrigated farms.....dollars..	92,846,541	170,318	104,580	114,505	401,708	572,770	274,480
3	Operated by—							
4	(a) Owners and managers.....dollars..	54,397,486	147,363	73,130	114,505	286,458	506,770	156,840
5	(b) Tenants.....dollars..	38,449,055	22,955	31,450	.....	115,250	66,000	117,640
6	Average, land and buildings, per farm.....dollars..	13,430.72	17,031.80	7,470.00	28,626.25	18,259.45	21,213.70	6,862.00
7	per acre in farms.....dollars..	25.95	57.99	34.44	5.71	56.13	8.64	4.33
8	Buildings, irrigated farms reporting value.....number..	6,698	10	14	4	21	28	39
9	Total reported.....dollars..	17,318,057	56,663	36,450	13,000	98,500	99,650	49,175
10	Average, per irrigated farm reporting.....dollars..	2,585.56	5,666.30	2,603.57	3,230.00	4,690.48	3,532.89	1,260.90
11	per acre on all irrigated farms.....dollars..	4.84	19.29	12.00	0.65	13.76	1.50	0.78
12	Buildings, nonirrigated farms reporting value.....number..	109,386	1,384	1,898	287	1,604	739	589
13	Total reported.....dollars..	239,435,747	2,099,831	3,564,450	463,370	3,753,655	1,509,692	1,006,250
14	Average, per nonirrigated farm reporting.....dollars..	2,189.91	1,517.22	1,678.00	1,614.53	2,340.18	2,042.88	1,504.11
15	per acre on all nonirrigated farms.....dollars..	5.47	6.25	6.72	1.07	8.93	2.39	1.45
16	Implements and machinery, irrigated farms reporting value.....number..	6,597	10	14	4	22	27	39
17	Total reported.....dollars..	9,398,048	20,137	18,875	5,800	31,600	57,071	27,135
18	Average, per irrigated farm reporting.....dollars..	1,424.59	2,013.70	1,348.21	1,450.00	1,436.36	2,113.74	695.77
19	per acre, on all irrigated farms.....dollars..	2.63	6.86	6.22	0.29	4.42	0.86	0.43
20	Implements and machinery, nonirrigated farms reporting value.....number..	106,087	1,361	1,798	284	1,532	755	641
21	Total reported.....dollars..	89,247,037	1,052,090	1,515,255	351,013	833,539	731,729	384,839
22	Average, per acre, on all nonirrigated farms.....dollars..	2.02	3.13	2.86	0.81	1.98	1.16	0.55
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
23	Enterprises.....1940.....number.....	2,743	13	9	5	21	22	26
24	.....1930.....number.....	733	8	1	1	3	5	.....
25	.....1920.....number.....	470	.....	.....	.....	.....	.....	.....
26	Average size of enterprise based on irrigable area.....1940.....acres.....	399	60	48	254	104	289	33
27	.....1930.....acres.....	1,041	.....	.....	.....	.....	748	.....
28	.....1920.....acres.....	1,631	.....	.....	.....	.....	760	.....
29	Diversion dams.....1940.....number.....	351	.....	.....	4	.....	5	9
30	Main canals and laterals.....1940.....length, miles.....	3,331.3	24.0	.....	8.0	1.0	13.0	1.1
31	.....1930.....length, miles.....	3,465	.....	.....	.....	.....	30	.....
32	.....1920.....length, miles.....	3,325	.....	.....	.....	.....	25	.....
33	.....1940.....capacity, c.f.s.*.....	14,256	4	15	17	45	27	19
34	.....1930.....capacity, c.f.s.*.....	13,108	.....	.....	.....	.....	42	.....
35	.....1920.....capacity, c.f.s.*.....	11,665	.....	.....	.....	.....	86	.....
36	Pipe lines*.....1940.....length, miles.....	125.1	0.3	.....	.....	8.1	.....	0.1
37	Storage dams.....1940.....number.....	155	1	.....	2	.....	1	1
38	Reservoirs.....1940.....number.....	164	3	.....	2	.....	2	1
39	.....1930.....number.....	40	.....	.....	.....	.....	1	.....
40	.....1920.....number.....	59	.....	.....	.....	.....	.....	.....
41	.....1940.....capacity, acre-feet..	2,306,159	10	.....	(1)	.....	(1)	(1)
42	.....1930.....capacity, acre-feet..	199,185	.....	.....	.....	.....	1,700	.....
43	.....1920.....capacity, acre-feet..	197,890	.....	.....	.....	.....	.....	.....
44	Wells, flowing.....1940.....number.....	19	.....	.....	.....	.....	.....	.....
45	.....1930.....number.....	.....	.....	.....	.....	.....	.....	.....
46	.....1920.....number.....	.....	.....	.....	.....	.....	.....	.....
47	.....1940.....yield, g.p.m.....	370	.....	.....	.....	.....	.....	.....
48	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
49	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
50	Wells, pumped.....1940.....number.....	2,412	13	2	2	6	19	12
51	.....1930.....number.....	537	.....	.....	.....	.....	.....	.....
52	.....1920.....number.....	34	.....	.....	.....	.....	.....	.....
53	.....1940.....yield, g.p.m.....	2,053,184	8,100	(1)	(1)	4,650	18,300	9,830
54	.....1930.....yield, g.p.m.....	428,058	.....	.....	.....	.....	.....	.....
55	.....1920.....yield, g.p.m.....	24,701	.....	.....	.....	.....	.....	.....
56	Pumping plants.....1940.....number.....	2,684	16	9	2	24	19	17
57	.....1930.....number.....	610	.....	.....	.....	.....	.....	.....
58	.....1920.....number.....	51	.....	.....	.....	.....	.....	.....
59	Prime movers.....1940.....capacity, hp.....	53,572	462	184	(1)	550	968	325
60	.....1930.....capacity, hp.....	10,991	.....	.....	.....	.....	.....	.....
61	.....1920.....capacity, hp.....	859	.....	.....	.....	.....	.....	.....
62	Pumps.....1940.....capacity, g.p.m.....	2,528,669	11,875	9,200	(1)	23,420	18,400	12,385
63	.....1930.....capacity, g.p.m.....	536,752	.....	.....	.....	.....	.....	.....
64	.....1920.....capacity, g.p.m.....	73,686	.....	.....	.....	.....	.....	.....
65	Pumping lift, from all sources.....1940.....average, feet.....	32	42	25	(1)	31	78	29
66	.....1930.....average, feet.....	29	.....	.....	.....	.....	.....	.....
67	.....1920.....average, feet.....	24	.....	.....	.....	.....	.....	.....
68	from pumped wells.....1940.....average, feet.....	34	60	(1)	(1)	56	78	39
PAY ROLL AND NUMBER OF EMPLOYEES 1939*								
69	Enterprises reporting pay roll.....number.....	72	.....	.....	.....	.....	.....	.....
70	Irrigated area in these enterprises.....acres.....	471,792	.....	.....	.....	.....	.....	.....
71	Wages and salaries paid and payable.....dollars..	308,746	.....	.....	.....	.....	.....	.....
72	Persons employed during week ending April 29.....number..	688	.....	.....	.....	.....	.....	.....

* Census of Agriculture.

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

‡ Includes intercounty projects counted as independent enterprises for each county into which they extend. For actual number of enterprises see State table 1.

§ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION - NEBRASKA

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1940, 1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939

irrigation data omitted from any of the counties listed are included under "All other counties"]

Buffalo	Butler	Chase	Cherry	Cheyenne	Clay	Colfax	Cuming	Custer	Dawes	Dawson	Deuel	Dodge	Douglas	Dundy	
15,835,633	21,731,576	7,788,391	20,102,596	13,338,478	11,750,818	14,305,137	23,900,506	22,688,456	8,053,619	22,928,580	6,415,959	25,064,200	19,531,285	5,902,308	1
4,749,068	163,650	473,070	1,308,460	2,616,444	75,400	580,225	224,069	873,971	1,370,204	14,752,217	1,090,920	741,265	357,600	634,837	2
2,420,569	129,050	405,270	1,187,215	1,653,158	(¹)	442,680	130,760	607,261	1,068,132	8,495,742	640,755	538,685	147,500	495,001	3
2,328,499	34,800	67,800	121,245	963,286	(¹)	137,545	93,900	266,710	304,072	6,250,475	450,165	202,580	210,300	139,836	4
10,324.06	13,637.50	22,527.14	42,206.39	12,169.51	15,080.00	17,582.58	14,003.75	9,931.49	17,598.72	18,856.57	15,151.67	25,560.86	14,908.33	14,763.65	5
50.35	59.64	8.31	5.52	14.68	34.16	64.75	89.07	18.13	11.35	53.81	39.26	101.72	137.77	14.79	6
438	11	19	29	211	5	32	14	88	75	835	72	27	24	43	7
885,999	30,500	65,050	97,051	446,123	17,700	97,900	42,900	198,325	261,450	2,340,471	215,725	174,550	107,300	131,549	8
2,022.83	2,772.73	3,423.68	3,346.59	2,114.33	3,540.00	3,059.38	3,064.29	2,253.69	3,486.00	2,802.96	2,996.18	6,464.81	4,470.83	3,059.28	9
9.39	11.12	1.14	0.41	2.49	8.02	10.93	13.22	4.11	2.17	6.54	6.78	23.95	41.32	3.07	10
1,761	1,801	673	1,127	833	1,463	1,338	1,809	3,245	711	982	381	1,710	1,698	590	11
2,640,335	4,004,055	1,345,275	2,294,586	1,859,153	1,980,895	3,467,336	6,575,910	5,594,651	1,295,980	1,669,996	783,250	5,189,333	5,164,230	1,020,472	12
1,499.34	2,223.24	1,998.92	2,036.01	2,231.88	1,354.00	2,591.43	3,635.11	1,724.18	1,822.76	1,683.46	2,055.77	3,034.70	3,041.36	1,729.61	13
5.30	11.04	2.75	0.69	3.24	5.67	14.17	18.41	3.44	1.77	5.10	3.19	16.23	30.68	1.95	14
439	11	20	30	210	4	32	14	87	72	840	72	26	22	42	15
487,274	17,200	30,250	49,714	265,530	8,750	59,220	15,950	84,310	97,170	1,253,206	110,454	59,120	19,310	51,878	16
1,109.96	1,563.64	1,512.50	1,657.13	1,264.43	2,187.50	1,850.62	1,139.29	969.08	1,348.58	1,481.81	1,534.08	2,273.85	877.73	1,235.19	17
5.17	6.27	0.53	0.21	1.48	3.96	6.61	4.92	1.75	0.80	4.57	3.47	8.11	7.44	1.21	18
1,693	1,728	664	1,057	881	1,436	1,285	1,805	3,150	687	926	403	1,677	1,677	563	19
978,493	1,406,844	810,769	1,060,530	1,162,118	1,072,407	1,165,407	2,029,299	3,061,623	601,851	720,449	673,345	1,732,692	1,092,125	669,139	20
1.96	3.88	1.66	0.32	2.06	3.01	4.76	5.68	1.27	0.82	2.20	2.73	5.42	6.49	1.28	21
464	16	11	21	60	5	30	12	38	39	486	58	30	3	13	22
175	.....	4	1	19	3	2	.....	4	23	55	34	.....	.....	4	23
4	.....	13	.....	36	.....	.....	.....	.....	88	13	21	.....	.....	12	24
90	69	293	116	100	70	88	52	300	545	425	193	50	170	510	25
190	.....	534	.....	150	.....	.....	.....	.....	669	3,150	242	.....	.....	1,369	26
1,605	.....	345	.....	166	.....	.....	.....	.....	276	10,899	629	.....	.....	1,176	27
3	1	12	30	34	.....	.....	.....	4	39	4	11	.....	.....	6	28
31.0	.....	42.0	15.0	21.4	.....	1.0	1.0	69.5	89.0	301.8	13.0	.....	2.3	28.0	29
47	.....	18	.....	27	.....	.....	.....	.....	88	465	32	.....	.....	17	30
16	.....	40	.....	94	.....	.....	.....	.....	231	191	74	.....	.....	62	31
468	7	68	55	65	11	80	25	432	241	1,251	35	15	.....	78	32
600	.....	31	.....	21	.....	.....	.....	.....	111	2,575	33	.....	.....	77	33
160	.....	107	.....	78	.....	.....	.....	.....	232	1,145	296	.....	.....	203	34
.....	0.1	1.2	.....	1.4	0.3	0.3	.....	2.7	18.8	33.5	0.5	2.4	.....	0.3	35
31	.....	1	3	3	.....	.....	.....	.....	8	48	.....	.....	1	3	36
31	.....	1	3	4	.....	.....	.....	.....	9	45	.....	.....	1	1	37
1	.....	.....	.....	.....	.....	.....	.....	.....	1	4	.....	.....	.....	.....	38
2	.....	2	.....	4	.....	.....	.....	.....	17	.....	2	.....	.....	.....	39
454	.....	(¹)	41	87	.....	.....	.....	.....	14,570	517	.....	(¹)	(¹)	(¹)	40
48	.....	.....	.....	.....	.....	.....	.....	.....	12,000	349	.....	.....	.....	.....	41
860	.....	152	.....	95	.....	.....	.....	.....	1,302	.....	3	.....	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
587	15	3	.....	40	1	12	2	10	3	483	56	26	10	4	49
205	.....	1	.....	4	.....	.....	.....	.....	.....	39	19	.....	.....	.....	50
1	.....	1	.....	.....	.....	.....	.....	.....	2	8	2	.....	.....	.....	51
477,350	13,200	3,700	.....	30,117	(¹)	6,905	(¹)	7,300	135	440,550	58,835	24,020	5,600	4,550	52
160,664	.....	2,480	.....	5,300	.....	.....	.....	.....	.....	23,855	15,950	.....	.....	.....	53
450	.....	300	.....	.....	.....	.....	.....	.....	2,200	3,901	2,450	.....	.....	.....	54
537	15	4	1	47	5	33	12	36	6	478	56	31	10	5	55
221	.....	1	.....	6	.....	.....	.....	.....	.....	50	20	.....	.....	.....	56
3	.....	2	.....	.....	.....	.....	.....	.....	3	9	4	.....	.....	.....	57
9,161	295	163	(¹)	994	125	611	238	703	66	10,016	956	591	97	140	58
3,484	.....	20	.....	83	.....	.....	.....	.....	.....	847	337	.....	.....	.....	59
18	.....	40	.....	.....	.....	.....	.....	.....	53	.....	75	.....	.....	.....	60
483,750	15,805	5,500	(¹)	34,817	5,500	34,805	13,100	33,200	2,935	472,285	60,485	29,270	5,609	5,370	61
174,584	.....	2,480	.....	5,300	.....	.....	.....	.....	.....	48,005	24,950	.....	.....	.....	62
696	.....	6,300	.....	.....	.....	.....	.....	.....	4,000	5,430	5,152	.....	.....	.....	63
26	35	48	(¹)	63	41	26	20	33	36	.....	21	.....	.....	.....	64
30	.....	18	.....	46	.....	.....	.....	.....	.....	18	25	19	.....	.....	65
23	.....	18	.....	.....	.....	.....	.....	.....	25	36	16	.....	.....	.....	66
27	39	56	.....	63	(¹)	32	(¹)	51	21	36	21	19	42	65	67
(¹)	1	.....	.....	.....	.....	.....	.....	.....	(¹)	1	.....	.....	.....	(¹)	68
(¹)	.....	(¹)	.....	.....	.....	.....	.....	.....	(¹)	(¹)	51,440	(¹)	.....	(¹)	69
(¹)	.....	(¹)	.....	.....	.....	.....	.....	.....	(¹)	(¹)	23,809	(¹)	.....	(¹)	70
(¹)	.....	(¹)	.....	.....	.....	.....	.....	.....	(¹)	(¹)	45	(¹)	.....	(¹)	71

¹Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

²Includes siphons and farm pipe lines reported.

³Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION - NEBRASKA

COUNTY TABLE II.—FARM VALUES, 1940, ENTERPRISES AND IRRIGATION WORKS, 1940,
(Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1931)

ITEM (For definitions and explanations, see text)		Fillmore	Franklin	Frontier	Furnas	Gage	Garden	Garfield	Gosper
FARM VALUES, 1940 *									
1	Land and buildings, all farms.....dollars..	14,754,247	7,075,083	8,710,090	9,124,531	31,436,587	9,320,180	2,796,272	6,113,952
2	Land and buildings, irrigated farms.....dollars..	58,036	245,865	224,100	276,300	173,140	1,881,522	586,560	313,931
3	Operated by—								
4	(a) Owners and managers.....dollars..	(¹)	161,200	224,100	170,800	(¹)	1,404,114	257,750	263,161
5	(b) Tenants.....dollars..	(¹)	81,635	.....	105,500	(¹)	477,408	328,800	50,730
6	Average, land and buildings, per farm.....dollars..	14,599.00	11,175.68	22,410.00	16,222.94	15,740.00	13,081.38	10,290.35	24,147.77
7	per acre in farms.....dollars..	76.55	30.20	20.68	33.23	30.74	9.62	31.35	35.75
8	Buildings, irrigated farms reporting value.....number..	4	22	10	16	10	115	51	13
9	Total reported.....dollars..	27,383	53,652	51,500	46,700	19,600	278,858	114,700	60,291
10	Average, per irrigated farm reporting.....dollars..	6,845.50	2,438.73	5,150.00	2,918.75	1,930.00	2,424.85	2,249.02	4,637.77
11	per acre on all irrigated farms.....dollars..	36.13	6.59	5.03	6.62	10.27	1.43	6.19	7.03
12	Buildings, nonirrigated farms reporting value.....number..	1,671	1,085	1,109	1,236	2,730	523	424	715
13	Total reported.....dollars..	2,944,420	1,490,935	1,888,520	2,077,304	6,902,673	1,016,952	564,060	1,171,407
14	Average, per nonirrigated farm reporting.....dollars..	1,762.07	1,374.13	1,702.94	1,680.67	2,528.45	1,944.46	1,330.33	1,638.33
15	per acre on all nonirrigated farms.....dollars..	8.23	4.37	3.11	4.63	13.02	1.14	1.64	4.37
16	Implements and machinery, irrigated farms reporting value.....number..	4	21	10	17	11	113	54	13
17	Total reported.....dollars..	8,525	30,272	15,300	23,945	8,250	115,122	52,350	24,818
18	Average, per irrigated farm reporting.....dollars..	2,131.25	1,441.52	1,530.00	1,408.53	750.00	1,018.78	969.44	1,909.08
19	per acre, on all irrigated farms.....dollars..	11.25	3.72	1.41	2.88	4.32	0.59	2.82	2.91
20	Implements and machinery, nonirrigated farms reporting value.....number..	1,677	992	1,048	1,155	2,640	515	395	578
21	Total reported.....dollars..	1,250,192	580,184	830,213	881,082	2,246,008	559,572	185,241	514,725
22	Average, per acre, on all nonirrigated farms.....dollars..	3.49	1.70	1.37	1.99	4.24	0.63	0.64	1.82
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
23	Enterprises.....1940.....number.....	3	17	5	25	10	22	4	15
24	.....1930.....number.....	1	12	.....	7	2	19	1	1
25	.....1920.....number.....	.....	.....	.....	.....	.....	31	.....	.....
26	Average size of enterprise based on								
27	irrigable area.....1940.....acres.....	70	89	52	55	48	902	1,231	613
28	.....1930.....acres.....	.....	.....	.....	.....	.....	1,480	.....	.....
29	.....1920.....acres.....	.....	.....	.....	.....	.....	863	.....	.....
30	Diversion dams.....1940.....number.....	.....	6	.....	.....	1	40	1	1
31	Main canals and laterals.....1940.....length, miles.....	.....	5.0	.....	.....	2.0	71.1	12.1	51.2
32	.....1930.....length, miles.....	.....	.....	.....	.....	.....	143	.....	.....
33	.....1920.....length, miles.....	.....	.....	.....	.....	.....	165	.....	.....
34	.....1940.....capacity, c.f.s. ³.....	.....	46	13	33	20	275	150	1,537
35	.....1930.....capacity, c.f.s. ³.....	.....	.....	.....	.....	.....	525	.....	.....
36	.....1920.....capacity, c.f.s. ³.....	.....	.....	.....	.....	.....	480	.....	.....
37	Pipe lines ⁴.....1940.....length, miles.....	.....	0.3	0.2	.....	1.6	0.1	0.9	2.3
38	Storage dams.....1940.....number.....	.....	1	.....	.....	1	1	.....	.....
39	Reservoirs.....1940.....number.....	.....	1	.....	.....	1	1	.....	.....
40	.....1930.....number.....	.....	.....	.....	.....	.....	.....	.....	.....
41	.....1920.....number.....	.....	.....	.....	.....	.....	2	.....	.....
42	.....1940.....capacity, acre-feet.....	.....	(¹)	.....	.....	(¹)	(¹)	.....	.....
43	.....1930.....capacity, acre-feet.....	.....	.....	.....	.....	.....	100,000	.....	.....
44	.....1920.....capacity, acre-feet.....	.....	.....	.....	.....	.....	100,000	.....	.....
45	Wells, flowing.....1940.....number.....	.....	.....	.....	.....	.....	.....	.....	.....
46	.....1930.....number.....	.....	.....	.....	.....	.....	.....	.....	.....
47	.....1920.....number.....	.....	.....	.....	.....	.....	.....	.....	.....
48	.....1940.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
49	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
50	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
51	Wells, pumped.....1940.....number.....	3	16	.....	14	1	8	1	14
52	.....1930.....number.....	.....	.....	.....	.....	.....	.....	.....	.....
53	.....1920.....number.....	.....	.....	.....	.....	.....	.....	.....	.....
54	.....1940.....yield, g.p.m.....	1,900	10,690	.....	10,700	(¹)	3,010	(¹)	14,550
55	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
56	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
57	Pumping plants.....1940.....number.....	3	15	5	25	11	8	4	16
58	.....1930.....number.....	.....	.....	.....	.....	.....	.....	.....	.....
59	.....1920.....number.....	.....	.....	.....	.....	.....	3	.....	.....
60	Prime movers.....1940.....capacity, hp.....	100	337	121	522	250	169	111	146
61	.....1930.....capacity, hp.....	.....	.....	.....	.....	.....	.....	.....	.....
62	.....1920.....capacity, hp.....	.....	.....	.....	.....	.....	64	.....	.....
63	Pumps.....1940.....capacity, g.p.m.....	1,950	15,510	5,310	21,650	8,610	9,010	7,200	16,300
64	.....1930.....capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
65	.....1920.....capacity, g.p.m.....	.....	.....	.....	.....	.....	5,500	.....	.....
66	Pumping lift, from all sources.....1940.....average, feet.....	125	42	23	30	43	23	30	41
67	.....1930.....average, feet.....	.....	.....	.....	.....	.....	.....	.....	.....
68	.....1920.....average, feet.....	.....	.....	.....	.....	.....	9	.....	.....
69	from pumped wells.....1940.....average, feet.....	125	49	.....	42	(¹)	23	(¹)	43
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁵									
70	Enterprises reporting pay roll.....number.....	.....	.....	.....	.....	.....	9	1	.....
71	Irrigated area in these enterprises.....acres.....	.....	.....	.....	.....	.....	8,849	(¹)	.....
72	Wages and salaries paid and payable.....dollars..	.....	.....	.....	.....	.....	3,718	(¹)	.....
73	Persons employed during week ending April 29.....number..	.....	.....	.....	.....	.....	37	(¹)	.....

* Census of Agriculture.

¹ Data are included only in State totals because less than 3 farms or less than 3 enterprises reported in the 1940 Census.² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION - NEBRASKA

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1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939—Continued

Irrigation data omitted from any of the counties listed are included under "All other counties"

Greeley	Hall	Hamilton	Harlan	Hayes	Hitchcock	Holt	Howard	Jefferson	Kearney	Keith	Kimball	Lincoln	Loup	Madison	
6,542,161	12,537,093	12,357,039	7,732,637	5,830,195	7,495,284	15,323,038	8,312,642	15,003,755	10,953,798	11,763,663	5,659,851	17,851,517	2,225,320	15,492,115	1
168,555	2,803,931	257,380	325,895	166,250	1,370,615	66,810	168,000	45,200	1,343,885	3,323,795	1,121,635	4,371,452	593,620	331,600	2
83,260	1,603,191	(¹)	203,815	117,600	983,295	(¹)	89,350	(¹)	719,200	2,307,345	760,035	2,504,857	372,020	220,300	3
83,295	1,200,740	(¹)	122,080	48,650	387,320	(¹)	86,650	(¹)	624,685	1,016,450	381,500	1,866,595	221,600	111,300	4
8,327.75	12,034.04	29,708.89	15,518.81	11,875.00	12,022.94	11,135.00	8,173.81	11,550.00	14,146.16	23,407.01	15,364.85	13,600.79	11,872.40	13,816.67	5
27.23	45.38	75.02	30.68	16.25	25.07	12.11	24.94	31.48	36.93	13.71	12.33	32.24	17.48	49.54	6
19	223	9	21	13	113	6	21	1	88	141	71	300	49	23	7
36,790	557,655	73,900	76,550	35,250	227,625	14,800	48,800	10,100	187,020	465,650	203,035	860,722	123,850	106,500	8
1,936.32	2,500.74	8,211.11	3,645.24	2,711.54	2,014.38	2,466.67	2,323.81	2,525.00	2,125.23	3,302.43	2,901.90	2,869.07	2,527.55	4,630.43	9
0.02	9.08	20.74	7.21	3.45	4.16	2.68	6.47	7.54	5.14	1.92	2.26	6.35	3.65	15.91	10
889	1,254	1,557	1,040	517	667	2,262	1,347	1,583	984	543	370	1,577	254	1,804	11
1,492,415	2,358,076	2,655,191	1,674,613	1,098,945	1,137,450	3,747,550	2,765,445	3,588,670	1,640,769	1,431,401	697,960	2,587,135	366,625	4,232,220	12
1,678.76	1,880.44	1,705.32	1,610.20	2,125.62	1,705.32	1,655.74	2,053.04	2,291.02	1,650.67	2,616.10	1,886.38	1,640.53	1,443.41	2,362.65	13
4.40	8.98	7.96	4.95	2.58	2.86	2.64	8.38	10.32	5.80	3.13	1.47	1.97	1.29	12.16	14
17	226	7	19	13	109	6	23	4	89	138	70	298	47	22	15
16,839	231,335	27,920	36,850	18,950	150,220	3,702	16,560	3,000	107,050	252,178	133,706	466,664	58,450	39,465	16
960.53	1,150.35	3,988.57	2,044.74	1,457.69	1,378.17	617.00	721.30	750.00	1,202.92	1,827.33	1,910.09	1,555.65	1,243.62	1,793.86	17
2.75	4.26	7.93	3.66	1.85	2.75	0.67	2.30	2.24	2.94	1.04	1.47	3.44	1.72	5.90	18
812	1,227	1,507	954	518	651	2,143	1,289	1,555	980	537	400	1,525	250	1,076	19
462,050	792,428	1,150,041	808,349	637,473	676,826	1,461,524	777,888	1,358,923	795,923	799,371	598,315	1,198,987	149,244	1,050,951	20
1.36	3.02	3.47	2.39	1.50	1.70	1.03	2.36	3.91	2.81	1.75	1.25	0.91	0.53	3.86	21
5	257	6	19	11	15	3	16	5	42	82	40	157	5	16	22
1	92	1	13	1	7	3	1	1	19	28	18	21	1	1	23
291	69	260	77	93	775	16	52	33	958	275	230	329	1,027	49	25
109	109	109	109	109	1,787	1,787	1,787	1,787	76	988	545	2,024	2,024	2,024	26
9.0	0.2	0.2	0.2	0.2	3,535	3,535	3,535	3,535	702	971	702	4,542	4,542	4,542	27
11	2	2	2	2	2	2	2	2	12	12	16	9	2	2	28
0.1	0.5	0.5	0.5	0.5	42.0	42.0	42.0	42.0	91.2	91.2	43.1	199.1	35.1	35.1	29
312	8	8	8	8	43	43	43	43	89	89	62	204	204	204	30
123	123	123	123	123	33	33	33	33	151	151	75	210	210	210	31
282,740	9,905	9,905	7,855	3,250	153	2	40	8	2,595	114	1,775	271	25	25	32
109,839	109,839	109,839	109,839	109,839	108	108	108	108	530	156	1,142	1,142	1,142	1,142	33
3	301	10	21	12	160	1.6	1.3	0.5	722	174	710	710	710	710	34
124	124	124	124	124	1.6	1.6	1.6	1.6	1.4	1.7	0.8	1.4	1.4	1.5	35
65	6,161	606	475	312	2	2	2	2	2	2	2	2	2	2	36
3,590	276,830	10,805	18,375	16,600	3	3	3	3	4	4	4	4	4	4	37
29	33	77	32	35	4	4	4	4	5	5	5	5	5	5	38
36	36	36	36	36	5	5	5	5	6	6	6	6	6	6	39
33	77	36	50	56	6	6	6	6	7	7	7	7	7	7	40
1	1	1	1	1	7	7	7	7	8	8	8	8	8	8	41
(¹)	(¹)	(¹)	(¹)	(¹)	8	8	8	8	9	9	9	9	9	9	42
(¹)	(¹)	(¹)	(¹)	(¹)	9	9	9	9	10	10	10	10	10	10	43
(¹)	(¹)	(¹)	(¹)	(¹)	10	10	10	10	11	11	11	11	11	11	44
(¹)	(¹)	(¹)	(¹)	(¹)	11	11	11	11	12	12	12	12	12	12	45
(¹)	(¹)	(¹)	(¹)	(¹)	12	12	12	12	13	13	13	13	13	13	46
(¹)	(¹)	(¹)	(¹)	(¹)	13	13	13	13	14	14	14	14	14	14	47
(¹)	(¹)	(¹)	(¹)	(¹)	14	14	14	14	15	15	15	15	15	15	48
(¹)	(¹)	(¹)	(¹)	(¹)	15	15	15	15	16	16	16	16	16	16	49
(¹)	(¹)	(¹)	(¹)	(¹)	16	16	16	16	17	17	17	17	17	17	50
(¹)	(¹)	(¹)	(¹)	(¹)	17	17	17	17	18	18	18	18	18	18	51
(¹)	(¹)	(¹)	(¹)	(¹)	18	18	18	18	19	19	19	19	19	19	52
(¹)	(¹)	(¹)	(¹)	(¹)	19	19	19	19	20	20	20	20	20	20	53
(¹)	(¹)	(¹)	(¹)	(¹)	20	20	20	20	21	21	21	21	21	21	54
(¹)	(¹)	(¹)	(¹)	(¹)	21	21	21	21	22	22	22	22	22	22	55
(¹)	(¹)	(¹)	(¹)	(¹)	22	22	22	22	23	23	23	23	23	23	56
(¹)	(¹)	(¹)	(¹)	(¹)	23	23	23	23	24	24	24	24	24	24	57
(¹)	(¹)	(¹)	(¹)	(¹)	24	24	24	24	25	25	25	25	25	25	58
(¹)	(¹)	(¹)	(¹)	(¹)	25	25	25	25	26	26	26	26	26	26	59
(¹)	(¹)	(¹)	(¹)	(¹)	26	26	26	26	27	27	27	27	27	27	60
(¹)	(¹)	(¹)	(¹)	(¹)	27	27	27	27	28	28	28	28	28	28	61
(¹)	(¹)	(¹)	(¹)	(¹)	28	28	28	28	29	29	29	29	29	29	62
(¹)	(¹)	(¹)	(¹)	(¹)	29	29	29	29	30	30	30	30	30	30	63
(¹)	(¹)	(¹)	(¹)	(¹)	30	30	30	30	31	31	31	31	31	31	64
(¹)	(¹)	(¹)	(¹)	(¹)	31	31	31	31	32	32	32	32	32	32	65
(¹)	(¹)	(¹)	(¹)	(¹)	32	32	32	32	33	33	33	33	33	33	66
(¹)	(¹)	(¹)	(¹)	(¹)	33	33	33	33	34	34	34	34	34	34	67
(¹)	(¹)	(¹)	(¹)	(¹)	34	34	34	34	35	35	35	35	35	35	68
(¹)	(¹)	(¹)	(¹)	(¹)	35	35	35	35	36	36	36	36	36	36	69
(¹)	(¹)	(¹)	(¹)	(¹)	36	36	36	36	37	37	37	37	37	37	70
(¹)	(¹)	(¹)	(¹)	(¹)	37	37	37	37	38	38	38	38	38	38	71
(¹)	(¹)	(¹)	(¹)	(¹)	38	38	38	38	39	39	39	39	39	39	72
(¹)	(¹)	(¹)	(¹)	(¹)	39	39	39	39	40	40	40	40	40	40	73
(¹)	(¹)	(¹)	(¹)	(¹)	40	40	40	40	41	41	41	41	41	41	74
(¹)	(¹)	(¹)	(¹)	(¹)	41	41	41	41	42	42	42	42	42	42	75
(¹)	(¹)	(¹)	(¹)	(¹)	42	42	42	42	43	43	43	43	43	43	76
(¹)	(¹)	(¹)	(¹)	(¹)	43	43	43	43	44	44	44	44	44	44	77
(¹)	(¹)	(¹)	(¹)	(¹)	44	44	44	44	45	45	45	45	45	45	78
(¹)	(¹)	(¹)	(¹)	(¹)	45	45	45	45	46	46	46	46	46	46	79
(¹)	(¹)	(¹)	(¹)	(¹)	46	46	46	46	47	47	47	47	47	47	80
(¹)	(¹)	(¹)	(¹)	(¹)	47	47	47	47	48	48	48	48	48	48	81
(¹)	(¹)	(¹)	(¹)	(¹)	48	48	48	48	49	49	49	49	49	49	82
(¹)	(¹)	(¹)	(¹)	(¹)	49	49	49	49	50	50					

CENSUS OF IRRIGATION — NEBRASKA

COUNTY TABLE II.—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940

[Counties for which 1920 data are not shown may have had irrigation in that year; 1930 and 1920]

ITEM (For definitions and explanations, see text)		Merrick	Morrill	Nance	Nuckolls	Perkins	Phelps	Platte	Polk	Red Willow
FARM VALUES, 1940*										
1	Land and buildings, all farms.....dollars..	11,362,177	9,107,910	8,097,524	9,938,123	9,705,440	13,067,534	20,119,434	13,253,753	7,938,200
2	Land and buildings, irrigated farms.....dollars..	982,014	4,958,759	334,715	62,360	47,480	1,546,805	588,103	86,125	1,139,265
3	Operated by—									
4	(a) Owners and managers.....dollars..	541,040	2,401,064	240,295	(2)	36,800	845,685	230,606	(2)	734,115
5	(b) Tenants.....dollars..	440,974	2,557,695	94,420	(2)	10,680	701,120	327,500	(2)	405,150
6	Average, land and buildings, per farm.....dollars..	11,831.49	8,404.68	23,908.21	10,393.33	15,826.67	15,468.05	12,784.81	17,225.00	13,725.06
	per acre in farms.....dollars..	49.67	20.39	33.01	50.62	13.95	47.92	58.32	59.60	37.57
7	Buildings, irrigated farms reporting value.....number..	83	583	14	6	3	97	45	5	80
8	Total reported.....dollars..	315,500	1,002,050	72,465	13,600	10,500	282,990	130,740	21,980	211,300
9	Average, per irrigated farm reporting.....dollars..	3,801.20	1,718.78	5,178.07	2,266.67	3,500.00	2,917.42	2,905.33	4,396.00	2,578.75
10	per acre on all irrigated farms.....dollars..	15.96	4.12	7.15	11.04	3.09	8.77	12.97	15.21	7.12
11	Buildings, nonirrigated farms reporting value.....number..	1,132	395	932	1,327	787	999	1,971	1,344	907
12	Total reported.....dollars..	2,605,825	660,410	1,645,355	2,006,170	1,534,921	2,114,265	5,302,695	3,059,868	1,473,600
13	Average, per nonirrigated farm reporting.....dollars..	2,301.87	1,667.70	1,765.40	1,511.81	1,950.34	2,116.38	2,690.36	2,275.69	1,624.70
14	per acre on all nonirrigated farms.....dollars..	9.91	1.23	6.27	5.80	2.92	7.17	12.88	11.38	3.65
15	Implements and machinery, irrigated farms reporting value.....number..	81	570	13	6	3	98	45	5	80
16	Total reported.....dollars..	116,447	705,614	20,611	7,950	11,200	111,635	40,015	10,350	85,725
17	Average, per irrigated farm reporting.....dollars..	1,437.82	1,237.92	1,585.46	1,325.00	3,733.33	1,139.13	889.22	2,070.00	1,071.56
18	per acre, on all irrigated farms.....dollars..	5.89	2.90	2.03	6.45	3.29	3.46	3.97	7.16	2.85
19	Implements and machinery, nonirrigated farms reporting value.....number..	1,103	393	879	1,301	811	962	1,930	1,321	886
20	Total reported.....dollars..	815,605	352,525	575,777	863,247	1,209,887	908,586	1,550,918	1,167,321	693,702
21	Average, per acre, on all nonirrigated farms.....dollars..	3.10	0.67	2.20	2.49	2.30	3.08	3.77	4.34	1.72
ENTERPRISES AND IRRIGATION WORKS JANUARY 1										
22	Enterprises.....1940.....number.....	62	49	3	7	3	51	18	6	53
23	.....1930.....number.....	16	24		4		8	4	1	12
24	.....1920.....number.....		48							9
25	Average size of enterprise based on irrigable area.....1940.....acres.....	68	2,208	85	73	167	2,382	51	60	113
26	.....1930.....acres.....	81	4,686							356
27	.....1920.....acres.....		2,086							548
28	Diversion dams.....1940.....number.....		32					1	2	1
29	Main canals and laterals.....1940.....length, miles.....		451.5				152.1			16.0
30	.....1930.....length, miles.....		666							19
31	.....1920.....length, miles.....		568							20
32	.....1940.....capacity, c.f.s.4.....	4	907	12	13		3	10	8	78
33	.....1930.....capacity, c.f.s.4.....		2,008							92
34	.....1920.....capacity, c.f.s.4.....		1,386							66
35	Pipe lines6.....1940.....length, miles.....	0.1	2.1	0.5			0.2		0.1	0.3
36	Storage dams.....1940.....number.....		3		4					
37	Reservoirs.....1940.....number.....	2	3		4					
38	.....1930.....number.....									
39	.....1920.....number.....		2							1
40	.....1940.....capacity, acre-feet.....	(2)	238		264					
41	.....1930.....capacity, acre-feet.....									
42	.....1920.....capacity, acre-feet.....		4							10
43	Wells, flowing.....1940.....number.....									
44	.....1930.....number.....									
45	.....1920.....number.....									
46	.....1940.....yield, g.p.m.....									
47	.....1930.....yield, g.p.m.....									
48	.....1920.....yield, g.p.m.....									
49	Wells, pumped.....1940.....number.....	77	13		2	3	61	15	3	49
50	.....1930.....number.....	20								14
51	.....1920.....number.....									11
52	.....1940.....yield, g.p.m.....	69,145	13,750		(2)	3,900	54,814	8,905	2,250	31,330
53	.....1930.....yield, g.p.m.....	23,530								11,030
54	.....1920.....yield, g.p.m.....									4,700
55	Pumping plants.....1940.....number.....	71	16	4	7	3	54	19	7	56
56	.....1930.....number.....	17								11
57	.....1920.....number.....									7
58	Prime movers.....1940.....capacity, hp.....	1,320	416	92	107	142	898	264	138	1,125
59	.....1930.....capacity, hp.....	289								263
60	.....1920.....capacity, hp.....									312
61	Pumps.....1940.....capacity, g.p.m.....	71,025	17,850	4,900	6,230	3,900	57,294	12,475	5,100	52,590
62	.....1930.....capacity, g.p.m.....	29,330								14,550
63	.....1920.....capacity, g.p.m.....									18,403
64	Pumping lift, from all sources.....1940.....average, feet.....	24	38	13	18	72	29	30	60	30
65	.....1930.....average, feet.....	16								33
66	.....1920.....average, feet.....									28
67	from pumped wells.....1940.....average, feet.....	24	44		(2)	72	30	36	96	34
PAY ROLL AND NUMBER OF EMPLOYEES 19396										
68	Enterprises reporting pay roll.....number.....		13				1			1
69	Irrigated area in these enterprises.....acres.....		75,442				(2)			(2)
70	Wages and salaries paid and payable.....dollars..		50,168				(2)			(2)
71	Persons employed during week ending April 29.....number..		156				(2)			(2)

*Census of Agriculture.

1Data between census years not comparable (see headnote).

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

3For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION — NEBRASKA

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1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939—Continued

Irrigation data omitted from any of the counties listed are included under "All other counties"

Rock	Saline	Saunders	Scotts Bluff	Seward	Sheridan	Sherman	Sioux	Stanton	Thayer	Valley	Webster	York	All other counties ¹	
4,511,720	22,460,700	32,982,329	22,212,331	21,292,156	15,818,178	6,151,058	8,114,079	12,104,603	13,197,493	8,194,248	6,827,317	17,181,787	306,662,057	1
285,580	217,870	234,905	21,048,141	276,140	1,699,210	503,280	3,244,817	245,080	65,140	2,111,143	123,750	233,150	913,395	2
272,520	177,030	158,945	9,671,465	183,320	(²)	252,020	2,033,073	170,780	41,600	973,785	87,425	192,300	647,895	3
13,060	40,840	75,930	11,376,676	95,120	(²)	251,260	1,211,744	74,300	23,340	1,137,360	36,325	40,250	265,500	4
14,279.00	15,562.14	19,575.42	12,244.41	10,709.23	42,480.25	7,189.71	12,432.25	17,505.71	9,305.71	10,662.33	8,838.29	16,653.57	14,973.89	5
5.47	68.51	98.87	61.36	73.78	8.06	25.32	12.46	64.70	50.38	30.62	30.16	53.33	25.40	6
20	13	12	1,669	26	40	70	259	13	7	188	13	14	59	7
53,750	57,300	68,855	4,203,387	48,700	148,650	140,750	591,335	45,135	17,300	464,960	37,900	42,800	180,145	8
2,687.50	4,423.08	5,737.92	2,518.51	1,873.08	3,716.25	2,007.86	2,263.15	3,471.92	2,471.43	2,473.14	2,915.38	3,057.14	3,053.31	9
1.22	18.08	28.98	12.25	12.90	0.70	7.07	2.27	11.92	13.38	8.73	9.24	9.79	5.01	10
545	1,973	2,548	162	1,960	1,137	1,078	414	1,172	1,579	959	1,187	1,781	30,249	11
807,135	5,308,942	7,782,130	264,190	4,211,679	2,688,410	1,770,085	642,390	3,497,960	3,088,380	1,714,392	1,584,480	3,915,021	74,825,622	12
1,480.98	2,736.41	3,054.21	1,630.80	2,148.82	2,334.48	1,642.01	1,551.67	2,984.61	1,954.65	1,787.69	1,334.86	2,198.22	2,473.66	13
1.30	15.26	16.89	2.11	11.84	1.87	5.51	0.73	13.38	8.73	5.78	4.57	10.98	7.54	14
19	14	11	1,594	25	40	68	255	14	7	195	13	14	59	15
23,950	14,210	17,061	2,777,228	22,400	75,395	37,121	350,059	19,525	6,950	188,100	13,100	20,380	79,567	16
1,260.53	1,015.00	1,551.00	1,742.30	896.00	1,884.88	545.90	1,372.78	1,394.64	992.68	964.62	1,007.69	1,455.71	1,350.12	17
0.54	4.47	7.18	8.10	5.94	0.36	1.87	1.34	5.15	5.38	3.53	3.19	4.66	2.22	18
542	1,934	2,461	132	1,893	1,117	1,035	408	1,137	1,521	923	1,139	1,744	29,524	19
352,997	1,717,621	2,107,570	92,648	1,346,086	1,139,600	484,954	341,855	947,841	1,141,812	532,576	673,364	1,494,732	25,526,269	20
0.57	4.86	4.57	0.74	3.78	0.79	1.51	0.39	5.63	3.23	1.79	1.94	4.19	2.57	21
13	13	12	124	26	10	5	52	7	5	14	13	15	21	22
1	1	.....	26	.....	.....	2	34	.....	.....	1	1	2	4	23
.....	.....	.....	28	.....	.....	.....	54	.....	.....	.....	.....	.....	44	24
26	40	29	1,792	43	118	3,009	834	111	44	1,830	37	61	213	25
.....	.....	.....	8,684	.....	.....	.....	1,098	.....	.....	.....	.....	.....	.....	26
.....	.....	.....	8,987	.....	.....	.....	876	.....	.....	.....	.....	.....	466	27
11	4	.....	17	.....	.....	.....	51	.....	.....	2	1	1	3	28
1.0	.....	.....	898.0	.....	1.0	64.0	317.4	1.0	.....	80.4	.....	1.1	6.0	29
.....	.....	.....	1,230	.....	.....	.....	268	.....	.....	.....	.....	.....	14	30
.....	.....	.....	1,039	.....	.....	.....	232	.....	.....	.....	.....	.....	90	31
15	39	14	2,614	26	9	4	147	11	12	149	9	19	65	32
.....	.....	.....	4,201	.....	.....	.....	776	.....	.....	.....	.....	.....	20	33
.....	.....	.....	4,754	.....	.....	.....	558	.....	.....	.....	.....	.....	298	34
1.6	0.1	0.5	15.1	.....	0.8	3.3	1.3	.....	2.9	5.7	0.9	0.2	3.2	35
.....	.....	.....	8	.....	1	.....	23	.....	.....	.....	1	.....	.....	36
.....	.....	.....	8	.....	1	.....	24	.....	.....	.....	1	.....	.....	37
.....	.....	.....	5	.....	.....	.....	8	.....	.....	.....	.....	.....	7	38
.....	.....	.....	4	.....	.....	.....	8	.....	.....	.....	.....	.....	6	39
.....	.....	.....	75,171	(²)	.....	.....	1,172	.....	.....	(²)	.....	.....	.....	40
.....	.....	.....	77,950	.....	.....	.....	339	.....	.....	.....	.....	.....	76	41
.....	.....	.....	75,165	.....	.....	.....	132	.....	.....	.....	.....	.....	13,100	42
.....	.....	.....	.....	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
.....	.....	.....	.....	370	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
2	.....	8	64	.....	6	.....	7	4	.....	7	8	8	5	49
.....	.....	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	43	50
(²)	.....	1,670	69,620	.....	4,323	.....	7,870	4,600	.....	4,200	4,985	4,430	1,510	51
.....	.....	.....	950	.....	.....	.....	.....	.....	.....	.....	.....	.....	28,260	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,200	53
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
4	13	14	102	13	11	4	10	8	5	12	11	16	24	55
.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	97	56
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	57
97	251	110	2,165	192	217	32	217	242	125	239	179	215	284	58
.....	.....	.....	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,736	59
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	227	60
2,760	12,500	4,030	111,623	13,100	10,123	1,360	11,050	11,200	5,000	14,640	8,200	11,470	17,203	61
.....	.....	.....	950	.....	.....	.....	.....	.....	.....	.....	.....	.....	85,604	62
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19,535	63
21	23	20	24	26	33	11	48	34	17	53	39	30	37	64
.....	.....	.....	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	26	65
(²)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
.....	.....	23	28	11	49	.....	57	50	.....	78	45	49	40	67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	14	.....	.....	1	7.1	.....	.....	.....	2	.....	.....	69
.....	.....	.....	198,937	.....	.....	(²)	26,488	.....	.....	(²)	.....	.....	.....	70
.....	.....	.....	123,141	.....	.....	(²)	21,318	.....	.....	(²)	.....	.....	.....	71
.....	.....	.....	242	.....	.....	(²)	56	.....	.....	(²)	.....	.....	.....	72

¹Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

²Includes siphons and farm pipe lines reported.

³Pay roll and number of employees reported only by enterprises serving 5 or more farms.

⁴Data for less than 3 enterprises shown with permission of the enterprise involved.

CENSUS OF IRRIGATION—NEVADA

STATE TABLE 1.—IRRIGATION SUMMARY FOR THE STATE: 1890 TO 1940

ITEM (For definitions and explanations, see text)	CENSUS OF—						
	1940	1935	1930	1920	1910	1900	1890
Approximate land area of State.....acres....	70,273,280	70,285,440	70,285,440	70,285,440	70,285,440	70,285,440	70,285,440
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number..	3,573	3,686	3,442	3,163	2,889	2,184	1,277
Land in all farms.....acres....	3,785,106	3,621,769	4,080,906	2,357,163	2,714,757	2,565,647	1,661,416
Farms irrigated: ¹							
Farms.....number..	3,264	2,927	3,031	2,718	2,406	1,906	1,167
Increase or decrease (-) over preceding census.....percent..	7.7	.....	11.5	13.0	26.2	63.3	.....
Proportion of all farms.....percent..	91.4	79.2	88.0	85.9	83.5	87.3	91.4
Land in farms.....acres....	3,624,536	(3)	3,102,085	(3)	(3)	(3)	(3)
Proportion of all farm land.....percent..	95.8	(3)	76.0	(3)	(3)	(3)	(3)
Area irrigated.....acres....	755,636	523,286	380,192	(7)	(7)	504,168	224,403
Increase or decrease (-) over preceding census.....percent..	93.7	.....	.....	.....	.....	124.7	.....
Proportion of total land area of State.....percent..	1.1	0.4	0.6	.....	.....	0.7	0.3
Proportion of all farm land.....percent..	20.0	7.0	9.6	.....	.....	19.7	13.5
Value of irrigated farms (land and buildings).....dollars..	46,392,883	(3)	59,956,787	(3)	(3)	(3)	(3)
Average per farm.....dollars..	14,213.51	(3)	19,781.19	(3)	(3)	(3)	(3)
Average per acre.....dollars..	12.80	(3)	19.33	(3)	(3)	(3)	(3)
Value of farm implements and machinery.....dollars..	3,612,624	(3)	4,041,264	(3)	(3)	(3)	(3)
Average per farm.....dollars..	1,106.81	(3)	1,333.31	(3)	(3)	(3)	(3)
Average per acre.....dollars..	1.00	(3)	1.30	(3)	(3)	(3)	(3)
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number..	1,464	(3)	1,245	1,015	1,347	(3)	(3)
Farms irrigated.....number..	4,291	(3)	(3)	(3)	(3)	(3)	(3)
Area irrigated.....acres....	739,563	(3)	486,648	561,447	701,833	(3)	(3)
Area existing works were capable of supplying with water.....acres....	841,304	(3)	736,249	704,708	840,962	(3)	(3)
Area irrigable.....acres....	915,689	(3)	983,717	1,382,036	1,232,142	(3)	(3)
Additional area existing works were capable of supplying with water.....acres....	101,441	(3)	249,601	143,261	139,129	(3)	(3)
Additional irrigable area in enterprises not supplied with water.....acres....	175,826	(3)	497,069	820,589	530,309	(3)	(3)
Investment in irrigation enterprises.....dollars..	16,906,780	(3)	15,457,931	14,754,280	6,721,924	1,537,559	1,700,875
Increase or decrease (-) over preceding census.....percent..	9.4	(3)	4.8	119.5	337.2	-9.6	.....
Average per acre based on area works were capable of supplying with water.....dollars..	20.10	(3)	21.00	20.94	7.99	(3)	(3)
Increase or decrease (-) over preceding census.....percent..	-4.3	(3)	0.3	162.1	.....	.....	.....
Estimated completed cost of existing enterprises.....dollars..	18,129,554	(3)	18,489,603	22,648,747	12,188,756	(3)	(3)
Average per acre based on irrigable area in enterprises.....dollars..	19.80	(3)	18.80	16.39	9.69	(3)	(3)
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	0.48	(3)	0.91	0.79	0.97	(3)	(3)

¹ Relates to farms reporting irrigated cropland harvested and/or irrigated pasture, 1940 Census; farms reporting irrigated cropland harvested, 1935 Census; farms reporting irrigated crops, 1930, 1920, and 1910 Censuses; and farms reporting irrigated land, 1900 and 1890 Censuses. ² Increase or decrease represented by 1940 figures are with reference to 1930 figures, not 1935. ³ Not available. ⁴ Irrigated land from which crops were harvested plus 324,893 acres of irrigated land used only for pasture. ⁵ Irrigated land from which crops were harvested. ⁶ Acreage of irrigated crops including some duplication where 2 or more crops were harvested from same land. ⁷ Data were secured for crops irrigated but the returns were considered relatively incomplete. ⁸ Total is for irrigated farms reporting this item. Averages are based on all irrigated farms. ⁹ For 1920 and 1910 relates to total area in enterprises. Irrigable areas for those years were not reported. ¹⁰ The land area shown for 1910 represents redeterminations by the Bureau of the Census and, therefore, differs from that shown for earlier years.

STATE TABLE 2.—CENSUS OF AGRICULTURE—NUMBER OF FARMS, FARM ACREAGE ACCORDING TO USE, AND SPECIFIED FARM VALUES FOR IRRIGATED AND NONIRRIGATED FARMS, BY TENURE OF OPERATOR, 1940

ITEM (For definitions and explanations, see text)	Farms	Land in farms	CROPLAND HARVESTED 1939			VALUE OF FARMS (Land and buildings)		VALUE OF BUILDINGS		VALUE OF IMPLEMENTS AND MACHINERY	
			Total	Irrigated ¹	Irrigated pasture 1939	Total	Average per acre ²	Total	Average per acre ²	Total	Average per acre ²
All farms.....	Number 3,573	Acres 3,785,106	Acres 435,855	Acres 130,743	Acres 324,893	Dollars 47,594,384	Dollars 12.57	Dollars 9,340,357	Dollars 2.47	Dollars 3,721,263	Dollars 0.98
Owners and managers.....	3,057	3,553,025	401,829	396,635	304,273	43,109,839	12.13	8,560,012	2.41	3,368,075	0.95
Tenants.....	516	232,080	34,027	33,908	20,621	4,484,545	19.32	780,345	3.36	353,188	1.52
Irrigated farms, total.....	3,264	3,624,536	435,154	430,743	324,893	46,392,883	12.80	8,971,907	2.48	3,612,621	1.00
Owners and managers.....	2,811	3,428,873	401,176	396,635	304,273	42,128,655	12.39	8,225,577	2.40	3,274,127	0.96
Tenants.....	453	197,663	33,978	33,908	20,621	4,264,228	21.57	746,330	3.78	338,497	1.71
Wholly irrigated farms.....	2,955	2,984,198	414,172	414,172	303,687	42,821,754	14.35	8,135,432	2.73	3,417,344	1.15
Owners and managers.....	2,533	2,790,155	380,350	380,350	285,003	38,733,951	13.88	7,422,302	2.66	3,060,917	1.11
Tenants.....	422	194,013	33,822	33,822	18,684	4,087,803	21.07	713,130	3.68	326,427	1.65
Partly irrigated farms.....	309	640,338	20,682	16,671	21,206	3,571,129	5.58	836,475	1.31	195,280	0.30
Owners and managers.....	278	636,688	20,826	16,485	19,269	3,391,704	5.33	803,275	1.26	183,510	0.29
Tenants.....	31	3,650	156	86	1,937	176,425	48.34	33,200	9.10	11,770	3.22
Nonirrigated farms, total.....	309	160,570	701	.....	.....	1,201,501	7.48	368,450	2.29	108,639	0.68

¹ Does not include irrigated fallow land or land in young irrigated crops not harvested or in irrigated crops that failed.

² Based on all land in farms for each tenure group.

CENSUS OF IRRIGATION - NEVADA

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STATE TABLE 3.—NUMBER OF ENTERPRISES, IRRIGABLE AREA, AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1940; IRRIGATED AREA, 1939, 1929, AND 1919; WATER DELIVERED TO IRRIGATORS, 1939; BY SOURCE OF WATER SUPPLY

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	1940			IRRIGATED AREA				DELIVERY OF WATER TO IRRIGATORS, 1939.					
	Enter- prises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Irrigated area reporting—			Quantity delivered per acre ¹	Cost ¹	
								Quantity	Cost	Quantity and cost		Per acre	Per acre- foot
Number	Acres	Acres	Acres	Acres	Acres	Percent	Acres	Acres	Acres	Acres-feet	Dollars	Dollars	
Total.....	1,464	915,689	841,304	739,863	486,648	561,447	52.0	627,502	678,791	569,881	3.4	0.88	0.26
Primary sources:													
Streams, gravity.....	746	726,400	663,018	578,163	394,415	466,812	46.6	491,238	541,443	457,080	3.1	0.81	0.26
Streams, pumped.....	11	855	805	652	821	2,647	-20.6	595	630	573	2.6	1.88	0.77
Streams, gravity and pumped.....	6	2,950	2,895	2,780	.....	720	.....	1,380	2,780	1,380	1.2	0.36	0.30
Wells, pumped.....	74	2,415	1,493	568	2,117	295	-73.2	556	511	507	1.8	7.93	4.44
Wells, flowing.....	100	3,323	3,062	2,604	1,132	811	130.0	1,511	2,244	1,170	6.8	0.43	0.06
Wells, pumped and flowing.....	9	360	360	237	177	65	33.8	188	181	132	3.6	2.06	0.57
Lakes, gravity.....	2	(2)	(2)	(2)	.....	445	.....	(2)	(2)	(2)	(2)	(2)	(2)
Lakes, pumped.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springs.....	233	59,728	58,462	54,945	61,987	21,987	-11.4	49,562	34,889	29,826	1.7	0.58	0.33
Springs and streams.....	181	79,402	72,355	63,415	.....	.....	.....	49,899	61,338	47,822	3.0	0.53	0.18
Stored storm water.....	1	(2)	(2)	(2)	20	17,348	.....	.....	(2)	.....	.....	.....	.....
City water.....	.....	.....	.....	.....	.....	14	.....	.....	.....	.....	.....	.....	.....
Sewage.....	1	(2)	(2)	(2)	.....	88	.....	.....	(2)	.....	.....	.....	.....
Streams, gravity; wells, pumped...	27	10,349	10,234	9,837	2,260	4,957	335.3	8,197	9,177	7,537	2.0	0.61	0.30
Streams, gravity; wells, flowing...	9	2,621	2,532	2,502	2,274	82	10.0	2,480	2,431	2,409	2.2	0.60	0.27
Streams, pumped; wells, pumped...	3	1,145	1,106	1,105	.....	.....	.....	705	705	705	3.0	1.16	0.39
Waste water, seepage or drainage...	5	423	462	157	.....	.....	.....	131	32	6	3.3	2.33	0.70
Other mixed.....	45	25,563	24,665	22,781	21,152	45,176	7.7	20,978	22,313	20,652	3.8	0.26	0.07
Other and not reported.....	.....	.....	.....	.....	293	.....	.....	.....	.....	.....	.....	.....	.....
Supplemental sources: ³													
Streams, gravity and/or storage...	7	143,453	123,240	84,204	.....	.....	.....	84,104	84,204	84,104	3.5	1.04	0.30
Streams, pumped.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped.....	4	905	605	518	.....	.....	.....	518	518	518	1.8	1.06	1.07
Wells, flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Based on enterprises reporting both quantity and cost of water, assuming (a) that for enterprises serving 1 to 4 farms the cost of water is cost of maintenance and operation, and for enterprises serving 5 or more farms it is total annual charges, and (b) that enterprises reporting cost and quantity of water had used the same quantity of water per acre as all enterprises which reported water delivered.

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

³Areas shown under "Supplemental sources" are parts of areas shown under "Primary sources" and therefore are not again added into the totals (see text).

STATE TABLE 4.—INVESTMENT, 1940 AND 1930; AND COST OF MAINTENANCE AND OPERATION, 1939, 1929, AND 1919; BY SOURCE OF WATER SUPPLY

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	INVESTMENT							COST OF MAINTENANCE AND OPERATION ¹						
	1940			1930			Average per acre increase or decrease (-) 1930-40	1939		1929		Average per acre increase or decrease (-) 1930-40	1919	
	Amount	Pro- portion of total	Aver- age per acre ²	Amount	Pro- portion of total	Aver- age per acre ²		Irrigated area reporting	Aver- age per acre	Irrigated area reporting	Aver- age per acre		Irrigated area reporting	Aver- age per acre
Total.....	Dollars 16,906,790	Percent 100.0	Dollars 20.10	Dollars 15,457,931	Percent 100.0	Dollars 21.00	Dollars -0.90	Acres 338,722	Dollars 0.48	Acres 474,422	Dollars 0.91	Dollars -0.43	Acres 460,317	Dollars 0.73
Primary sources:														
Streams, gravity.....	11,357,470	67.3	17.13	13,710,031	88.7	22.73	-5.60	551,351	0.41	388,499	0.85	-0.44	394,358	0.65
Streams, pumped.....	10,635	0.1	13.21	46,000	0.3	43.86	-30.65	630	1.88	821	7.01	-5.13	897	1.76
Streams, gravity and pumped.....	27,103	0.2	9.36	.....	.....	.....	.....	2,780	0.25	.....	.....	.....	720	0.76
Wells, pumped.....	56,240	0.3	37.68	142,761	0.9	20.19	17.49	534	8.21	2,075	4.82	3.39	236	12.10
Wells, flowing.....	134,168	0.8	43.82	147,612	0.9	99.00	-55.18	2,244	0.35	942	4.08	-3.73	157	6.56
Wells, pumped and flowing.....	22,927	0.1	63.89	10,760	0.1	66.93	6.76	181	1.67	177	5.26	-3.59	65	61.77
Lakes, gravity.....	(3)	(3)	(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	130	19.63
Lakes, pumped.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springs.....	361,127	2.1	6.18	614,206	4.0	8.93	-2.75	34,869	0.55	59,664	0.77	-0.22	17,840	1.74
Springs and streams.....	1,071,769	6.3	14.81	.....	.....	.....	.....	61,338	0.47	.....	.....	.....	.....	.....
Stored storm water.....	(3)	(3)	(3)	2,100	(4)	105.00	(3)	(3)	(3)	20	2.50	(3)	15,548	0.37
City water.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80	0.44
Sewage.....	(3)	(3)	(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped...	98,398	0.6	9.61	119,003	0.8	7.03	2.58	9,177	0.55	1,940	2.29	-17.4	1,246	1.57
Streams, gravity; wells, flowing..	22,035	0.1	8.70	45,975	0.3	9.32	-0.62	2,431	0.59	2,104	0.77	-0.18	82	1.46
Streams, pumped; wells, pumped...	21,100	0.1	19.08	.....	.....	.....	.....	705	1.16	.....	.....	.....	.....	.....
Waste water, seepage or drainage..	747	(4)	4.61	.....	.....	.....	.....	32	2.09	.....	.....	.....	.....	.....
Other mixed.....	207,591	1.2	8.42	618,477	4.0	19.19	-10.77	22,313	0.25	19,887	1.36	-1.11	38,958	1.54
Other and not reported.....	.....	.....	.....	1,106	(4)	3.69	.....	.....	.....	283	3.34	.....	.....	.....
Supplemental sources: ⁵														
Streams, gravity and/or storage...	3,441,466	20.4	27.92	.....	.....	.....	.....	84,204	0.45	.....	.....	.....	.....	.....
Streams, pumped.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped.....	71,885	0.4	118.82	.....	.....	.....	.....	518	1.96	.....	.....	.....	.....	.....
Wells, flowing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Based on irrigated area in enterprises reporting cost of maintenance and operation.

²Based on area works were capable of supplying with water.

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

⁴Less than one-tenth of 1 percent.

⁵Areas shown under "Supplemental sources" are parts of areas shown under "Primary sources" and therefore are not again added into the totals (see text).

CENSUS OF IRRIGATION—NEVADA

STATE TABLE 5.—AREAS, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920

ITEM AND TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	CENSUS OF—				Increase or decrease (-) 1930-40 primary enter- prises	ITEM AND TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	CENSUS OF—				Increase or decrease (-) 1930-40 primary enter- prises
	1940		1930				1940		1930		
	Primary enter- prises	Supple- mental enter- prises ¹	Primary enter- prises	Primary enter- prises			Primary enter- prises	Supple- mental enter- prises ¹	Primary enter- prises	Primary enter- prises	
AREA IRRIGATED						AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER—Continued					
Total.....	Acres 739,863	Acres 84,722	Acres 486,648	Acres 561,447	Percent 52.0		Acres (²)	Acres	Acres 5,855	Acres 7,240	Percent (²)
Individual and partnership....	438,996	7,848	{ 316,918	355,901	38.5	Commercial.....					
Cooperative, incorporated....	² 137,066								Bureau of Reclamation ³	66,788	41,210	90,000	69,850	-25.8
Cooperative, unincorporated....	85,039		32,267	69,877	² 588.33	Office of Indian Affairs ²	24,863		9,665	8,195	157.2
Irrigation district.....	2,940	65,000		80,000		State.....	⁴ 744		330	12	
Commercial.....	(²)		5,855	5,990	(²)	City and/or sewage.....				28	
Bureau of Reclamation ³	57,471	11,874	54,040	41,324	6.3	Other.....	(⁴)		71,200		
Office of Indian Affairs ²	17,807		6,148	5,321	186.4						
State.....	⁴ 744		220	12							
City and/or sewage.....				22							
Other.....	(⁴)		71,200								
AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER						IRRIGABLE AREA ⁵					
Total.....	841,304	123,845	736,249	704,708	14.3	Total.....	915,689	144,358	983,717	1,382,036	-6.0
Individual and partnership....	469,808	8,735	{ 502,308	453,900	-2.5	Individual and partnership....	510,352	11,110	{ 587,571	807,045	-13.1
Cooperative, incorporated.....	² 158,764										
Cooperative, unincorporated....	96,517		56,891	85,483	² 348.7	Cooperative, unincorporated....	96,517			260,000	
Irrigation district.....	3,820	73,900		80,000		Irrigation district.....	3,820	73,900		14,240	(²)
						Commercial.....	(²)		5,855	12,240	(²)
						Bureau of Reclamation ³	87,500	59,348	137,500	192,000	-36.4
						Office of Indian Affairs ²	57,392		25,855	15,390	122.0
						State.....	⁴ 744		340	80	
						City and/or sewage.....				28	
						Other.....	(⁴)		162,000		

¹ Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text). ² Data for 2 "Commercial" enterprises are included with "Cooperative, incorporated" enterprises in the 1940 Census. ³ U. S. Dept. of the Interior. ⁴ Data for 2 "Other" enterprises are included with "State" enterprises in the 1940 Census. ⁵ For 1920 relates to total area. Irrigable area for that year was not reported. ⁶ For explanation of areas, see text, p. 389.

STATE TABLE 6.—ENTERPRISES, AREAS, AVERAGE COSTS, 1940, AND AREA IRRIGATED, 1939,
BY TYPE OF ENTERPRISE

TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	ENTERPRISES		AREAS		AVERAGE COST				AREA IRRIGATED, 1939 ¹				
	Total	Serving 5 or more farms	Irrigable	Works were capable of supplying with water	Primary enterprises		Supplemental enterprises		Farms served	Total area	Cropland		Irrigated pasture
					Works and equipment per acre ²	Maintenance and operation per acre ²	Works and equipment per acre ²	Maintenance and operation per acre ²			From which crops were harvested	On which crops failed	
Total.....	Number 1,464	Number 91	Acres 915,869	Acres 841,304	Dollars 15.30	Dollars 0.43	Dollars 23.89	Dollars 0.46	Number 4,291	Acres 739,893	Acres 459,863	Acres 5,298	Acres 274,702
Individual and partnership....	1,362	9	510,352	486,808	4.31	0.31	35.27	1.35	1,518	438,996	256,562	3,331	179,103
Cooperative, incorporated.....	39	32	⁴ 159,304	⁴ 158,764	⁴ 13.00	⁴ 0.42			⁴ 972	⁴ 137,066	⁴ 76,324	150	60,592
Cooperative, unincorporated....	38	32	96,517	96,517	8.46	0.32			420	85,039	61,681	100	23,058
Irrigation district.....	² 2	2	3,820	3,820	22.05	1.09	10.82	0.31	24	2,940	2,100		840
Commercial.....	2	2	(⁴)	(⁴)	(⁴)	(⁴)			(⁴)	(⁴)	(⁴)		
U. S. Bureau of Reclamation.....	3	3	87,500	66,788	98.38	0.99	44.92	0.68	729	57,471	47,954	1,717	7,908
U. S. Office of Indian Affairs.....	14	11	57,392	24,863	48.53	1.40			623	17,607	14,518		3,059
State.....	2		⁶ 744	⁶ 744	⁶ 23.13	⁶ 2.87			⁶ 5	⁶ 744	⁶ 524		⁶ 220
City and/or sewage.....													
Other.....	2		(⁶)	(⁶)	(⁶)	(⁶)			(⁶)	(⁶)	(⁶)		(⁶)

¹ Reported by enterprises in the Census of Irrigation, 1940, not by the Census of Agriculture. ² Based on area works were capable of supplying with water and cost of works and equipment exclusive of water right investment. ³ Based on irrigated area in enterprises reporting maintenance and operation in 1939. ⁴ Data for 2 "Commercial" enterprises are included with "Cooperative, incorporated" enterprises in the 1940 Census. ⁵ Data for less than 3 enterprises shown with permission of the enterprises involved. ⁶ Data for 2 "Other" enterprises are included with "State" enterprises in the 1940 Census. ⁷ For explanation of areas and investment, see text, p. 389.

STATE TABLE 7.—INVESTMENT IN IRRIGATION ENTERPRISES, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920

TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	TOTAL INVESTMENT, TO JANUARY 1							AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER		Capital expendi- tures during 1939 ¹	Estimated invest- ment re- quired to complete works	
	1940					1930	1920	Increase or decrease (-) 1930-40	Primary enter- prises			Supple- mental enter- prises
	Total	Primary enter- prises	Supple- mental enter- prises	Total cost of works and equipment	Invest- ment in water rights							
Total.....	Dollars 16,906,790	Dollars 13,393,439	Dollars 3,513,351	Dollars 15,827,567	Dollars 1,079,223	Dollars 15,457,931	Dollars 14,754,280	Percent 9.4	Dollars 15.92	Dollars 28.37	Dollars 349,560	Dollars 1,222,761
Individual and partnership....	2,350,895	2,278,510	} 440,885	{ 2,175,332	175,553	4,530,708	4,014,570	-48.1	{ 4.65	} 50.47	{.....	168,673
Cooperative, incorporated.....	² 2,776,276	² 2,407,776		{ 2,306,826	² 469,450	1,019,047	² 209.9	{ ² 15.17	{ 4,708			
Cooperative, unincorporated....	828,733	828,733		816,233	12,500				8.59		810	
Irrigation district.....	888,934	84,217	804,717	883,934	5,000		1,246,811		22.05	10.89	816	
Commercial.....	(²)	(²)		(²)	(²)	227,000	340,559	(²)	(²)			
U. S. Bureau of Reclamation.....	8,838,237	6,570,488	2,267,749	8,421,527	416,710	³ 7,767,759	7,953,537	13.8	98.38	55.03	109,074	212,816
U. S. Office of Indian Affairs.....	1,206,505	1,206,505		1,206,505		360,214	178,536	234.9	48.53		234,152	841,275
State.....	⁴ 17,210	⁴ 17,210		⁴ 17,210		11,000	1,000		⁴ 23.13			
City and/or sewage.....							420					
Other.....	(⁴)	(⁴)		(⁴)		⁵ 1,624,860			(⁴)			

¹ Only for enterprises serving 5 or more farms. ² Data for 2 "Commercial" enterprises are included with "Cooperative, incorporated" enterprises in the 1940 Census. ³ Part of investment reported in California. ⁴ Data for 2 "Other" enterprises are included with "State" enterprises in the 1940 Census. ⁵ Includes 1 "Irrigation district" and 1 Carey Act enterprise. ⁶ For explanation of investment, see text, p. 389.

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STATE TABLE 8.—INDEBTEDNESS, ARREARAGE, AND CHARGES, BY TYPE OF ENTERPRISE, CENSUS OF 1940

TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	INDEBTEDNESS OF ENTERPRISES REPORTING						ARREARAGES OF ENTERPRISES REPORTING ²			CHARGES OF ENTERPRISES REPORTING			
	Enter- prises 1940	Area		Total indebted- ness 1940	Average per acre assessed 1939 ³	Average per acre works were capable of supplying with water ⁴	Enter- prises 1940	Total arrearages		Average per acre assessed 1939	Area assessed 1939	Charges made 1939	Charges collected 1939
		Irri- gable 1940	Works were capable of supplying with water 1940					Dec. 31 1939	Dec. 31 1938				
Total.....	Number 13	Acres 247,142	Acres 205,692	Dollars 3,934,315	Dollars 14.79	Dollars 14.12	Number	Dollars	Dollars	Dollars	Acres 320,187	Dollars 391,703	Dollars 207,292
Partnership.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12,645	2,712	494
Cooperative, incorporated.....	6	22,574	19,974	32,997	2.47	2.22	.....	.....	.....	.....	75,438	72,432	65,102
Cooperative, unincorporated.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57,331	17,350	9,641
Irrigation district.....	2	77,720	77,720	493,000	5.17	5.89	.....	.....	.....	.....	81,524	61,738	57,845
Commercial.....	2	(6)	(5)	(5)	(5)	(6)	.....	.....	.....	.....	(5)	(5)	(5)
Bureau of Reclamation ⁵	3	146,848	107,998	3,408,318	17.87	17.08	.....	.....	.....	.....	75,704	225,123	74,125
Office of Indian Affairs ⁷.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,545	12,348	85
State.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Only for enterprises serving 5 or more farms. Enterprises and areas shown are totals for primary and supplemental enterprises reporting. ²In payment of principal, interest, and/or other funded obligations. ³Based on primary enterprises only; State average for supplemental enterprises is \$16.73. ⁴Based on primary enterprises only; State average for supplemental enterprises is \$22.63. ⁵Data for 2 "Commercial" enterprises are included with "Cooperative, incorporated" enterprises in the 1940 Census. ⁶Data for less than 3 enterprises shown with permission of the enterprises involved. ⁷U. S. Dept. of the Interior. ⁸Represents indebtedness and arrearages of irrigation districts to the U. S. Government. ⁹For explanation of areas and investment, see text, p. 389.

STATE TABLE 9.—COST OF MAINTENANCE AND OPERATION, AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939, BY TYPE OF ENTERPRISE

TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	COST OF MAINTENANCE AND OPERATION						PAY ROLL AND EMPLOYEES, 1939 ¹		
	Primary enterprises		Supplemental enterprises		Average cost per irrigated acre		Enterprises reporting pay roll	Wages and salaries paid and payable	Employees during week ending April 29
	Irrigated area reporting 1939	Reported cost 1939	Irrigated area reporting 1939	Reported cost 1939	Primary enterprises 1939	Supplemental enterprises 1939			
Total.....	Acres 688,722	Dollars 233,859	Acres 84,722	Dollars 38,705	Dollars 0.43	Dollars 0.46	Number 65	Dollars 190,642	Number 275
Individual and partnership.....	417,568	140,632	7,848	10,632	0.34	1.35	4	876	11
Cooperative, incorporated.....	² 137,066	² 56,943							
Cooperative, unincorporated.....	61,664	19,550			0.32		26	² 29,326	² 85
Irrigation district.....	2,940	3,207	65,000	19,972	1.09	0.31	² 2	11,375	10
Commercial.....	(²)	(²)			(²)		2	(²)	(²)
U. S. Bureau of Reclamation ³	57,471	56,629	11,874	8,101	0.99	0.68	3	35,290	72
U. S. Office of Indian Affairs.....	11,929	16,657			1.40		6	70,329	68
State.....	⁴ 84	⁴ 241			⁴ 2.87				
City and/or sewage.....									
Other.....	(⁴)	(⁴)			(⁴)				

¹Only for enterprises serving 5 or more farms. ²Data for 2 "Commercial" enterprises are included with "Cooperative, incorporated" enterprises in the 1940 Census. ³Data for less than 3 enterprises shown with permission of the enterprises involved. ⁴Data for 2 "Other" enterprises are included with "State" enterprises in the 1940 Census. ⁵For explanation of areas and investment, see text, p. 389.

STATE TABLE 10.—IRRIGATION WORKS, BY TYPE OF ENTERPRISE, 1940

TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	DAMS		CANALS			RESERVOIRS		PIPE LINES	FLOWING WELLS		PUMPED WELLS		PUMPING PLANTS			
	Diversion	Storage	Capacity at main head- ing	Length ¹		Number	Capacity	Length	Number	Yield	Number	Yield	Prime movers		Pumps	
				Earth	Lined ²								Number	Rated capacity	Number	Rated capacity
Total.....	Number 1,896	Number 122	Sec.-ft. 22,930	Miles 2,845	Miles 52.2	200	Ac.-ft. 696,005	Miles 104.7	322	G. v. m. 39,835	167	G. v. m. 50,938	192	Hp. 2,262	196	G. v. m. 141,065
Individual and partnership....	² 1,675	105	³ 13,973	¹ 1,591	41.6	³ 185	³ 31,314	⁵ 75.4	319	35,444	² 165	³ 45,055	³ 183	³ 1,732	³ 187	³ 91,848
Cooperative, incorporated.....	⁴ 157	7	⁴ 2,927	⁴ 393	⁴ 3.8	7	83,470	3.6	.....	.....	.....	.....	.....	.....	.....	.....
Cooperative, unincorporated....	43	5	1,492	240	6.1	3	3,551	3.4	3	4,391	2	5,883	2	100	2	5,883
Irrigation district.....	1	1	90	16	0.5	1	80,000	0.4	.....	.....	.....	.....	.....	.....	.....	.....
Commercial.....	(⁴)	.....	(⁴)	(⁴)	(⁴)	.....	(⁴)	(⁴)	.....	.....	.....	.....	.....	.....	.....	.....
Bureau of Reclamation ⁵	4	2	3,400	480	.....	2	452,670	19.2	.....	.....	.....	.....	6	422	6	43,084
Office of Indian Affairs ⁶	16	2	1,048	125	0.2	2	45,000	2.6	.....	.....	.....	.....	1	8	1	250
State.....	(³)	.....	(³)	(³)	.....	.....	.....	.....	.....	.....	(³)	(³)	(³)	(³)	(³)	(³)
City and/or sewage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other.....	.....	.....	(³)	.....	.....	(³)	(³)	(³)	.....	.....	.....	.....	.....	.....	.....	.....

¹Includes main and lateral canals but not farm ditches. ²Includes flumes. ³Data for 2 "State" and 2 "Other" enterprises are included with "Individual and partnership" enterprises. ⁴Data for 2 "Commercial" enterprises are included with "Cooperative, incorporated" enterprises in the 1940 Census. ⁵U. S. Dept. of the Interior.

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STATE TABLE 11.—DAMS, BY MATERIAL: 1940 AND 1930

MATERIAL	1940		1930		MATERIAL	1940		1930	
	Diversion	Storage	Diversion	Storage		Diversion	Storage	Diversion	Storage
Total.....	Number 1,896	Number 122	Number 1,640	Number 118	Earth and rock.....	Number 1,077	Number 110	Number	Number 71
Concrete or masonry.....	96	8	132	20	Other and mixed.....	603	4	1,321	22
Timber.....	84	.....	148	.....	Not reported.....	37	.....	39	5

¹ Principally temporary dams, replaced annually.

STATE TABLE 12.—PUMPING PLANTS, BY KIND OF MOTIVE POWER AND TYPE OF PUMP, 1940; AND TOTAL NUMBER AND CAPACITY, 1930

PUMPS BY KIND OF POWER EMPLOYED	Pumps	Proportion of total number	Rated capacity of pumps	Proportion of total capacity	Average lift of pumps	MOTIVE POWER BY TYPE OF PUMP EMPLOYED	Prime movers	Proportion of total number	Rated capacity of movers	Proportion of total capacity
Total, 1940.....	Number 196	Percent 100.0	G. p. m. 141,065	Percent 100.0	Feet 31	Total, 1940.....	Number 192	Percent 100.0	Hp. 2,262	Percent 100.0
Electric motor.....	42	21.4	83,774	59.4	22	Centrifugal pump.....	84	43.7	825	36.5
Centrifugal.....	27	13.7	57,700	41.0	20	Electric.....	25	13.0	224	9.9
Turbine.....	7	3.6	15,283	10.8	38	Internal-combustion.....	56	29.1	487	21.6
Plunger.....	3	1.5	10	.....	19	Other.....	3	1.6	114	5.0
Other.....	5	2.6	10,781	7.6	18	Turbine pump.....	22	11.5	568	25.1
Internal-combustion engine.....	95	48.5	25,088	17.8	34	Electric.....	7	3.6	306	13.6
Centrifugal.....	57	29.1	15,452	11.0	22	Internal-combustion.....	15	7.9	260	11.5
Turbine.....	16	8.2	8,200	5.8	39	Other.....	.....	.....	.....	.....
Plunger.....	19	9.7	1,006	0.7	65	Plunger pump.....	52	27.1	106	4.7
Other.....	3	1.5	430	0.3	116	Electric.....	2	1.0	1	(¹)
Other kinds of motive power.....	34	17.3	5,338	3.8	28	Internal-combustion.....	18	9.4	65	2.9
Centrifugal.....	3	1.5	4,750	3.4	29	Other.....	32	16.7	40	1.8
Turbine.....	.....	.....	.....	.....	.....	Other and mixed types of pumps.....	34	17.7	763	33.7
Plunger.....	31	15.8	588	0.4	28	Electric.....	12	6.2	507	22.3
Other.....	.....	.....	.....	.....	.....	Internal-combustion.....	14	7.3	248	11.0
Mixed kinds of motive power.....	25	12.8	26,865	19.0	35	Other.....	8	4.2	8	0.4
Centrifugal.....	14	7.2	8,865	6.3	30	Total, 1930.....	157	.....	2,671	.....
Turbine.....	2	1.0	17,775	12.6	42	Increase or decrease (-) 1930-1940.....	35	.....	-409	.....
Plunger.....	9	4.6	135	0.1	39					
Other.....	.....	.....	.....	.....	.....
Total, 1930.....	173	.....	115,648	.....	31					
Increase or decrease (-) 1930-1940..	23	.....	25,417	.....	.....			

¹ Less than one-tenth of 1 percent.² Includes one waterwheel for which the capacity was not reported.³ Number of pumping plants.

STATE TABLE 13.—PIPE LINES, BY MATERIAL, SIZE, AND LENGTH: 1940 AND 1930

MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940	MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940
	1940 ¹	1930 ²			1940 ¹	1930 ²	
Total.....	Miles 104.7	Miles 90.6	Percent 15.6	Wood-stave:	Miles	Miles	Percent
Concrete:				1 to 12 inches.....	12.0	10.2	17.6
1 to 12 inches.....	4.3	9.5	-54.7	13 to 24 inches.....	.....	0.5	-80.0
13 to 24 inches.....	.....	2.1	109.5	Over 24 inches.....	0.1	.....	.....
Over 24 inches.....	4.1	.....	.....	Clay and other:			
Metal:				1 to 12 inches.....	4.8	8.3	-42.2
1 to 12 inches.....	69.1	54.2	27.5	13 to 24 inches.....	1.0	.....	.....
13 to 24 inches.....	6.3	4.0	115.0	Over 24 inches.....	0.4	.....	.....
Over 24 inches.....	2.4	.....	.....		

¹ Includes siphons and farm pipe lines reported.
pipe lines not segregated by size.² Pipe sizes were separated at 30 inches in diameter (instead of 24 inches) in the 1930 Census.³ Includes 1.8 miles

STATE TABLE 14.—AREA WITHIN IRRIGATION ENTERPRISES FOR WHICH DRAINS HAVE BEEN INSTALLED, AND ADDITIONAL AREA IN NEED OF DRAINAGE: 1940, 1930, AND 1920

ITEM	1940	1930	1920	ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number..	37	41	58	Ratio of area drained to area irrigated in—			
Area irrigable in these enterprises.....acres...	244,984	353,208	1,537,417	(a) Enterprises reporting lands drained and/or needing drainage.....percent..	54.2	35.7	18.4
Area irrigated in these enterprises.....acres...	180,044	(²)	(²)	(b) All irrigation enterprises.....percent..	13.2	25.9	6.1
Area for which drains have been installed.....acres...	97,576	126,249	34,175	Ratio of area drained plus area needing drainage to—			
Additional area needing drainage.....acres...	21,153	25,349	98,249	(a) Irrigable area reporting.....percent..	48.5	43.2	124.6
				(b) Irrigated area reporting.....percent..	65.9	(²)	(²)

¹ For 1920 relates to total area in enterprises. Irrigable area was not reported and irrigated area in enterprises reporting drainage was not reported separately for the 1920 Census.² Not available.³ Based on irrigable area for 1930, area irrigated in enterprises reporting land drained or needing drainage not available.

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STATE TABLE 15.—WATER USED, BY SOURCE OF SUPPLY: 1939, 1929, AND 1919

ITEM (For definitions and explanations, see text)	TOTAL			MEASURED ¹			NOT MEASURED		
	1939	1929 ¹	1919 ¹	1939	1929	1919	1939	1929 ¹	1919 ¹
PRIMARY ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	1,064,515	626,580	925,808	944,576	598,020	727,037	119,839	28,560	199,271
Area irrigated by these enterprises.....acres....	207,997	156,588	212,323	183,346	150,417	122,627	24,651	6,171	89,696
Average water per acre irrigated.....acre-feet..	5.1	4.0	4.4	5.2	4.0	5.9	4.9	4.6	2.2
Total water delivered to irrigators.....acre-feet..	1,852,409	224,035	170,911	623,875	211,435	157,638	1,228,534	12,600	13,279
Area irrigated by these enterprises.....acres....	629,381	72,380	60,044	150,016	68,396	49,494	473,365	3,984	10,550
Average water per acre irrigated.....acre-feet..	3.0	3.1	2.8	4.2	3.1	3.2	2.6	3.2	1.3
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	18,847	.....	.....	.....	.....	.....	18,847	.....	.....
Area irrigated by these enterprises.....acres....	4,121	.....	.....	.....	.....	.....	4,121	.....	.....
Average water per acre irrigated.....acre-feet..	4.6	.....	.....	.....	.....	.....	4.6	.....	.....
SUPPLEMENTAL ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	289,950	.....	.....	91,645	.....	.....	198,305	.....	.....
Area irrigated by these enterprises.....acres....	82,074	.....	.....	17,074	.....	.....	65,000	.....	.....
Average water per acre irrigated.....acre-feet..	3.5	.....	.....	5.4	.....	.....	3.1	.....	.....
Total water delivered to irrigators.....acre-feet..	291,033	.....	.....	239,535	.....	.....	51,498	.....	.....
Area irrigated by these enterprises.....acres....	84,101	.....	.....	72,300	.....	.....	11,904	.....	.....
Average water per acre irrigated.....acre-feet..	3.5	.....	.....	3.3	.....	.....	4.3	.....	.....
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	947	.....	.....	.....	.....	.....	947	.....	.....
Area irrigated by these enterprises.....acres....	518	.....	.....	.....	.....	.....	518	.....	.....
Average water per acre irrigated.....acre-feet..	1.8	.....	.....	.....	.....	.....	1.8	.....	.....

¹Data only for enterprises serving 5 or more farms. Water and area for surface and underground sources and water and area for primary and supplemental enterprises were not segregated for 1929 and 1919.

STATE TABLE 16.—AREA IRRIGATED, BY TYPE OF RIGHTS UNDER WHICH WATER WAS DELIVERED:
1939, 1929, AND 1919

TYPE OF WATER RIGHTS (For definitions and explanations, see text)	1939			1929		1919	
	Area irrigated			Area irrigated	Proportion of total	Area irrigated	Proportion of total
	Primary enterprises	Proportion of total	Supplemental enterprises ¹				
Total.....	Acres 739,883	Percent 100.0	Acres 84,722	Acres 486,648	Percent 100.0	Acres 561,447	Percent 100.0
Appropriation ²	576,468	77.9	19,717	261,572	53.7	368,108	65.2
Underground.....	4,829	0.7	5	2,192	0.5	1,244	0.2
Appropriation and underground.....	11,186	1.5	.....	.....	.....	.....	.....
Adjudicated by court ³	122,705	16.6	65,000	161,920	33.3	161,175	28.7
Other mixed and not reported.....	24,675	3.3	.....	60,964	12.5	32,922	5.9

¹Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text). ²"Appropriation" includes water rights published in the 1930 and 1920 census reports as "Appropriation and use," "Notice filed and posted," "Permit from State," and "Certificate or license from State." ³Riparian rights are not recognized in Nevada, except those adjudicated by Courts prior to 1885. A total of 22,839 acres reported as having "Riparian" rights in 1939, owing to misapprehension as to their legal status, is included in the reported total of 122,705 acres having rights "Adjudicated by court."

BUREAU OF RECLAMATION AREAS AND INVESTMENT

The areas credited to the United States Bureau of Reclamation in State tables 5, 6, 8, and 9 include 57,471 acres which were irrigated in 1939 within the Newlands Project. An area totaling 11,874 acres was irrigated with a supplemental supply from the Humboldt Project and is reported as receiving a primary supply through another enterprise. The Bureau was also prepared in 1940 to provide a supplemental supply of water to 28,010 acres in the Truckee Storage Project which is reported as receiving a primary supply through another enterprise.

The investment attributed to the Bureau of Reclamation in State tables 7 and 17 relates principally to expendi-

tures on the above projects and reflects the construction costs incurred by the Bureau of Reclamation and comparatively minor expenditures by an irrigation district in addition to the outlays of Federal funds. The investment includes expenditures for the construction of Boca Dam storage facilities in California to serve supplemental water for lands in Nevada since the costs of the facilities will be repaid by the latter lands. Excluded from the investment of the Bureau of Reclamation in Nevada are the construction costs incurred by the Bureau of Reclamation at Boulder Dam, where none of the costs will be repaid by irrigators in Nevada.